# A Grammar of Ben Tey (Dogon of Beni) 

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July 2015
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color codes
blue: regular phonemic transcription of Ben Tey forms green: reconstructions, IPA, underlying, other Malian languages

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## 1 Introduction

### 1.1 Dogon languages

This work is part of a larger project on Dogon languages. Dogon is a family of at least twenty languages and many more locally named varieties. The family is traditionally considered to be part of the vast Niger-Congo family, which includes Bantu, Mande (e.g. Bambara and Boso), and West Atlantic (e.g. Fulfulde). However, to date this has not been established.

### 1.2 Ben Tey language

The language is referred to by its speakers in Beni and Gamni villages as bê:n tèy, literally 'Beni's language'. I write is as Ben Tey, abbreviation BenT. The Koumboye dialect is localled called kùmbǒy têy 'Koumboye's language.'

The combined population of Beni, Gamni, and Komboy was said to be around 3000 in 2004-5.

The genetically most closely related Dogon languages are Bankan Tey and Nanga. Bankan Tey is spoken in Walo, north of Douentza at the base of Gandamiya inselberg. Nanga is spoken in several villages south of Beni including Anda, Namakoro, and Wakara.

Jamsay is spoken as a second language by virtually every native speaker Ben Tey. It is the lingua franca among Dogon in the zone. Many young people have gone to school recently in Jamsay-speaking Dianwely Maoudé, which also has a modest market on Tuesdays. Jamsay is replacing Ben Tey as in-group language among younger speakers in Gamni, though Ben Tey is still locally dominant in Beni.

Fulfulde is also widely spoken as a second language. It is used locally in contacts with Fulbe people, who are commissioned by Dogon livestock owners to herd the animals, and whose women make the rounds selling fresh and curdled milk. Fulfulde is also the primary language of Douentza, which has the major regional market on Sundays.

Other local Dogon languages that are often known to people from Beni are Nanga and Tommo-So.

Bambara is not yet widely spoken in the area. However, many young men and some young women migrate annually to Mopti, Bamako, or other southern cities for seasonal work. Others stay in the south for several years, often working as domestics or street pedlars, then return to their native village. These people pick up a basic knowledge of Bambara in the south.

French is the major language of education and is spoken to a variable extent by those who have passed through the school system.

### 1.3 Locations and environment

Ben Tey is spoken in the communities in (1). GPS readings are in degrees, minutes, and decimal fractions (. 000 to .999 ) of minutes.

Beni and Gamni are located on a large flat rocky shelf between an inselberg cliff and the sandy plain. Standard Jamsay is spoken in villages in the plains such as Dianwely. Farther south on the same rocky shelf as Beni and Gamni is the village of Pergue, where an unusual dialect of Jamsay is spoken. Across the sandy plains from Beni is another long inselberg ridge leading in the north to Fombori near Douentza. Koumboye is located at the base and on the lower slopes of this inselberg.
(1) a. village of Beni (bê:n), locally also called bè:n ná: 'Beni mother' (i.e. 'Beni proper') to distinguish it from (b). Coordinates are N 1451.144 by W 0256.785 , about 3 km SSE of Dianwely Maoudé, a Jamsay-speaking market town some 13 km south of Douentza. Beni is on the edge of the rocky shelf overlooking the plains on one side and a deep ravine on the other. Beni people cultivate fields in the plains below, primarily millet, and some light herding (often entrusted to local Fulbe) ; there is some off-season gardening in the ravine (African eggplant, chili pepper, yam, lettuce, sugar cane, onion) along with guava and mango; other activities are bee-keeping (apiaries in trees and in caves), spinning and weaving (cotton cloth), and oil extraction from fruit pits (wild grape Lannea, wild date Balanites, and karité Vitellaria). Surnames are Kagoye and Morogoye.
b. Beni-Djinekala (bè:n jìrnè kàlá "Beni house new", archaic name mà:-tánà), an offshoot of Beni proper; coordinates N $14^{\circ} 51.248^{\prime}$ by W $02^{\circ} 56.860^{\prime}$. Same activities and surnames as Beni.
c. Gamni (gàmnú) village, on the same rocky shelf as Beni but at the base of the cliffs some distance from the plains at N $1450.770^{\prime}$ by W $0254.965^{\prime}$. Cultivated fields are mostly on the rocky shelf, some light herding, no significant off-season gardening. Other industries are indigo dye-ing (Timte women), weaving, wooden beds, and leather sandals. Surnames are Djire, Dielekoumaga, and Timte. Younger people are becoming Jamsay-dominant, while most older people are bilingual.
b. Koumboye (kùmbǒy) hamlet cluster, about 6 km south of Douentza, at the base and on the lower slope of the mountain ridge including Fombori ( 2 km from Douentza). Kumboy's coordinates are N 1456.043 by W 02 55.586. Mostly scattered thatch huts on the plains at the base of the mountain, but two families have stone houses on the lower slope. Farming and light herding, no gardens. Industries include woven doum-palm fans and mats, and wooden beds and stools. Surnames are Ouologuem, Seiba, and Guindo. There are no close social relations with Beni-Gamni.

Beni and Gamni are said to be among the oldest villages in the zone, pre-dating the Jamsayspeaking villages in the plains.

In the past, Beni and Walo were closely affiliated, with the chiefhood rotating from one to the other on the death of a chief (Hogon). Walo is well-separated from the Ben Tey-
speaking communities, as Walo is north of Douentza while Beni, Gamni, and Kouboye are south of Douentza. Combined with the strict Islamization of the entire zone, which has led to a ban on most traditional ceremonies and to the destruction of masks, idols, and tomtoms, this geographical separation has led to a severe attenuation of social relations between Beni and Walo.

### 1.4 Previous and contemporary study of Ben Tey

The existence of this language was long unknown both to western scholarship and to Dogon government linguists in Bamako. Aside from myself, the only linguist known to have visited the area is Roger Blench, who made a brief survey of the language of Walo in March 2005. He was told that the Walo variety was a dialect of the language under study here. He referred to the language provisionally as Walo-Kumbe in a survey report and word list disseminated on his website since 2005.

### 1.4.1 Fieldwork

I began work on Jamsay in mid-2004. Jamsay is the major Dogon language of the zone south of Douentza, with extensions to Mondoro and to near Koro. It is therefore a kind of Dogon lingua franca in this area, and is widely spoken as a second Dogon language by native speakers of Ben Tey, Nanga, Najamba, and Toro Tegu languages.

During September 2004 I began surveying these four non-Jamsay Dogon languages, spending one week for each in a representative village. Much of this early work involved making contacts, and doing flora-fauna vocabulary (many insects and plants are only collectible in the late rainy season). I returned to Beni for 4-6 day visits on several subsequent occasions.

Additional fieldwork on Ben Tey was done in 2006-11 as part of the larger project. Texts were recorded and transcribed, an extensive general lexicon developed, and the grammar drafted. A few details were checked between 2011 and 2015.

### 1.4.2 Audiovisual and internet

This grammar and the text transcriptions/translations are in conventional print form. The lexical data are currently included in a pan-Dogon spreadsheet that is also the basis for the lexical pages in the project website:
http://www.dogonlanguages.org
The flora-fauna terms are currently in separate spreadsheets on Dogon flora and Dogon fauna, also available on the project website.

The lexical senses (in English and French), and the flora and fauna taxa, are associated with five-digit reference numbers (internal to our project). Audiovisual materials, which include photos (jpg), short video clips that illustrate individual lexical senses, and longer videos that might be described as amateur documentaries. The photos and the short lexical clips have the relevant five-digit number codes in their file names, so it is relatively easy to go back and forth between lexical entries and associated images and clips.

With help from Salif Morogoye and Minkailou Djiguiba, I have produced a number of videos about practical activities in Beni, including agriculture, food preparation, collecting honey, and weaving. These may be viewed on the project website or on my personal page at Linguistics Dept, U Michigan.

### 1.4.3 Acknowledgements

The original Jamsay-focused project, which included the first short visit to Beni, was funded by grant PA-50643-04 from the National Endowment for the Humanities. The larger Dogon project during which most of the work on BenT has been done has been supported by the National Science Foundation: grants BCS-0537435 (2006-09), BCS-0853364 (2009-13), and BCS-1263150 (2013-16). Additional support has been obtained from the University of Michigan.

## 2 Sketch

In this chapter a few major features of the language are introduced. For all topics raised, muchfuller coverage can be found in the following chapters.

### 2.1 Prosody

The most important linguistic-theoretical interest of Dogon languages is the grammaticalization of (usually stem-wide) tone overlays, which erase lexical tone melodies and are controlled by a nearby word. I call this tonosyntax, defined as the imposition of a tone contour on one or more words (the targets) by another word or constituent (the controller). A brief summary of the tone overlays in BenT is in §3.7.2. Tone overlays are indexed by superscripts like ${ }^{\mathrm{L}}$ or ${ }^{\mathrm{HL}}$, positioned on the edge of the targeted word that "faces" the controller. These superscripts are not phonetic diacritics, since the tone overlays have already been applied to the targeted word; the superscripts are simply indexes that a tonosyntactic process has applied.

Some Dogon languages, including BenT, also have more exaggerated word-final "intonational" contours (prolongation, with or without slowly falling pitch as in the dyingquail intonation), which can be lexicalized, grammaticalized, or (as in English) discoursesensitive. See $\S 3.8$ for a summary.

The syllabic tones in BenT, whether lexical or grammatical, are $\mathrm{H}, \mathrm{L},<\mathrm{HL}>,<\mathrm{LH}>$, and bell-shaped $<\mathrm{LHL}>$. The latter occurs lexically in some monosyllabics, and can also be created secondarily by combining tones from a stem syllable and a suffix, or by docking a floating L-tone ( 1 Sg possessor) on a monosyllabic noun. There is no $<\mathrm{HLH}>$ syllable tone.

Stems (except for some expressive adverbials) must have at least one H-tone. The normal lexical melodies are /H/, /HL/, /LH/, /LHL/, and /HLH/, the latter exemplified by bísěm 'tree sp. (Acacia tortilis)'. /HLH/ is disallowed in most Dogon languages, but it is allowed in Toro Tegu as well as in BenT. Nouns with contours like /HLHL/ are treated prosodically by native speakers as compounds.

Tone overlays controlled by elements to the right are always $\{\mathrm{L}\}$, i.e. stem-wide L-tone, also known as tone-dropping. $\{\mathrm{L}\}$ is overlaid on a noun before an adjective, on a noun or adjective before a demonstrative, ib a word (not already tone-dropped) in the head NP of the relative, on a verb stem before a negative inflectional suffix, or on a verb in the unsuffixed perfective.

BenT also has the intonational prolongation feature (symbol $\rightarrow$ ) built into some lexical stems, chiefly expressive adverbials like dém $\rightarrow$ ‘straight, directly’. BenT makes extensive use of phrase-final intonational features (prolongation, rise or fall in final pitch) in parallelistic constructions ('X or Y', polar interrogative 'will you go, or will you not go?').

Possessed nouns (plus any adjectives and numerals) have a different tone overlay controlled by a preceding possessor (NP or pronoun). The possessor-controlled overlay is $\{\mathrm{HL}\}$ if the possessor is a determined/quantified NP or a pronoun For simple (undetermined and unquantified) nonprominal possessors, the overlay on the possessed NP is $\{\mathrm{HL}\}$ after final H -tone and $\{\mathrm{L}\}$ after final L-tone. There are further complications, including differences
between alienable and inalienable (kin-term) possession as to whether numerals are included in the targeted domain.

1 Sg possessor is marked only by a floating L-tone that docks on the left edge of the possessed noun. The latter has the possessor-controlled $\{\mathrm{HL}\}$ overlay, which combines with the floating L-tone of the 1 Sg to produce $\{\mathrm{LHL}\}$, more accurately represented as $\mathrm{L}+\{\mathrm{HL}\}$. For a rare noun like běy ${ }^{n}$ 'beard' that already consists of a lexically <LHL> syllable, the possessed stem with the $\{\mathrm{HL}\}$ overlay is ${ }^{\mathrm{HL}} b \hat{\varepsilon} y^{n}$, and the 1 Sg form with the extra L-tone on the left edge is therefore ${ }^{\mathrm{L}+\mathrm{HL}}$ b ${ }^{\dddot{c}} y^{n}$ ' my beard', identical (to my ears) to the unpossessed form.

Because a possessor has tonal effects on a noun to its right, while an adjective or demonstrative has tonal effects on a noun to its left, we must consider what happens when the noun is caught in the cross-fire. In BenT, a possessor has tonosyntactic control over the possessed sequence consisting maximally of a noun, one or more modifying adjectives, and a following numeral, as in Poss ${ }^{(H) L}$ [ N Adj Num]. The relevant possessed-noun overlay, $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$, targets the full domain.

There is a process reminiscent of terminal intonation modulation in verbal morphology, where 1Sg $-y$ and 1Pl $-y . \therefore$, and likewise $2 \mathrm{Sg}-w$ and 2Pl $-w \therefore$, differentiate plural from singular by means of prolongation of the preceding vowel and by imposition of [HL] (falling) pitch on the final syllable. Whether this can be handled using ordinary phonological length and tone, or must be classified as intonational, is discussed in §3.8.3.

### 2.2 Inflectable verbs

The system of derivational and inflectional categories is similar to those of other Dogon languages. The major suffixal derivations (chapter 9) are reversive (e.g. 'untie') and causative for verbs, and inchoative and factitive for adjectives. There are also some passivelike constructions. The verb stem, simple or suffixally derived, is followed by an aspectnegation (AN) suffix plus a pronominal-subject suffix, or by a modal suffix that also includes pronominal-subject information. For example, $t \delta \overline{-} j \dot{\varepsilon}-\grave{W}$ 'you-Sg have sowed (seeds)', the verb is followed by recent perfect $-j \dot{\varepsilon}$ - and then by 2 Sg subject $-\grave{w}$.

The principal AN categories are based on the intersection of the perfective-imperfective aspectual opposition with polarity (positive, negative). The core of the indicative system therefore consists of the four poles perfective (positive), perfective negative, imperfective (positive), and imperfective negative. There is little morphological connection between positive and negative forms. The (positive) perfective and imperfective both have a (more or less) unsuffixed basic form, and a few more specialized categories marked by suffixes. The perfective (positive) system therefore includes marked experiential perfect, recent perfect, and resultative, while the imperfective (positive) system includes a reduplicated variant and a marked progressive that can also be habitual.

At a higher level, these AN categories are subordinated to an opposition between present (unmarked) and past (marked by a conjugated clitic). For example, past imperfective is a higher-level past category dominating imperfective.

Stative forms can be derived from some regular verbs including stance verbs ('be sitting' as opposed to dynamic 'sit down'), and there are several defective stative quasi-verbs ('be', 'have', etc.). Suffixally marked modal categories are imperative and hortative. There is a special verb form for quoted imperatives (QuotImprt).

An example of a verb form is ló:-rè-W 'you-Sg went', markup go-Pfv1a-2SgSbj. The perfective-1a is a suffixal form used with motion verbs and more or less mediopassive intransitives (including inchoatives derived from adjectives).

### 2.3 Noun phrase (NP)

For nouns, the main morphological feature is the opposition between (animate) singular $-m$, and zero both for (animate) plural and for inanimate (undifferentiated singular and plural). In several other Dogon languages, human or animate singular is *-n(u), versus plural *-m or similar. Rather than trying to reconcile BenT animate singular $-m$, it is more reasonable to derive BenT -m from *-n(u) via *- (preserved in Nanga).

Typical modifying adjectives have a three-way suffixal distinction, with $-m$ (animate singular), zero (animate plural), and $-w$ (inanimate). Such adjectives directly follow the noun, and control tone-dropping on it. A numeral or determiner may follow the adjective. Numerals and definite kù do not control tone-dropping on a preceding word, but demonstrative pronouns do.

As previously indicated, a possessor may precede the noun and its modifiers. A possessor controls an $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ overlay.

An example of a NP is [yà ${ }^{\mathrm{L}} p \check{\text { ě-m] }}{ }^{\mathrm{HL}}$ [ínjè pèrù]] '(a/the) old woman's ten dogs'. The NP yà ${ }^{\mathrm{L}} p \check{\varepsilon}-m$ is marked up [woman ${ }^{\mathrm{L}}$ old-AnSg], where superscript ${ }^{\mathrm{L}}$ indexes tonosyntactic tonedropping of the noun. The animate singular suffix shows up only once, at the end of the core NP (noun plus any adjective). The adjective controls tone-dropping on the noun, which appears without an adjective as yǎ-m. This NP functions as preposed possessor of the nounnumeral sequence that would otherwise appear as ìnjé pérú, mark-up 'dog-Pl ten', with zero marking of animate Pl . This noun-numeral combination is subject to a possessor-controlled $\{\mathrm{HL}\}$ tone overlay. The mark-up of the possessed NP is ${ }^{\mathrm{HL}}$ [dog ten], realized as [ ${ }^{\mathrm{HL}} \operatorname{dog}{ }^{\mathrm{L}}$ ten].

### 2.4 Postposition phrase (PP)

Postpositions include dative mâ:, instrumental nây ${ }^{n}$ 'with', and locative wo. The latter is atonal, and gets its tone by spreading from the final tone of the preceding NP or pronoun. Postpositions do not usually affect the form of the NP complement, except for minor tone sandhi.

Complex postpositions are created by combining locative wo with a form that functions like a possessed noun. For example, 'behind X ' is expressed as [ $\left[X^{\mathrm{HL}} \text { túlù }\right]^{\mathrm{L}}$ Wò], literally 'in X's rear', where tùlú 'rear' takes possessed-noun $\{\mathrm{HL}\}$ overlay.

Examples of PPs are, with another composite postposition, [tìwn $n y^{n}{ }^{\mathrm{HL}} b$ bélè $]{ }^{\mathrm{L}} W o ̀ ~ ' b e s i d e ~$ (a/the) tree' (originally 'in/at the tree's side'), mark-up [[tree ${ }^{\mathrm{HL}}$ side] in], and the simple PP ǹjé $n a ̂ y^{n}$ 'with what?', mark-up [what? with].

### 2.5 Main clauses and constituent order

BenT is verb-final. The basic order of nonpronominal constituents is SOV. Pronominal objects and dative PPs immediately precede the verb unless focalized or topicalized. There is
no case-marking for subject NPs. Object NPs including pronominals have an optional accusative clitic $=n i ̀$ that sometimes marks object focus.

Temporal, and to some extent spatial, adverbs often precede the subject NP, epecially when they describe the general spatiotemporal setting. In (2a), 'yesterday' typically precedes the subject, but the place name 'Douentza' follows it because it is a complement of 'come'. 'Yesterday' can also follow the subject NP (2b). On the other hand, (2c-d) show both temporal and spatial adverbs preceding subjects.

| a. yéngù | bô: dúwánsán | $y \varepsilon ́-\grave{W}=b \grave{\varepsilon}-\varnothing$ |
| :---: | :---: | :---: |
| yesterday | 1SgPoss-father D | come-3SgSbj $=$ Past-3SgSbj |
| 'My father | me to Douentza yesterda |  |

b. bô: yéngù dúwánsán yé-Ẁ $=b \grave{\text { à }}$ - $\varnothing$
[=(a)]
c. yéngù bê:n bǒl $\grave{\varepsilon} s i^{n} \rightarrow \quad \operatorname{mìr}^{n} \dot{\varepsilon}-\varnothing$
yesterday Beni rain(n) a.lot rain.fall.Pfv-3SgSbj
'Yesterday it rained a lot in Beni (village).'
d. yéngù [òr ${ }^{n}$ ó: dá:] àsùw ${ }^{n} \dot{\varepsilon}$-[yì-tê:]
yesterday [outback around] boy-[children]
jáy jàyà-bò
fight(n) fight.Pfv ${ }^{\mathrm{L}}-3 \mathrm{PlSbj}$
'Yesterday the young men had a fight (squabble) in the fields.'
e. nǔ: nàw $n$ â: băy ${ }^{n} \rightarrow \quad$ kùwò-bò
person.Pl meat a.lot eat.meat.Pfv-3P1Sbj
'The people ate a lot of meat.'
f. yì-ť̌: $\quad \eta a ̂ y^{n} \rightarrow \quad$ súyó-ré
children thus hit-Proh
'Don't-2Sg hit children like that!'

Many of the common "adverbs," other than full PPs and spatiotemporal adverbs, are expressive adverbials syntactically (§8.6.7).

### 2.6 Relative clauses

Relative clauses in BenT are fairly similar to those in Jamsay and other Dogon languages (other than Toro Tegu). The head NP remains, up to and including a numeral, inside the clause, but peripheral elements (determiners, non-numeral quantifiers) appear after the verb. The "verb" is a participle, agreeing with the head NP (not the subject, if distinct) in animacy and number. However, the agreement suffixes differ in form from those on nouns and those on adjectives. A relative morpheme kà: ${ }^{n}$ optionally occurs at the end of the clause-internal head NP. The relative clause as a whole controls tone-dropping on one or more words in the clause-internal head NP. The noun in the head NP is not repeated as a possessed noun after the entire relative clause as it can be in Jamsay and Togo Kan. In nonsubject relatives, if the
subject is pronominal it is expressed by an independent pronoun that is proclitic to the participle. In a nonsubject relative, if the subjects of the relative and main clauses are coindexed third persons, the relative clause has a reflexive pronoun as subject (§18.2.3).

The schemas in (3) give the general idea of how main clauses are converted into subject and nonsubject relatives. 'Stone' is tone-dropped in (3c) as the head NP, but not in (3b) where it is not the head. The main clause (3a) has a pronominal-subject suffix on the verb, but the relative clauses ( $3 b-c$ ) replace this with a participle that agrees with the head NP.
(3) a. main clause
[stone see-Ipfv-1SgSbj]
'I see a stone.'
b. subject relative
[person- $\mathrm{Pl}^{\mathrm{L}}$ stone see-Ipfv.Ppl-AnPl Definite]
'the people who see a stone'
c. nonsubject (in this case, object) relative
[stone ${ }^{\mathrm{L}} \quad 1 \mathrm{Sg}$ see-Ipfv-Inan Definite]
'the stone that I see'

Among several peculiarities of BenT relative clauses is the use of agentive forms as imperfective participles for animate heads (§14.1.6.6).

Relativization is covered in chapter 14.

### 2.7 Verb-chaining

Verbs and VPs may be chained together. In these cases, the final verb has its regular inflected form. In a direct verb-verb chain, the nonfinal verbs are in the bare stem, which is also used in some inflectional forms, and the verbs in question are immediately adjacent (i.e. in a compound-like structure). This is typical of semantically tight combinations where each verb denotes an aspect of a larger event structure (co-events). An example is děy dùsó- 'put down and leave', where the nonfinal verb remains in the bare stem while AN and pronominalsubject affixes occur only on the final verb.

There are also looser chains, where one complete clause or VP is linked to another by means of a clause-final subordinator like $=n a y^{n}(\S 15.1 .9)$ or other morpheme on the nonfinal VPs. In loose chains, the eventualities denoted by the various clauses may be spatiotemporally distinct and need not be construable as co-events.

Both direct verb-verb chains, and (to a large extent) loose chains such as those with $=$ ná $^{n}$, are associated with same-subject (SS) sequences. The corresponding different-subject (DS) clause-final subordinating particle is $=n i ̀ ~=n ̀ ̀$, which suspiciously resembles the accusative morpheme that is optionally added to direct-object pronouns and other NPs. For example, yغ̀ = náy 'come=and.SS' occurs in contexts like 'I came and (then) went back', while $y \varepsilon ́=n ̀ ~ ' c o m e=$ and.DS' can occur (with a preceding subject NP or pronoun) in contexts like 'He came and (then) I went away'.

Chaining (serialization) and switch-reference subordination is described in detail in chapter 15.

### 2.8 Interclausal syntax

VP chains and relativization account for a good part of the interclausal syntax, since some matrix verbs like 'can(not)' take the form of direct chains, and since many spatiotemporal and manner adverbial clauses are special cases of relativization. In addition, a subordinated clause (or VP) may be expressed with the verb in verbal-noun form.

The basic clause-final 'if' particle in conditional antecedents is de, which takes its tone from the preceding word. This particle also occurs in pseudo-conditional clauses that function to link one future event to another that will follow it in time (§16.1.2).

### 2.9 Quotations

Quotations have a rather complex syntax (§17.1). Quoted material can be framed by an explicit 'say' verb $g \check{y} y^{n}$-, or just by a clause-final unconjugated quotative clitic wa. The subject of a quoted sentence is set off by a special quotative subject (QuotSbj) morpheme. First and second person pronominal subjects are not expressed in the usual way by suffixation on the verb. Instead, they appear as independent pronouns with the quotative subject morpheme at the beginning of the clause, and the verb has an unmarked 3 Sg suffix. However, 3 Pl subject is marked on the verb. This is one of several cases in BenT (mirrored in several other Dogon languages) where 3 Pl subjects get special favored treatment in verbal agreement. The schema in (4) shows how a 1 Sg subject is treated in main clauses and in the corresponding quotation.
(4) a. donkey(-Acc) tie-Pfv1b-1SgSbj
'I tied the donkey.'
b. [1Sg QuotSbj] donkey(-Acc) tie-Pfv1b-3SgSbj Quot '(X) said that I tied the donkey.'

When the quoted speaker (or thinker) is coindexed to a NP within the quoted matter, i.e. when the original speaker (thinker) used "I/me," it takes the form of a logophoric pronoun. So if (4a) were uttered by $X$, and the current speaker is quoting him/her, we get the schema (5).
(5) [LogoSg QuotSbj] donkey(-Acc) tie-Pfv1b-3SgSbj Quot
'(X) said that he/she ( $=\mathrm{X}$ ) tied the donkey.'
Logophorics have the same form as third-person reflexive pronouns in BenT (unlike e.g. Tomo Kan, where the two series differ in form).

Imperatives ('go!') and hortatives ('let's go!') can also be quoted, but here too there is a special morphosyntax for such (jussive) complements. In addition to the usual hortative ('let's go!'), there is a quoted imperative (QuotImprt) verb form. It is used in wishes/imprecations like 'may God be with you' and in quoted or indirect commands like 'let him (=tell him to) come!' (§10.5.7, (§17.1.3.1).

## 3 Phonology

### 3.1 General

Syllables and metrical structure are briefly covered in §3.2. The consonants are presented in $\S 3.3$, followed by vowels in $\S 3.4$. The vowel-harmony system ( $\S 3.4 .5$ ) is not much of a factor in the morphophonology. Segmental (i.e. non-tonal) phonological processes are covered in $\S 3.5$, followed by remarks on cliticization in $\S 3.6$. The tonology is $\S 3.7$, and intonation patterns (some of them grammaticalized) are reviewed in §3.8.

### 3.2 Internal phonological structure of stems and words

### 3.2.1 Syllables

Monosyllabic words are $C v, C v$ : or $C v C$, rarely $C v: C$.
Verb stems are fond of the $C V$ shape. Nearly all monosyllabic verb stems are of this monomoraic shape, for example dǒ 'burn', mǎ 'shape (pottery)', ló 'go'. The vowel is lengthened before a derivational suffix such as reversive or causative, but remains short before an inflectional suffix or when chained to another following verb. Even a rising tone does not force an additional mora: yદ̌- 'come', nǔ- 'hear', gǒ- 'jab'. We do get a long vowel in $j \check{\varepsilon}$ :- 'bring' with its <LHL> tone.

With the exception of a few $C v$ nouns and adjectives, stems other than verbs have at least two moras, so vowel-final monosyllabic stems are usually of the shape $C v$ :, as in kû: 'head', ná: 'big'.

The defective noun ná 'time(s)' is always short-voweled. It is always closely combined with a following numeral or other quantifier: ná yěy 'twice'. Other nouns and adjectives that appear to be lexically $C v$ are /yǎ/ 'woman', /nú/ 'person', /ô/ 'mouse', /sǒ/ 'horse', reduplicated /tì-tê/ 'hawk', /pě/ 'old', and /lǎ/ 'other'. However, the vowels of these stems are lengthened when they are unsuffixed, presumably because they all have contour tones; see Contour-Tone Mora-Addition §3.7.4.1.

BenT (like Najamba) has a large number of nouns ending in a final long vowel with falling tone. For example, 'meat' is nàw ${ }^{n} \hat{a}$ :, compare Jamsay nòwn $n$ and Toro Tegu nàmá. The final rising tone is also found in two Dogon languages subgrouped with BenT: Nanga nàmâ, Bankan Tey nàmâ:. If we reconstruct *nàmá-, we must consider the possibility that BenT and its relatives have preserved a trace of an original L-toned suffix.

### 3.2.2 Metrical structure

Weak positions in metrical structure are characterized by raising and/or reduction of short vowels. Metrical structure is not a major factor in BenT in (uncompounded) noun, adjective, or numeral stems. The initial syllable is arguably a strong position, and there are many bisyllabic stems with an initial heavy syllable, e.g. bò:tó 'sack', jémbé 'bag'. However, nouns
like sègérè 'filtering basket' show no phonological signs of strong and weak positions; in particular, the second syllable of a trisyllabic stem is stable. In a bisyllabic stem, a final short high vowel $\{i u\}$ may be apocopated under some conditions, e.g. $C v C i \rightarrow C v C$ (§3.5.3.2, below).

In verbs, there are some suggestions of metrical structure insofar as some types of nonmonosyllabic verb stems show alternations between final $a$ and a somewhat unstable high vowel $\{i u\}$. Other Dogon languages often associate the high vowel in such alternations with weak metrical position (the high vowel may reduce to schwa, is subject to coloring by nearby consonants and vowels, and may be deleted entirely). However, there is a cart-and-horse issue here; does weak metrical position favor raising and lenition of a vowel, or does an independently occurring vocalic alternation happen to feed into lenition of the high-vowel alternant?

In BenT, the verbs with a final-vowel alternation have final $a$ in the imperative, and final high vowel (or zero) throughout the remainder of the paradigm, including forms where the final high vowel is "strengthened" by a tautosyllabic final consonant. For example, 'think' has imperative mă:nà, bare stem mà:ní (e.g. in chains), perfective mà:ní-tî-, imperfective mì-mà:ní-m, etc.

In verbal derivation, there are some cases where the final vowel of a bisyllabic input is raised before a derivational suffix, as in tárá- 'paste (on), affix', reversive tálí-rí' 'remove (something pasted or affixed)', where the second syllable of tálí-rí- is our focus. However, there are several reversives like gòlò-ró 'uncover (someone)', kúmjó-ró- 'uncrumple', etc., where no raising of the second-syllable vowel is observed. So metrical structure plays a relatively small role in BenT phonology.

### 3.3 Consonants

The consonants are listed in (6).
(6) Consonants

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

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

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

As elsewhere in the northeastern Dogon language zone, there is some fluctuation between $\{k g\}$ and $\{c j\}$ pronunciations before front vowels $\{i$ e $\varepsilon\}$. Where both pronunciations have been recorded, I normalize the transcription as $\{c j\}$.
$n$ is fairly common before a vowel. Examples: $n \varepsilon ̌ y^{n} n \varepsilon$ 'eat a meal', nà: $r^{n} 1$ 'hold near fire', Jár ${ }^{n} \grave{u}$ 'night', and $n u ̀ w^{n} \sigma^{\prime}$ 'do for a long time'.

An interesting alternation of $y$ and $n$ is intransitive yùró '(someone) wake up' and transitive jù̀: $r^{n} u$ 'wake (someone) up'. In other languages, cognates have either a nasal element in both forms (Jamsay $n$, Bankan Tey nj), or a non-nasal element in both forms (Nanga and Najamba w).

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

Spirantization of intervocalic $/ \mathrm{g} /$ to $\delta$ is fairly common, though not obligatory, when intervocalic within a word and flanked by vowels from the set $\left\{\begin{array}{l}a \\ 0\end{array}\right.$. Thus kù-dàyá 'agemate', dòvó 'state of being disdained'. One may consider $g$ to be phonologically basic.

Historically, some original $*_{\mathrm{g}}$ have been deleted between nonhigh vowels, resulting in long vowels in BenT. For example, àrš̌:-m 'domestic animal' reflects *(g)àrsègé, cf. Jamsay and Nanga gàsègé. It is ultimately from Arabic. Likewise dồ: 'Dogon (people)' and $\hat{\jmath}$ : 'chiefs' derive from *dògó and *ògó. For deletion of ${ }^{\eta}$ in similar contexts see $\S 3.3 .3$ below.

### 3.3.3 Velar nasal ( $\eta$ )

Aside from the homorganic clusters $\eta g$ and $\eta k$, we get $\eta$ in à $\eta \hat{y^{n}}{ }^{n}$ 'how?', pà $\eta a ́$ (variant pà $\left.\eta g a ́\right)$ 'strength', ŋây $\rightarrow$ 'thus', dû̀ dùŋó 'get dressed', sòyór ${ }^{\prime} \grave{\jmath} y ~ ' s p i n a l ~ c o r d ', ~ a n d ~ s e v e r a l ~ o t h e r ~$ stems.

As with $* \mathrm{~g}$, original $*_{\mathrm{y}}$ has disappeared intervocalically in certain words, e.g. nǎ:-m 'cow' (*nàyá), though it is retained in nàyà-nà: $r^{n} u$ 'butter (from cow's milk)', which may have been borrowed from the identical form in Jamsay. In séwn $u$ 'make thorn-branch fence', we seem to have $w^{n}$ for *ท (Jamsay sápá, Nanga sénỉ).

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

As in other Dogon languages, $f$ is not a full-fledged consonant, and a borrowed word containing it may show $p$. Thus màrpâ: 'rifle', kàpê: (alongside kàfê:) 'coffee', pùrù-púrù 'wheat-flour fritters'.

I have recorded $f$ in some loanwords that I assume also have variants with $p$ : cé:fàm 'fever', té:fà 'fee paid to witness of livestock sale', fârnî: 'wheat-flour fritters', ná:fígù 'trouble-makers', dófè 'good-for-nothing adult', nàfầ: 'usefulness', má:fè 'red sauce', sá:fâ 'evening prayer', and a few others. However, I also recorded $f$ in jófù (intensifier for 'wet')

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

$h$ occurs in loans, chiefly from Fulfulde (some of these were originally Arabic). One of these is the important particle hâl 'until, all the way to'. Others include hó:lé 'trust (verb)', hàrâm 'a Muslim holy day', híjjì 'pilgrimage to Mecca', and hí:lé ‘dupe, trick'.
? (glottal stop) is found in gúrù?á:nà 'Koran (book)', where it reflects Arabic $?$, and in the semi-linguistic utterance $\delta^{n} \not j^{n}$ 'nope!'. A glottal stop is also inserted after a $v$ - (for $C V$-) reduplicative segment before a vowel-initial stem, see e.g. §10.2.1.9.

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

Only $s$ is clearly established as a phoneme. Other sibilants $\left\{\check{S}_{Z} Z \check{Z}\right.$ ) occur in a few loanwords from French: álážérî: ‘Algeria', zánármá 'gendarmes', šinwâ: 'Chinese'. There is no strong tendency to phonetically palatalize $s$ before front vowels.

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

These nasalized sonorants can be independent phonemes in (noninitial) intervocalic position within words. In stems like bàrná 'beat (tomtom)', káwná 'mash (to press out oil)', $\varepsilon$ ' ${ }^{n}{ }^{n}$ ' milk (a cow)', pí:yní 'confine', díynà 'old', and gǎy ${ }^{n}$ 'put', the sonorant is the only nasal or nasalized segment. In such words, BenT intervocalic $w^{n}$ corresponds to $m$ in some other languages, e.g. BenT nùw ${ }^{n} \hat{1}$., Jamsay nǐm, Nanga nìmî 'cow-pea'.
$y^{n}$ and $w^{n}$ may also occur syllable-finally, though only $y^{n}$ is common here: gǎy ${ }^{n}$ 'put', káy ${ }^{n}$ 'do', $p \varepsilon ̌ w^{n}$ (sound of fart).

When a consonant from the set $\left\{r^{n} W^{n} y^{m}\right\}$ occurs in a word with a preceding nasal or nasalized consonant, and no intervening non-nasal consonant, the nasalization in $\left\{r^{n} W^{n} y^{m}\right\}$ may be attributed to Nasalization-Spreading, which normally operates from left to right within a word. In such cases, the sonorant is lexically unspecified for nasalization. Examples are nàw ${ }^{n} \hat{a}$ : 'meat', néwn ${ }^{n} \varepsilon$ 'taste', nàr"á 'mother', jèměyn 'metal protrusions on rifle cock', mùyní '(shoulder) be dislocated'. However, the predictability of nasalization is compromised by cases where $m$ reflects *mb, as in màrá 'become lost' (cf. Bankan Tey m̀bàrá), where the $r$ is not nasalized.

In e.g. nàr ${ }^{n} 1 y^{n}-W^{n}$ (for /nàr ${ }^{n} 1 y^{n} 1 \grave{i}-w^{n}$ ú/) 'expand (e.g. one's herd)', we observe spreading of nasalization across the entire word, which includes a suffix (elsewhere -w). This is possible when there is no intervening nonnasal consonant to block the spread from left to right.

A syllable-final $y^{n}$ or $w^{n}$ in a nasalizing environment could be transcribed with or without the nasalization diacritic. I generally transcribe without the diacritic, except for verbs (in the citation form with final vowel apocopated), since when suffixes are present the final semivowel is intervocalic and clearly nasalized. Thus noun sìyň̌w 'lover', pronounced [sìjnǎ ${ }^{n}$ ], and verb nàr ${ }^{n} i y^{n}-W^{n}$ 'expand (e.g. one's herd)'.

In áwn${ }^{n} y^{n} 1$ '(wound) swell', $\varepsilon w^{n} \varepsilon ̀ y^{n}$ 'milk (noun)', jìr ${ }^{n} \varepsilon ̌ y ~ ' r a i n y ~ s e a s o n ', ~ a n d ~ s o m e ~ f e w ~$ other stems, there are two mutually reinforcing consonants from the set $\left\{r^{n} W^{n} y^{n}\right\}$. Given that Nasalization-Spreading primarily works from left to right, if one must identify a (lexically) primary nasalized consonant it would be the leftmost one.

Initial $W^{n}$ was heard in certain words, suggesting a modest tendency for nasalization to spread from the right to the onset of the word. Examples: some pronunciations of the
(undoubtedly borrowed) term for 'rice or millet pancake' ( $w^{n}$ ó:nù, but also wó:njù, etc.); the final element (not otherwise attested) in kj̀njò- $W^{n}$ à $y^{n}{ }^{n} y^{n}$ 'strong, effervescent millet beer' (cf. kònjó 'millet beer'); $W^{n}$ à: $r^{n} u ́ ~($ (vine) spread out'. There is no general leftward NasalizationSpreading, as shown by examples like wòmbí 'uproot peanuts' and yàmdí 'be useless'. 'Woman' is yǎ:-m, plural yǎ: (unnasalized).

### 3.3.8 Consonant clusters

### 3.3.8.1 Initial $C C$ clusters

Word-initial $C C$ sequences are nasal-stop sequences $\grave{\eta} g$ and $\grave{m} b$. $\grave{\eta} g$ is seen in demonstrative $\grave{\eta} g u ́$ 'this' and in some other deictics, in $\grave{\eta} g o ́ ~ ' n o t ~ b e ', ~ a n d ~ a ~ f e w ~ F u l f u l d e ~ l o a n w o r d s ~ l i k e ~$ ŋ̀gú:rè 'livelihood'. Initial m̀b, which often alternates with simple $m$, is illustrated by m̀bǒ: ~ mǒ: 'mouth' and m̀bǎw ~ mǎW 'interethnic cousinhood'; intermediate pronunciations like [ $\mathrm{m}^{\mathrm{b}} \mathrm{o}$ :] with a faint oral release on the nasal are also observed.

When spoken in isolation, or after a word ending in a consonant, the initial nasal is syllabified separately. It is pronounced with low pitch in this position, but arguably this is phonetic pitch rather than phonological tone.

### 3.3.8.2 Medial geminated $C C$ clusters

Geminated medial $C C$ clusters are generally limited to Fulfulde (and other) borrowings.
Geminated clusters in words not likely to have been borrowed are:
11: illá 'slightly', kíllíyé 'be lost to sight', péllí 'break or cut off', îllé 'lift from underneath'.
$n n: ~ d a ̀ n n i ́ ~ ' h u n t ~(v e r b) ', ~ k o ̌ n n \grave{~ ' l a d l e ~(n o u n) ' ~(v a r i a n t ~ o f ~ k o ̀ t u ́ n \grave{) . ~}}$
Other geminated clusters attested in probable loanwords are exemplified below:
$b b: t o ́ b b \varepsilon ̀-t o ́ b b \varepsilon ̀ ~ ‘ s p o t t e d ’ . ~$
$c c: ~ h o ́ c c e ́ ~ ‘ c h e w ~ c u d ' . ~$
$d d$ : sáddà àyí 'be responsible for'.
$g g: ~ l o ́ g g i ́ ~ ' m a k e ~ d i r t y ’ . ~$
$j j$ : híjjì 'pilgrimage to Mecca'.
$k k$ : júkké ‘assess a fine’.
$m m$ : júmmà 'Friday prayer'.
$p p: s i ́ p p e ́ ~ ‘ d e s c r i b e ’ . ~$
$r r$ : yárró:rè 'tolerance'.
$t t$ : métté ‘be desperate'.
yy : láyyà 'Feast of the Ram'
There are no attestations of \#ff, \#hh, \#ss, \#ww.

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

These clusters typically begin with a syllable-final sonorant. The following syllable-initial consonant may be any full-fledged consonant phoneme. The most common type is the homorganic nasal-stop cluster. Those found in native vocabulary are:
$m b: t \varepsilon ́ m b u ̀ ~ ' t r a d i t i o n s ’ . ~$
nd : súndù 'child's medicine'.
$n t$ : bènté 'loincloth'.
nj : kònjó 'millet beer'.
ŋg : kóngóró 'chew on (bone)'
ŋk: yónkù 'soul'
Attested in Fulfulde loanwords:
$m p$ : hámpé 'chew (tobacco)'.
There are no attestations for \#nc.
Another cluster that occurs in native vocabulary is this:
$l g: j e ́ l g e ́ \rightarrow$ 'dangling'.
Other non-geminate $C C$ clusters attested are found mostly in loanwords, especially from Fulfulde. They include many combinations beginning with a sonorant $\{y w r l\}$.
$y b$ : háybé 'watch over'.
$y k$ : táyké 'notice'.
yl : léylà 'night of 27th of Ramadan'.
$y n$ : láyné 'chant (invoking God)'.
yr : bóyrì 'porridge'.
yt : sèytâ:n 'demon'.
wd : jáwdù 'livestock’.
$w g$ : tíwgú 'be disoriented'.
wl : dáwlè 'renown'.
$w t$ : sáwté 'be fed up'.
wy : Ǿwyí '(hen) brood'.
$W^{n} y^{n}: j a ̀ w^{n} y^{n} 1$ 'branch out'.
rb : dárbôy 'sword'.
$r d$ : wírdù 'saying one’s beads’.
rg : dòrgú 'ransom'.
rk: àrḱ́lè ‘armpit'.
rm : bármá 'pot'.
rn : fàrnî: ‘wheat-flour fritters’.
rp : màrpâ: 'rifle'.
rs : mórsínè 'large gunpowder horn'.
rt : sártù ‘deadline’.
lb : àlbárkà 'thanks!'.
lc : àlcêW 'stirrup'.
lj : áljúmá:rè ‘Friday’.
lk : àlkàmí:sà ‘Thursday’.

### 3.3.8.4 Medial triple $C C C$ clusters

These are rare and occur only in Fulfulde loans. The attested clusters, illustrated below, consist of a sonorant $y$ or $r$ plus a homorganic nasal-stop cluster.
yøg: póyŋgôl ‘illumination’.
yŋk : sóyóyŋkè 'Songhay (people)'.
rnd: bérndè 'cattle disease'.
rmb : kàrmbú ‘horse's muzzle’

In poorly assimilated loanwords there are also a few cases like kòmplê: '(clothing) outfit' (Fr complet).

### 3.3.8.5 Final $C C$ clusters

None.

### 3.4 Vowels

### 3.4.1 Short and (oral) long vowels

The inventory of oral vowels is the same as for other Dogon languages. The vowel qualities are high $\{i u\}$, mid-height $[+\mathrm{ATR}]\{\mathrm{e} o\}$, mid-height $[-\mathrm{ATR}]\{\varepsilon \rho\}$, and low $a$. The qualities all occur in short and long forms.
short oral long oral

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

### 3.4.2 Nasalized vowels

Phonemically nasalized vowels are fairly rare, except for a reasonable number with a-vowel. Examples below are sorted by vowel quality. Those with a high vowel have an expressive or onomatopoeic character. I know of no cases with + ATR e or o vocalism. The attested nasalized vowels are in (8).
(8) short nasal long nasal

| $u^{n}$ | $u:^{n}$ |
| :--- | :--- |
| - | - |
| $s^{n}$ | $\ddots:^{n}$ |
| $a^{n}$ | $a:^{n}$ |
| - | $\varepsilon:^{n}$ |
| - | - |
| - | $i:^{n}$ |

 'very much' (intonational prolongation makes identification of phonological length
impossible), jí: ${ }^{n}-j a ̀: n$ 'staggering or stumbling along' (expressive adverbial), sî: ${ }^{n}$ 'liquid animal fat (for sauce)'.
sǔ: ${ }^{n} s u^{n}$ 'breathe'.

$c \hat{\varepsilon}:^{n}$ 'inheritance’.
$a^{n}$ and $a:^{n}:-k a \check{a}:^{n}$ 'doers' (agentive) as in sìrdì-kǎ: ${ }^{n}$ 'magicians'; gǎ: ${ }^{n}$ 'put-ers' (agentive) as in yù:rù-gǎ:" 'fortune-tellers who analyse fox tracks', pán 'take (a step)', àjǎy ${ }^{n}$ ján 'sow (seeds) in a pit with manure’.

### 3.4.3 Initial vowels

Words may begin with any oral vowel quality. Examples are árwú 'thunder (verb)', $\varepsilon W^{n} \dot{\varepsilon} y$ 'milk', éw-yé 'sit', ósù 'road', ùsú 'sun', ìrěy 'ripe', òrú 'fresh'. Long vowels are uncommon but attested: í: $r^{n} \varepsilon y^{\prime}$ 'iron’.

### 3.4.4 Stem-final vowels

A fairly large number of nouns end in a long vowel, often with a $<\mathrm{HL}>$ or $<\mathrm{LHL}>$ tone: nà $W^{n} \hat{a}: ~ ' m e a t ', ~ l e ̀ m d \hat{\varepsilon}: ~ ' t o n g u e ' ~$

### 3.4.5 Vowel harmony

The active vowel-harmonic sets in Dogon languages are $\{\varepsilon \rho\}$ versus $\{\operatorname{e} o\}$, whether analysed in terms of relative height or in terms of the feature [ $\pm$ ATR]. Typically vowels from the same set may co-occur, but mixing the two sets (especially within an unsegmentable stem) is not allowed. High vowels $\{i u\}$ are extraharmonic and may combine with vowels of either set, while the relationship of $a$ to the harmonic sets is variable. The languages differ as to whether vowel harmony extends through to the end of words (i.e. from stem or suffix, or vice-versa). In compounds, each stem may have its own harmonic character. Since nouns and adjectives have little suffixal morphology, the issues generally apply only to verbal derivation and inflection.

In BenT, uncompounded stems of all word-classes respect harmony at the lexical level and do not mix the two active sets. To a large extent this is a trivial consequence of the strong preference for repeating the same mid-height vowel quality across a stem, as in jémbé 'bag', cé:lé 'do well', sóró 'sprinkle', and dòsó '(rain) strike'. In other words, even combinations of $\varepsilon$ with $\rho$, or of $e$ with $o$, are uncommon. However, we do seem to have harmonic effects in the nativization of loanwords such as pístólê: 'pistol' from French, and hó:lé 'trust (verb)' from Fulfulde.

### 3.5 Segmental phonological rules

### 3.5.1 Trans-syllabic consonantal processes

### 3.5.1.1 Nasalization-Spreading

Nasalization (from a nasal or nasalized consonant) can spreads from left to right within a word, affecting the sonorants $\{r w y\}$, which become $\left\{r^{n} W^{n} y^{n}\right\}$. The spreading occurs over intervening vowels, but is blocked by an intervening non-nasal consonant. Spreading is iterative within a word, so that e.g. /n...r...w.../ becomes $n \ldots r^{n} \ldots W^{n} \ldots$. I do not normally transcribe the nasalization in word-final position in nouns and other non-verb words.
 causative example is áw $w^{n} y^{n} 11_{-}^{\prime}$ 'be swollen', causative á $w^{n} y i ́-W^{n} u$ - 'cause to swell'.

The situation is complicated by cases where the potential target of NasalizationSpreading is separated by a vowel from a preceding original $*_{m b}$ or ${ }^{n} \mathrm{~g}$ g cluster that now alternates between the original nasal-stop pronunciation and a simple nasal $\{m \eta\}$, or that has now shifted entirely to the simple nasal pronunciation. In most such cases, NasalizationSpreading fails to apply, which makes it important to transcribe nasalization in other words with similar sequences where it does apply. Examples of non-application are in (9). Nasalization-Spreading does apply in $\grave{\varepsilon} m \varepsilon ̌ y^{n}$ 'sorghum' (compare Bankan Tey $\left.\grave{\varepsilon} m b \varepsilon ̌ y\right) ~ a n d ~ f o r ~$ younger speakers in mǎy "hard' (archaic m̀bǎy is also attested).

| a. bámàrà $\begin{aligned} & \text { màrá } \\ & \text { mì-rá- } \\ & \text { dámáy }\end{aligned}$ | 'Bambara (ethnicity)' |
| :---: | :---: |
|  | 'become lost' (cf. Bankan Tey m̀màrâ) |
|  | 'not want' (cf. Bankan Tey m̀ bìrá-) |
|  | 'courtyard' (cf. Bankan Tey dámbáy) |
|  | 'earth, dirt' (cf. Bankan Tey sùmbǎy) |
| b. táygày ~ táyày | 'side' |
| ŋ̀gú-rù ~ pú-rù | 'here' |
| kòngòró ~ kònòró | 'stem' |
| òngòró ~ j̀yòró | 'husband' |

Furthermore, some verbal inflectional endings undergo Nasalization-Spreading while others do not. In particular, the (third) plural category appears to be allergic to secondary nasalization. For example, perfective negative suffix -rí- is regularly nasalized to $-r^{n} 1 ́-$ in combinations like nì-r $r^{n} 1$ - 'did not give' (verb ní-), hence $3 \mathrm{Sg} n i ̀-r^{n} 1 \mathbf{1}-\varnothing, 1 \mathrm{Sg} n i ̀-r^{n} 1 ́-y^{n}, 1 \mathrm{Pl}$ $n i ̀-r^{n} i ́-y ̀ . \therefore, 2 \mathrm{Sg} n i ̀-r^{n} u ́-W^{n}$, and $2 \mathrm{Pl} n i ̀-r^{n} u ́-\bar{l} . \therefore$, but the 3 Pl form is nì-r-á 'they did not give' with unnasalized $r$. Likewise, a suffix $-y \grave{\varepsilon}$ with various plural or 3 Pl functions (plural of adjectives, 3 Pl of imperfective), does not nasalize: ní-yè 'they do/will give'. Other suffixes that do not nasalize are perfective-1a :-rè- (nú:-rè- 'did not go in'), progressive :-rà- (nǔ:-rà- 'is not going in'), and purposive -rá: ~ -ré:.

### 3.5.2 Vocalism of suffixally derived verbs

### 3.5.2.1 Suffixal Vowel-Spreading

Reversive suffix $-r^{\prime}$ - occurs (disregarding nasalization of the rhotic to $r^{n}$ ) in the forms -rí- (interchangeable with -rú-), ró-, and ré-. The less common surface forms -ró- and -ré- continue the $o$ or e vocalism of the input stem or at least its final syllable (kúmjó-ró- 'uncrumple', gòlò-ró- 'uncover', néngé-ré- 'become uncaught’). The example píré-ríl 'get unbogged' shows that -rí- may occur even where the phonological conditions permitting -ré- appear to be present. For the data, see $\S 9.1$.

Causative -wú- has invariant suffixal vocalism (§9.2.1), as does the minor causative suffix -gí- (§9.2.2). The vocalism of transitive suffix -rv́- (rarely -lf́-, §9.4) is consistent with that of reversive -rv́- (surface forms are -rí- and -ré-). In dì-ré- 'bathe (someone)' from intransitive dì-yé- 'bathe', and in síllé- 'take down' from intransitive sí-yé- 'go down', the suffixal $e$ is carried over from the intransitive stem-final vowel, even though its syllable is truncated in the causative. Data are in §9.2.

Deadjectival inchoatives are tricky, since they are not necessarily formed by adding a suffix directly to the adjective. Focusing on the form of the inchoative verb itself, we note that stem-wide vocalism limited to $\left\{\begin{array}{ll}o & u\end{array}\right\}$ vowels is associated with -ló- ~ -ró-, i.e. with suffixal o (dùgú- 'fat', inchoative dùgù-ló-; dùsú- 'heavy', inchoative dùsù-ló-; kúnjù-m 'coarse', inchoative kúnjú-ló-, órù-m 'smooth', inchoative óló-ró-; nǔm 'difficult', inchoative núm-dó-). There are some unusual cases where an $\varepsilon$ or a in the adjective is associated with a shift to e vocalism the suffix and in the stem itself in the inchoative ( $\varepsilon$ rimm 'sweet', inchoative élé-ré-; pílé 'white’, inchoative pílé-ré-; jéwnè̀- 'black', inchoative jèm-dé-; párù-m 'sour', inchoative pálé-ré-; gárù-m 'bitter', inchoative gàlè-ré-). We also get suffixal e in sîm 'pointed', inchoative sím-dé-, i.e. in the one case where the adjective has only $i$ vowel(s). Other stems with an $\{\varepsilon a\}$, and all stems with an $\rho$ anywhere in the stem, have $i$ in the suffix: gùrô- 'long', inchoative gùlù-rí-; غ̀sú- 'good', inchoative $\varepsilon$ ह́sí-lí-; ásù-m 'half-sweet, slightly bitter', inchoative ásí-lí-, and a few others. See $\S 9.7$ for more data.

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

In verbal derivation, the final syllable of a $C v C v$ - (or similar) input sometimes shifts to a high vowel.

In reversives, a shift from stem-final $\{\varepsilon a\}$ to a high vowel occurs in several cases (which also have $i$ as the suffixal vowel): pégé- 'nail (verb)', reversive pégí-rí- 'remove (nail)'; pájá- 'tie', reversive págí-rí- 'untie', ìré- 'forget', reversive ílí-rí- 'remember; tárá- 'paste, affix', reversive tálí-rí- 'unpaste, remove (something affixed)'. I know of no reversives involving input stem-final 0 . When the input stem-final is $\{e o\}$, no shift occurs in this vowel before the suffix: gòró- 'cover', reversive gòlò-ró- 'uncover'; néngíyé- be caught in tree', reversive néngé-ré- 'become uncaught', píré- 'get bogged', píré-rí- 'get unbogged'. For data see $\S 9.1$.

There is no shift in stem-final vowel quality before causative -wú- (§9.2.1). With a different causative suffix allomorph, we do get vowel raising in ùró- 'go up', causative ùlù-rú- 'take up'. Similarly, the two verbs with causative -gí- (káwá- 'separate oneself' and sáyá- 'be dispersed') delete the stem-final a, presumably after first raising it to a high vowel: káw-gí- 'separate (X from Y)', sáy-gí- ‘disperse (others)'.

Overall there is reasonable evidence for a process raising stem-final $\{\varepsilon a \quad o\}$ in nonmonosyllabic stems to a high vowel (variably pronounced $i$ or $u$ ) before a verbal derivational suffix other than causative -wú-.

### 3.5.3 Vocalic rules sensitive to syllabic or metrical structure

### 3.5.3.1 Vowel-Lengthening before verbal derivational suffix

$C v$ with short vowel is an acceptable shape for verb stems, e.g. tó 'step on'. Such short vowels are lengthened before derivational (but not inflectional) suffixes: reversive derivative tó:-rí- 'remove foot from (something that one has stepped on)' but e.g. perfective (inflectional) tó-tî:- 'stepped on'. Causative examples include $n \varepsilon$ - 'eat (meal)', causative $n \varepsilon:-W^{n} u ́-$ 'feed, give food to' and nú- 'enter', causative nú:- $W^{n} u$ - ‘cause to enter'.

Failure to lengthen was observed in irregular (frozen) causatives that involve truncation of an intransitive $C V-y v$ - stem to $C V$-, rather than an underlying $/ \mathrm{Cv} /$ stem: dì-yé- 'bathe, take a bath', causative dì-ré- 'bathe (someone)'; sí-yé- 'go down', causative sí-lé- 'take down'.

### 3.5.3.2 Syncope and Apocope

A short high vowel $\{i u\}$ can be deleted at the end of an unsuffixed stem (nouns, verbs, etc.), or at the end of a stem before a consonant-initial suffix (verbs). The deletion is generally optional. Syncope denotes deletion before a suffix, while Apocope is the term for word-final deletion not specifically involving a following word. For a discussion of weak metrical positions, those that lend themselves to reduction or deletion of a vowel, see $\S 3.2 .2$, above.

When the stem in question ends in ...yi or ...wu, the deletion is very common and the variant without the final high vowel is the most common form heard. For example, verb dèwú 'cover (something)' is normally heard as $d \check{\varepsilon} W$, both as simple $d \check{w} W$ in chains and in suffixed forms like perfective-1b děw-tî:- $\varnothing$. Pronunciations dèwú and dèwú-tî:- $\varnothing$ are possible in careful speech. The bisyllabic character of such verbs is better brought out in e.g. imperative děwà (with a vowel mutation) and imperfective (dì-)dèwú-m̀̀ 'he/she covers'. Other verbs with similar patterns include àwú- 'receive', dà:yí- 'encounter', and wàyí- 'hold’, which are heard as ǎw-, dǎ:y-, and wǎy-in the relevant environments.

Of the other sonorants, $r$ is frequently associated with Syncope and Apocope in similar positions. Examples are nàrn'í- 'call', bàrí- 'help', and làrí- 'chase', which are often heard as jǎr-, bǎr-, and lǎr-.

Nouns like yàrú 'cloudy weather' have both full and reduced (yǎr) pronunciations, with the full pronunciation favored in isolation and the reduced one common before a consonantinitial word, as in yǎr gǒ- 'cloudy weather go out (= end)'.

### 3.5.4 Local consonant cluster and consonant sequence rules

### 3.5.4.1 Derhoticization $\left(/ \mathrm{r}^{\mathrm{n}} /\right.$ to $\left.n\right)$

It is difficult to find contexts where a short vowel following $/ \mathrm{r}^{\mathrm{n}} /$ obligatorily syncopates (or apocopates). The forms of the word-family 'red' retain a vowel after $r^{n}$, e.g. adjective bár ${ }^{n}$ à- 'red’. There is no synchronic $r^{n}$ in e.g. káy ${ }^{n}$ - 'do, make’.

The best example of $/ \mathrm{r}^{\mathrm{n}} / \rightarrow n$ is probably the agentive compound tìn-tìr ${ }^{n} 1$ ím 'woodgatherer', whose initial is the noun tir ${ }^{n} \dot{u} \sim$ tìr $^{n} 1$ ' 'firewood'.

Stem- or word-final $\ldots r^{n} i$ or $\ldots r^{n} u$ optionally drop the vowel before certain consonants, especially alveolars $\{t d n\}$, and in this case the $/ \mathrm{r}^{\mathrm{n}} /$ may be realized as $n$.

### 3.5.4.2 Rhotic Assimilation

There are no synchronically clear cases, since a short high vowel after $r$ or $r^{n}$ does not usually totally syncopate or apocopate. For a list of stems with 11 , which in other northeastern Dogon languages sometimes arise from ${ }^{*} \mathrm{rl}$, see §3.3.8.2.

### 3.5.4.3 $/ y^{\mathrm{n}} \mathrm{r} / \rightarrow n$ in perfective negative

Perfective negative /-rí-/ combines with final $/ \mathrm{y}^{\mathrm{n}} /$ in verb stems to produce -ní-. The three verbs with final $y^{n}$ are káy ${ }^{n}$ - 'do, make', gǎy ${ }^{n}$ - 'put', and gǔy ${ }^{n}$ - 'say'. Their perfective negative forms are kà-ní-, gà-ní-, and gù-ní-. The origin of this shift is more complex than the synchronic data suggest. 'Do, make' has cognates in other Dogon languages with bisyllabic shape and a medial consonant $\left\{n \eta r^{m}\right\}$, e.g. Jamsay kár ${ }^{n}$ á-

### 3.5.4.4 $/ \mathrm{y}^{\mathrm{n}} \mathrm{r} / \rightarrow I$ in hortative negative and purposive

The $/ y^{\mathrm{n}} /$ of the three $C v y^{n}$ verbs (see preceding section) combine with hortative negative $/-\mathrm{r} \varepsilon$-ḿn/ (§10.5.6) to give -lغ̀-ḿ. Thus ká-lè-ḿ ‘let’s not do!’ from káy n'do', and gǎ-lè-ḿ ‘let’s not put!' from gǎy ${ }^{n}$. The same fusion occurs with purposive subordinator /-rá:/ (§17.5.1.1), e.g. kà ${ }^{\text {L }}$-lá: 'in order to do'.

### 3.5.4.5 /r...r/ becomes $1 \ldots r$ or $1 \ldots 1$ in verbal morphology

Reversive verbs (§9.1) normally add - $r v$ v- suffix to the stem. When the stem is of the shape Cvrv with medial $r$, the output in most cases is CVlv-rv- rather than \#Cvrv-rv- (10a), converging with the output from input stem $C v l_{v}$ (10b). This suggests that a dissimilatory shift of $/ \mathrm{r} \ldots \mathrm{r} /$ to $l \ldots r$ has taken place in the reversives in (10a). That this is not fully productive is suggested by one exception in (10c), which involves a somewhat less common reversive (therefore less likely to be lexicalized).

|  | input | gloss | reversive |
| :--- | :--- | :--- | :--- | gloss

The causative suffix allomorph -rv́- is responsible for a similar, though frozen and isolated, alternation in ùró- 'go up', causative ùlù-rú- 'take up'.

Similar alternations take place in deadjectival inchoative verbs, where we get e.g. દ́rù-m 'sweet', inchoative élé-ré- 'become sweet', and gùrô- 'long', inchoative gùlù-rí- 'become long'; for more examples see $\S 9.7$.

These alternations are typical of suffixal derivation, but are not systematic in AN inflection. In particular, perfective negative -rí- does not regularly induce the shift of an $r$ in the stem to $l$. Thus tèrè-rí- 'did not chop', gùrò-ríl 'did not steal', bàngìrì-rí- 'did not hide', etc.

However, the verb bèré- 'get, obtain' does combine with perfective negative -rí- as $b \grave{\varepsilon} 1-1 i$ - 'did not get', a form that is multiply attested in texts. The key difference between $b \grave{\varepsilon} l-l i ́-~ a n d ~ e . g . ~ t e ̀ r e ̀-r i ́-~ i s ~ s y n c o p e, ~ w h i c h ~ i s ~ n o t ~ r e g u l a r ~ f o r ~ C v r v-~ v e r b s ~ w i t h ~ f i n a l ~ n o n-h i g h ~$ vowels but which does apply idiosyncratically to /bèrè-rí-/. When syncope does apply, the resulting /rr/ cluster is realized as 11 . Evidently $/ \mathrm{rr} /$ is disfavored. Indeed, rr clusters do not occur within stems, in native Dogon vocabulary, though there are some Fulfulde loans like yárró:rè 'tolerance'.

Another example of the 11 output from /rr/ after syncope is sìyě- $1=$ là: from /sìyè-rí = rà:/ 'it has not gone down' (text 2005.1b.05). Another is dà:1-1í-, syncopated variant of dà:rì-rí- ‘did not please’.

The shift /rvr/ to 11 is arguably accomplished in two stages, a dissimilation to $/ \mathrm{r}(\mathrm{v}) 1 /$ or $/ l(\mathrm{v}) \mathrm{r} /$ (perhaps before syncope), followed by an assimilation (after syncope) to 11 . There is one attestation of unassimilated rl, namely láyâ: $r=$ lá 'it isn't a sacrificial animal', for /láyá:rù = rá), text 2005.1b.04, where only the dissimilation has occurred (noun láyá:rù is a multisyllabic Fulfulde loanword and apparently resists modification of its rhotic, but the clitic shifts $r$ to $l$. On the other hand, we have seen unassimilated $/ v r$ from $/ \mathrm{rvr} /$ in unsyncopated reversives (10a). Underlying /lvr/ also becomes as 11 after syncope in tàl-lí-, syncopated variant of tàlì-rí- 'did not transform' (§10.2.3.2).

### 3.5.4.6 $\left\{\mathrm{w} \mathrm{w}^{\mathrm{n}}\right\} \rightarrow m$

When a stem with shape like $C V W v$ - or $C V w^{n} v$ - undergoes Syncope or Apocope of the final vowel, the now syllable-final semivowel is converted to $m$ under limited conditions. This may occur in conjunction with a shift in a following consonant from $\{r l\}$ to $d$ as well.

The adjective ăm 'plump' corresponds to inchoative verb ('become ADJ') áwná- 'become plump'. Here the alternation of $m$ with $w^{n}$ is clearly conditioned by syllabic position.

Many other inchoatives are formed using inchoative derivational suffix -lv́- or less often $-r$ v́- (§9.7). In the case of 'black', we get adjective jéwnè but inchoative
jèm-dé- 'become black' (the $m d$ cluster is pronounced [mnd] in careful style). Likewise, káwà- 'spacious, wide (space)' corresponds to inchoative kám-dí- 'become (more) spacious'.

A minor inchoative suffix allomorph is $-y v^{\prime}$. For 'cold', the adjective is tâm while the inchoative is tá $w^{n}-y^{n} \bar{n}_{1}$ ' 'become cold, cool off".
$/ \mathrm{w} /$ does not shift to $m$ in adjectives with a following nominal suffix (singular, plural). Thus $\hat{\rho} W$ 'hot, fast', animate singular $\hat{\jmath} W-m$, animate plural $\hat{\jmath} W-y \underset{\varepsilon}{l}$. The shift also does not occur before reversive derivational suffix -rí- (§9.1), to judge by the one known example: d $\check{w} w$
 causative suffix -gv́- in káwá- 'separate oneself', causative káw-gí- 'separate (X from Y)'.

### 3.5.4.7 $/ \mathrm{r} / \rightarrow d$

Negative clitics beginning with $r$, and verbal derivational suffixes beginning with $r$, shift the liquid to $d$ after a nasal.

The most common case is stative negative clitic $=$ rá-. It becomes $=$ dá in e.g. $1=\grave{m}=$ dá 'it isn't me', where it follows the 'it is' clitic $=\grave{m}$, see §11.2.1.4.

See also dìm-dí- 'cause to follow' with transitive suffix (§9.4) from /dìmbì-rí-/, and tím-dí- ‘uncover (remove lid)' from /tímbí-rí-/ with reversive suffix (§9.1), in both cases after Syncope.

### 3.5.4.8 CCC simplification

If a disallowed triple consonant cluster is produced by syncope from $/ \mathrm{CCvC} /$, the cluster is simplified. The examples known to me involve /mbvr/ becoming $m d$, for example in dìm-dí'take (sth) along', transitive of mediopassive dìmbì-yí- 'follow', and in tím-dí- 'take lid off', reversive of tímbí- 'put a lid on'. I interpret this as deletion of the /b/, followed by hardening of /r/ to $d$, see §3.5.4.7 just above.

### 3.5.5 Vowel-vowel and vowel-semivowel sequences

### 3.5.5.1 $V V$-Contraction

Contraction of two vowels to one vowel occurs in verbal morphology.
In verbs, the progressive suffix appears as :-rà-, i.e. as lengthening of a stem-final vowel followed by rà. The suffix could be represented as /-vrà-/ with an underspecified initial vowel (" v ") that contracts with a preceding short vowel to form a long vowel with the quality features of the first vowel.

The perfective-1b suffix likewise appears as :-rغ̀े-, and could be represented as /-vrè-/.
There are no opportunities for $V V$-Contraction to arise in nominal inflectional morphology, where the few suffixes are consonant-initial.

Hiatus between vowels requires a glottal stop (arguably nonphonemic), as in the noun $i-P \varepsilon ̌ W^{n} r^{n} \dot{\varepsilon}$ 'tree sp.' (Spondias), which may be reduplicative. Clearer cases of reduplication occur in verbal morphology. The usual reduplicative syllable is an initial Ci-, but when the verb stem is vowel-initial (as in éw-yé- 'sit') we get reduplicated forms like ì-?éw-yè-w 'he/she is sitting', again with glottal stop between the $i$ and the first $e$.

### 3.5.6 Local vowel-consonant interactions

### 3.5.6.1 Fluctuation between short high vowels $\{i u\}$

There is much fluctuation between the two short high vowels, especially in noninitial syllables of verb stems. While the same verb can be heard in different variants in the same positions, some of the fluctuation involves assimilation to an adjoining consonant, especially semivowels $y$ versus $w$ but also $\{j c j\}$ versus $m$, and/or to a non-low front versus back vowel in an adjoining syllable (this vowel may itself be unstable).

My general sense is that short high vowels in noninitial syllables of verb stems tend toward unrounded [i] when adjacent segments are not rounded or labial. Thus yòlì-rí- '(meat) become tender’ seems more common than yòlù-rú- in spite of the initial-syllable $\rho$, while the causative yòlù-rù-wú- favors rounded vowels because of the $w$ of the causative suffix.

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

Syllable-final (i.e. word-final or preconsonantal) /iy/ monophthongizes phonetically to [i:], and /uw/ likewise monophthongizes to [u:]. In general I transcribe iy and uw since this brings out the morphological structure more clearly.

Examples are the perfective-1b combinations $1 \mathrm{Sg}-t i ́-\grave{y}$ [tîi] and $2 \mathrm{Sg}-t u ́-\grave{W}$ [túùu], and a few similar cases in verbal inflectional morphology. This transcriptional practice permits an orthographic distinction in the perfective-1b between $1 \mathrm{Sg}-t \hat{1}-\bar{y}$ and $3 \mathrm{Sg}-t \hat{i}:-\varnothing$ (the latter is from $/-t \hat{1}-\varnothing /$ with the /î/ lengthened to permit articulation of the contour tone), although the two are homophonous.

Further examples occur in bare stems of nonmonosyllabic verb stems ending in sequences like /...iyi/ and /...iwu/. When the final short vowel syncopates or apocopates, we get syllable-final /iy/ and /uw/, which then monophthongize. This happens with e.g. dògìyí- 'look up at', bàngì-yí- 'hide (oneself)', and gònjùwú- 'turn around (and go back)', which appear in some contexts as [dògy̌:] etc..

Inanimate suffix - $W$ may be added to adjectives that end in $u$, as in yòrú-w' 'tender (e.g. meat)', which is heard as [jòrû:].

### 3.6 Cliticization

The boundary between clitics (enclitics) and suffixes is not sharp. All clitics are of the phonological (rather than floating) type; that is, they are independent functional elements that happen to be pronounced as part of the preceding word. The best candidates for clitic status are those mentioned below.

If Nasalization-Spreading is determined to be characteristic of word-internal morphology, the failure of a "suffixal" $\left\{\begin{array}{ll}y & w\end{array}\right\}$ to be nasalized after a nasal syllable could be taken as an indicator of clitic status. In this analysis, passive -yéy (§9.5), adjectival plural -yè (§4.5.1), and even progressive :-rà- (§10.2.2.3) would have to be reassigned to clitic status. I am reluctant to do this, since the progressive is in other respects clearly suffixal, but readers may disagree.

### 3.6.1 'it is' clitic $=\grave{m} \sim=\varnothing$

The 'it is' morpheme is classified as a clitic on phonological as well as semantic grounds. The phonology of this clitic is complex and heavily morphologized, and I cover it in the section on this clitic (§11.2.1).

### 3.6.2 Past clitic $=b \grave{\varepsilon}-$

The motivation for treating this as a clitic is that it constitutes an outer morphological layer with its own pronominal-subject inflection, following a (somewhat reduced) internal verbsuffix combination; see $\S 10.4$. .

### 3.6.3 Stative negative =rá-

Stative negative =rá- (§10.2.3.4) is more clitic-like than the regular perfective and imperfective negative suffixes. It is added to already complete word forms, rather than replacing a positive suffix. It can also be added to the positive 'it is' clitic (§11.2.1.4).

### 3.7 Tones

Tones at the level of syllables are $\mathrm{H}[\mathrm{igh}], \mathrm{L}[\mathrm{ow}],<\mathrm{LH}>$ (rising), $<\mathrm{HL}>$ (falling), and bellshaped $<\mathrm{LHL}>$. There are no $<\mathrm{HLH}>$ syllables, though /HLH/ melody is allowed in nonmonosyllabic stems. Angled brackets are used to express contour tones within a syllable. Stem- or word-level patterns involving more than one syllable, including at least one contour tone, are expressed as e.g. $\mathrm{H} .<\mathrm{HL}>$ (H followed by $<\mathrm{HL}>$ ).

Contour-toned syllables usually have at least two moras. In other words, light $C V$ syllables are normally simple $H$ or L. Exceptions are $C \check{v}$ verb stems, and initial $C \tilde{v}$ syllables in nouns when 1 Sg possessor (floating L-tone) docks from the left to create $C \check{v}$. In these exceptional cases, the rising tone is difficult to hear. Heavy $C v$ : or $C v C$ and superheavy $C v: C$ syllables may be $\mathrm{H}, \mathrm{L},<\mathrm{LH}>,<\mathrm{HL}>$, or $<\mathrm{LHL}>$. There is no increase in duration for $<\mathrm{LHL}>$ as opposed to $<\mathrm{HL}>$ or $<\mathrm{LH}>$ syllables; the three tone segments are articulated over a similar duration, with the initial L-tone segment generally brief. Thus $j \check{\varepsilon}$ : 'bring' does not have noticeably greater duration than e.g. cê: 'scale', and gâw 'tall' is pronounced with a short vowel.

### 3.7.1 Lexical tone patterns

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

Lexically, each stem must have at least one H-tone segment, i.e., at least one $\mathrm{H},<\mathrm{LH}>$, $<\mathrm{HL}>$, or $<$ LHL $>$ syllable. This applies to noun, adjective, numeral, verb, and adverb stems. It does not necessarily apply to functional elements such as pronominal clitics and clausefinal subordinating morphemes.

For the possibility that some nouns might have no lexical H-tones, see §3.7.1.7. Whether lexical or not, even these nouns must have at least one H-tone element in surface forms, except when an $\{\mathrm{L}\}$ overlay has erased all lexical tones.

### 3.7.1.2 Lexical tone patterns for verbs

In their bare stem (used in chains and before many inflectional suffixes), regular verbs end in an H-tone. The primary tone melodies are /H/ (all-high) and /LH/ (rising). Every verb is lexically either /H/ or /LH/, except for one /LHL/ verb, $j \tilde{\text { : }}$ ' 'bring'. A verb-stem-initial voiced obstruent $\{b d j g\}$ is strongly associated with /LH/ melody, and the counterexamples are mostly Fulfulde loanwords. A verb-stem-initial voiceless obstruent $\{p t c k s\}$ is strongly associated with $/ \mathrm{H} /$ melody. Stems beginning with a sonorant or with zero initial consonant (i.e. with initial vowel) have a lexical choice between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$. The voicing of noninitial consonants is irrelevant to lexical tone melody. As will be indicated below, the strong association between initial-obstruent voicing and tone melody applies only to verb stems, and even for verbs it is often overridden.

For / $\mathrm{LH} /$ stems, the tone break is just before the right edge of the stem. The patterns are therefore $C \check{v}, C \check{v}$ : $, C \grave{v} C \hat{v}, C \grave{v} C C \hat{v}, C \grave{v}: C \hat{v}, C \grave{v} C \grave{v} C \dot{v}$, etc. This pattern is enforced for suffixal derivatives as well as for underived stems; for example, a $C \grave{v} C \hat{V}$ stem has suffixal derivatives of the shape $C \grave{v} C \grave{v}-C \hat{v}$.

Examples of lexical verb stems of one syllable (not counting reduplicative Ci -) are in (11). For a fuller list see §10.1.3.
(11) Monosyllabic verb tone melodies
stem gloss reference

| a. /H/ melody |  |  |
| :---: | :---: | :---: |
| nú | 'enter' |  |
| né | 'eat (meal)' |  |
| káy ${ }^{\text {n }}$ | 'do, make' | §10.1.3.6 |
| b. /LH/ melody |  |  |
| gǒ | 'go out' |  |
| yě | 'come' | §10.1.3.3 |
| nǔ | 'hear' |  |
| gǎy ${ }^{\text {n }}$ | 'put' | §10.1.3.6 |
| gǔy ${ }^{\text {n }}$ | 'say' | §10.1.3.6 |
| c. $<$ LHL $>$ melody (only example) |  |  |
| $j \varepsilon$ : | 'bring' | §10.1.3.4 |

Some bisyllabic and longer stems of /H/ and /LH/ melodies are in (12).
stem gloss
a. /H/ melody
tíwé 'die’
páyá 'tie’
pégírí 'unbutton’
tógóró 'chew'
b. /LH/ melody
jìyé 'kill'
wàrá 'do farm work'
wà: $r^{n} u$ 'spread out'
bilìré 'roll oneself (on the ground)'
dàngìrí 'break in half'
$C_{v}: C v$ - stems with /LH/ melody are pronounced $C \grave{v}: C \hat{v}$ - in careful speech. However, especially when the final vowel is $\{i u\}$ and the medial consonant is a sonorant, syncope can occur, resulting in $C \bar{v}: C$-. A pronunciation $C \check{v}: C \hat{v}$ - is also possible, with the pitch rise jumping the gun. An example is bà:rú- ~ bà:rí- 'go around (obstacle)', whose alternative pronunciations include bǎ: $r$ - and bǎ:rí- (with faintly articulated final vowel).

These lexical melodies are subject to modification in inflected forms. See chapter 10 for details.

### 3.7.1.3 Lexical tone patterns for unsegmentable noun stems

Nouns are subject to the general rule that there must be at least one H-tone segment in the stem, but are otherwise rather unconstrained. Unlike verbs (in their lexical melody), nouns may end in either an L- or H-tone.

Examples of lexical stems of one syllable (not counting reduplicative Ci -) are in (13). The animate singular suffix $-m$ present in some examples does not affect the tone.

> stem gloss
a. H tone

| yí-m | 'child' |
| :--- | :--- |
| ná | 'time(s)' (with numer |
| ná: | 'entire (e.g. plant)' |
| dŏ:-m | '(a) Dogon' |
| <LH> tone |  |
| yă: |  |
| pǒ: | 'women' (Sg. yă-m) |
| něm | 'snife' |

```
c. <HL}>\mathrm{ tone
    kû: 'head'
    kô: 'scab'
    yû: 'millet'
    dâm 'gunpowder'
d. <LHL> tone (fairly full list, excluding C\check{v}-ỳ verbal nouns)
    ǒ: 'guinea-fowls'
    \jmath:: 'fiber, tree bark` (contrast ô: 'chiefs')
    dô:` 'Dogon'
    mî: 'cut (wound)'
    gô: 'fire'
    gŏ:n 'pigeons'
    b\check{\varepsilonyn}
    bây"n}\quad\mathrm{ 'tibia of bird's leg'
with initial L-toned Ci-/Cu-reduplication
    tì-tă: 'hyenas'(Sg tì-tă:-m)
    cì-cč: 'beetles, bugs'
    kì-kă: 'grasshoppers'
    sì-Sî:: 'grubs, worms'
    jì-j\grave{\varepsilon}:n
    tù-tŭ: 'termites'
    tìtaayy 'dancing ground'
with initial H-toned Ci-/Cu-reduplication
    gí-gă:" 'crows'
    gú-gû: (pèrè-gìrè gú-gû:: 'vinaceous dove')
with L-toned compound initial
    sàwà-sê:: 'tall grass sp. (Andropogon)'
e. <HLH> tone
    [none]
```

Some rather complex tonal patterns occur in noun stems of two or more syllables. However, these stems are probably understood as prosodically composite by native speakers. Hyphenation is usually omitted in (14), but the natural prosodic break is suggested by spaces (not used elsewhere) and by the tone formulae above. If divided in the manner suggested, the tone patterns of the components are unremarkable.
(14)
stem gloss
/H/ /LH/
á-kùngùró 'giant turtles’ (§4.1.6)
/H/ /LHL/
kór pẽ: $\quad$ 'tree sp.' (Piliostigma)
sá gô: 'ostriches'
típ gô: 'hornbills'
í ? $2 \check{\varepsilon} W^{n} r^{n} \grave{\varepsilon} \quad$ 'tree sp.' (Spondias)

```
    p\varepsilońt\varepsiloń pě: 'grasshopper sp.'(Oedaleus)
    s\varepsiloń\eta\varepsilońr"\varepsiloń s\tilde{\varepsilon.:" 'grasshopper sp.'(Kraussella)}
    pélé gìrê: 'doves’
    -sá kèlê: 'tiny scorpions'(compound final)
/LH/ /H/
    pòrú yóló 'weaver (bird)'
    gòrǒm gómjó 'millipedes'
/LH/ /HL/
    jòlǒm jórù 'herb sp.'(Xysmalobium)
    pèlěm pérù 'tall herb sp.'(Aeschynomene)
/LH/ /LH/
    mǎy kìrn'\varepsilon}\quad\mathrm{ 'tree sp.'(Maerua)
/LH/ /LHL/
    àrrá wềy 'tree sp.' (Crataeva)
    bǎ: kô: 'glossy starling sp.'
    tùtǔ: běndè 'herb sp.'(Cassia)
    kèr\varepsiloň\eta kě:sù 'shellfish'
/L/ /LHL/
    yì-t\varepsiloň: 'children' (plural of yí-m)
    yà-tě: 'female (lizard)' (cf. yà- 'woman')
    kòto kon: 'lice'
```

With these compound-like forms factored out, the regular lexical tone melodies for noun stems are $/ \mathrm{H} /$, /HL/, /LH/, /LHL/, and /HLH/. The melodies are best illustrated with stems of two syllables, not counting any initial reduplication (15). /LHL/ is rather typical of BenT nouns. /L/ is ruled out by the constraint that all noun stems must have at least one H-tone element. This constraint insures that tonosyntactically controlled tone-dropping is always audible.

| melody | stem | gloss |
| :--- | :--- | :--- |
| /H/ | kí-kéré-m | 'cricket' |
| /HL/ | tórò | 'mountain' |
| /LH/ | jèsú | 'body' |
| /LHL/ | sèngû: | 'waterjar' |
| /HLH/ | bísěm | 'tree sp. (Acacia tortilis)' |

3.7.1.4 Lexical tone patterns for adjectives and numerals

Adjectives are generally mono- or bisyllabic. The tone patterns (allowing for possible accidental gaps) appear to be the same as for nouns.
stem gloss
a. /H/ melody
nínáy ${ }^{n} \quad$ 'respectable'
pílé
'white'
b. /LH/ melody
lă- 'other' (lă-w, lǎ-m, lă:)
mǎ: 'dry'
gòlú 'crooked’
kòrǒy 'empty, bare'
bòlòrǒy 'half-ripe'
c. /HL/ melody
ôW 'hot'
kálà 'new'
Érù- 'sweet' ( ह́rù-m, etc.)
tâm 'cold'
d. /LHL/ melody

| mènjê- | 'thin' (mènjê-w etc.) |
| :--- | :--- |
| sòsû- | 'nearby' (sòsû-W, etc.) |
| sǒ:rò | 'young' |

The inventory of numerals is more limited. The attested tone patterns are illustrated in (17). There is no clear indication that numerals differ from nouns, and adjectives, in their tonal possibilities.
stem gloss
a. /H/ melody
pérú 'ten’
b. /LH/ melody

| tà:nú | 'three' |
| :--- | :--- |
| nǐ:y $y^{n}$ | 'four' |
| nùmǔy | 'five' |
| tè:sǐm | 'nine' |

c. $/ \mathrm{HL} /$ melody
súy ${ }^{n} \grave{y} y^{n} \quad$ 'seven'
gá:rày 'eight'
d. /LHL/ melody, in part


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

The bitonal melodies are $/ \mathrm{HL} /$ and $/ \mathrm{LH} /$. Both are well-attested for nouns and other non-verb stems. In some /LH/ cases, one could argue that the final H-tone is secondary.

There is no suspense about tone-component location when the stem is monosyllabic, or a bimoraic (i.e. $C v C v$ ) bisyllabic (18).
(18)

```
    stem gloss
    <LH>
    bǐ:n 'tree sp.' (Sclerocarya)
    gǔy }\mp@subsup{}{}{n}\quad\mathrm{ 'sedge'
    jǒ:n 'hares' (Sg jǒ:n-m)
    s\varepsiloň: 'mongooses'(Sg s\varepsiloň:-m)
<HL>
    sû: 'francolin (bird)' (Sg sû:-m)
    â:n 'bee' (Sg â:n
    ô: 'mice' (Sg ô-m)
L.H
    wàr n
    dùrú} 'spear for fruits'
    sìsé 'father's sister'
H.L
    lósù 'duiker (mammal)'
    wárà 'daba (hoe)'
```

In bisyllabics of the types $C v: C v$ and $C v C C v$, the tone break is at the syllable boundary (19).
(19)

| stem | gloss |
| :--- | :--- |
| L.H |  |
| pè:lú <br> kà:rú | 'tree sp.' (Detarium) |
| kà:sá | 'crack' |
| jàmbá | 'wool (fabric)' |
| jòlgó | 'betrayal' |
| H.L | 'foot-chain' |
| já:sù |  |
| tó:rù | 'shiftlessness' |
| dáwlè | 'idol' |
| sálgù | 'recognized value' |
|  | 'ablutions' |

When the second syllable of a bisyllabic stem has two moras, the situation is more complex. Stems of this shape with $/ \mathrm{LH} /$ melody have the tone break at the syllable boundary if the final syllable is $C v$ : with long vowel (20a), but delay it to the final moraic boundary when the final syllable is diphthongal Cvy (20b). Stems of this shape with / $\mathrm{HL} /$ melody have the tone break at the syllable boundary if the final syllable is $C v$ : (20c), but those with final $C v C$ (diphthongal or not) divide into two sets, one with syllable-boundary tone break (20d) and the other with final-mora break (20e). (20d) seems to be typical of native vocabulary, (20e) of Fulfulde loanwords.

> stem gloss
a. LH with break at syllable boundary
final Cv:

| sà:yú: | 'wild fonio grass' |
| :--- | :--- |
| ə̀r $r^{n}$ ó: | '(the) bush, outback' |
| dùmdó: | 'end (finish)' |

b. $\mathrm{L}<\mathrm{LH}>$ with break in middle of final syllable
final CvC pèrěy 'caïlcédrat tree'
jàmsěy 'grass sp.'
òsǒy 'tree sp.' (Grewia)
cìrgěy 'spike, point (of spear)'
morphologically composite gù:-gǔ: 'shrub sp.' (Calotropis) à-kǐ: $\quad$ 'edible winged termites'
c. H.L with break at syllable boundary
final Cv:
wúrò: 'shrub sp.' (Salvadora)
sínjì: 'knee'
kúrì: 'rosary, prayer beads' (variant)
d. H.L with break at syllable boundary
final $C v C$ (also a few numerals like súy ${ }^{n}$ ə̀ $y^{n}$ 'seven')
ह́ $W^{n} \dot{\varepsilon} y^{n} \quad$ 'milk'
sómə̀ ${ }^{n} \quad$ 'spices’
ów ${ }^{n}$ д̀ $y^{n} \quad$ 'cemetery'
térèw 'truth'
sádàm 'expense'
e. $\mathrm{H} .<\mathrm{HL}>$ with break in middle of final syllable
final $C v C$ (mostly Fulfulde loans)
dárbôy 'single-edged sword'
ká:fây 'sword'
póyngôl 'illumination (on horizon)'
tílây 'certainty’
gárbâl 'animal market'

In bitonal trisyllabic stems that are not treated prosodically as composite, if the final syllable has only one mora, the tone break is always at the final syllable boundary (21). Some quadrisyllabic L.L.L.H cases are also included in (21), but they are most likely structured prosocially as L.L-L.H compounds.
stem gloss
L.L.H with final monomoraic syllabie
òs̀̀ró 'baobab tree'
kèrkèlé 'tree sp.' (Dalbergia)
gàngàrá 'herb sp.' (Cassia)
bìyà:kú 'guava'

| L.L.L.H with final monomoraic syllabie |  |
| :--- | :--- |
| dòn-gòm-dò:rú | 'burry herb sp.' (Pupalia) |
| kàmàkòró | 'vine sp.' (Leptadenia) |
| àsàpèrú | 'herb sp.' (Cassia) |

H.H.L
kóngólù 'doum palm'
tí-táwrù 'tree sp.' (Boscia)
sátéllè 'tree sp.' (Bauhinea)
ná:fígù 'trouble-maker'

However, there are a minority of trisyllabic /LH/ noun stems that shift tones after the first syllable (22). I suspect that most of these examples are etymologically composite (L-HH with L-toned initial). ànsá:rá is borrowed and was probably contracted from *ànìsá:rá as in some other local languages.
stem gloss

| L.H.H |  |
| :--- | :--- |
| cè̀mkúsú | 'tall herb sp.' (Sesbania) |
| sàsóngóm | 'grass sp.'(Aristida) |
| sùpúrgú | 'nightjars' |
| tàwéré | 'ducks' |
| ànsá:rá | 'white people' |

As with bisyllabics, if the final syllable is bimoraic, there may be (in theory) a lexical choice in trisyllabic nouns between having tone breaks at the final syllable boundary, or in the middle of the final syllable, though good examples (not composite prosodically) are difficult to find. In most cases the break is in the middle of the final syllable (23).
stem gloss
$\begin{array}{cl}\text { L.L. }<\mathrm{LH}>\text { or L.L.L. }<\mathrm{LH}>\text { with tone break in middle of final syllable } \\ \text { bà:ràm(-)bǎm } & \text { 'tall grass sp.' (Panicum) } \\ \begin{array}{ll}\text { pùtùm(-)pǔ: } & \text { 'herb sp.' (Commelina) } \\ \text { غ́sègèrěy } & \text { 'lemon grass sp.' }\end{array}\end{array}$
H.H. $<\mathrm{HL}>$ with tone break in middle of final syllable bálángâl 'donkey-cart poles’

### 3.7.1.6 Tone-Component location for tri- and quadri-tonal noun stems

Leaving compounds aside, /LHL/ is moderately common as a tone melody for nouns and other non-verb stems. There are also several cases of /HLH/.

Bisyllabic /LHL/ may be realized as $\mathrm{L} .<\mathrm{LH}>(24 \mathrm{a}$ ) or $<\mathrm{LH}>$.L (24b-c). The difference between $\mathrm{L} .<\mathrm{LH}>$ and $<\mathrm{LH}>$.L usually correlates with syllabic structure. If the final syllable ends in a long vowel, we get $\mathrm{L} .<\mathrm{LH}>(24 \mathrm{a})$; if the final syllable is monomoraic, we get $<\mathrm{LH}>$. H (24b). Judging from (24c), a final sonorant (or at least a final semivowel) is disregarded.
stem gloss
a. L. $<\mathrm{HL}>$, ends in long vowel inanimate
òmdô: 'tamarind'
kùrô: 'wild grape' (Lannea)
mò: $r^{n} \mathrm{o}: \quad$ 'wild date' (Balanites)
jìmbê: 'shrub sp.' (Feretia)
animate
غ̀njê: 'chickens’ (Sg ènjê-m)
cèngû: 'agama lizards' (Sg cè̀gĝ̂-m)
b. $<\mathrm{LH}>$.L, ends in short vowel
kěrsù 'grass sp.' (Cynodon)
yǔ:rù 'sand foxes'
c. $<\mathrm{LH}>$.L (disregarding cpd initial), ends in $C v C$ syllable
gà: $y^{n}$-kǒ:lòy 'tree sp.' (Ficus sur)'
kèlè-pă:lày 'spleen'

However, there is something circular about the correlation of tone contour with final vowel length. This is because a word-final short-voweled $/ C \hat{v} /$ can be easily lengthened to $C \hat{v}$ : by Contour-Tone Mora-Addition (§3.7.4.1). One could therefore posit underlying /òmdô/ etc. for (24a), with the same syllabic and moraic structure as e.g. kěrsù in (24b). The animate nouns 'chickens' and 'agama lizards' in (24a) have singulars with suffix -m after a short vowel.

Examples of the /LHL/ melody with noun stems of three or four syllables are in (25). If the final syllable is short, we get (L.)L.H.L (25a). If the final syllable has a long vowel, we
get L.L. $<\mathrm{HL}>$. The data on nouns with a final short vowel plus semivowel are too sparse to allow generalizations ( $25 \mathrm{c}-\mathrm{d}$ ).
(25)
stem gloss
a. L.H.L or L.L.H.L, ends in short vowel
màygórò 'mango'
sèkúrù 'bush sp.' (Hibiscus)
gà:ní:kò 'tree sp.' (Celtis)
làsá:sù 'rifle'
sàr ${ }^{n}$ àkúyò 'squirrels'
tàbàtérù 'colubrid snake sp.'
wògòtórò 'donkey cart'
$\begin{array}{cc}\text { b. L.L. }<\mathrm{HL}>\text { or L.L.L. }<\mathrm{HL}>\text {, ends in long vowel } \\ \text { mù-mùr' } \mathrm{H} \text { : } & \text { 'scorpions' } \\ \text { غ̀dùnû: } & \text { 'owls' } \\ \text { àsàgùsô: } & \text { 'tree sp.' (Combretum) }\end{array}$
c. L.H.L, ends in short vowel plus semivowel

| kànár"ày | 'watermelon' |
| :--- | :--- |
| tìngírغ̀y | 'segment' |
| sònór $n$ 'jy $y^{n}$ | 'spine' |

So much for /LHL/. The other tritonal pattern, /HLH/, is less common. The examples known to me are in (26). They are of the type (H).H. $<\mathrm{LH}>$, with rising tone in the final syllable. The final $<\mathrm{LH}>$-toned syllable drops to L-tone before an H -tone, and is pronounced as a more or less level mid-tone prepausally. That the final syllable is structurally $<\mathrm{LH}>$ is brought out by the fact that a following possessum (or noun-based postposition) has $\{\mathrm{HL}\}$ rather than $\{\mathrm{L}\}$ tone overlay. See §3.7.4.5 for the phonology.
stem gloss

| $\begin{equation*} \mathrm{H} .<\mathrm{LH}> \tag{26} \end{equation*}$ <br> plants |  |
| :---: | :---: |
| bá:r ${ }^{\text {nǎm }}$ | 'tree sp. (Acacia nilotica)' |
| bísěm | 'tree sp. (Acacia tortilis)' |
| nór ${ }^{\text {nǒy }}{ }^{\text {n }}$ | 'néré tree (Parkia biglobosa)' |
| sÉWrěm | 'tree sp. (Cassia sieberiana)' |
| dángěy | 'grass sp. (Dactyloctenium)' |
| múy ${ }^{\text {nǎm }}$ | 'aromatic sedge tubers' |
| ethnicities |  |
| púlǒ: | 'Fulbe (people)', Sg púlǒ-m |
| sórǧ̌: | 'Bozo (people)', Sg sórgǒ-m |
| jémbě: | 'blacksmiths', Sg jémbě-m |
| other nouns |  |
| bú:sǎm | 'marrow' |
| húkǔm | 'tent' |


| déwrěm <br> só:rǒm | 'pit-trap' <br> 'upstairs' |
| :---: | :--- |
| H.H.<LH> |  |
| pórúyǒm <br> sémégěm | 'bush sp. (Pergularia tomentosa) |

I know of three bisyllabic $<\mathrm{LH}>.<\mathrm{LH}>$ nouns, all flora terms: yǎmbǒm 'tree sp. (Gyrocarpus americanus)', ǒ:mbǒm 'grass sp. (Andropogon gayanus)', and kě:lદ̌y 'tree sp. (Cola cordifolia)'. It is possible that these, or at least the first two, are analysed (by native speakers) as compounds prosodically.

We can summarize the analysis of tone-element positioning in nouns as follows: the tone breaks are located as far to the right as possible, but there is some variation as to whether break points occur at syllable or mora boundaries in cases where the two can be distinguished.

### 3.7.1.7 Possibility of lexically/L/-toned nouns

Most apparently/LH/-toned animate nonmonosyllabic noun stems that end in a short vowel are arguably lexically L-toned with a final H -tone added by phonological rule (to satisfy an output constraint against all-low stems). The examples in (27a) simply add singular $-m$ to the final-H-toned stem. By contrast, those in (27b), which constitute a majority, have singulars with final-syllable rising tone (with the H-tone on the suffixal $-m$ ). One could argue that the stems in (27b) lack a lexical H-tone.
plural singular gloss
a. wàrú wàrú-m
mùnjú mùnjú-m
tènú tèyú-m
bìrnī-pìgìrí bìrnì-pìgìrí-m
b. à $W^{n}$
àw
ùlú ùlǔ-m
ànjá ànjǎ-m
àr ${ }^{\text {àà-mòró }}$
sèrù-kùwná
ìnjé
gùló
nì-nìwn ${ }^{n} \dot{\varepsilon}$
pèré
kòlòro
àsèmbé
sàr ${ }^{n}$ à-gàlàrá
àbù:ló àbù:lǒ-m
á-kùngùró á-kùngùrǒ-m
'antelope sp.'
'Mossi’ (ethnicity)
'Tengou' (ethnicity)
'spotted skink sp.'
'aardvark'
'snake'
'whiptail lizard'
'tree snake sp.'
'grey heron'
'crowned crane’
'dog'
'slave'
'cat'
'sheep'
'genet (mammal)'
'striped skink’
'mongoose sp.'
'spotted skink sp.'
'giant tortoise'

If we were to decide to represent these stems as /L-toned lexically, there would be no reason not to do the same for inanimate nouns and kin terms that have LH-tones with the H-tone on the final mora.

### 3.7.2 Grammatical tone patterns

### 3.7.2.1 Grammatical tones for verb stems

Verbs have a bare stem that is used in most aspect-negation categories (but not the derived stative or the imperative). Verbs are lexically either / $\mathrm{H} /$-toned, or have a rising tone pattern /LH/ with the rise on the final syllable.

In the perfective negative (suffix -rí-), and in the unsuffixed perfective, regular verbs undergo tone-dropping to $\{\mathrm{L}\}$. The exception is the irregular verb $j \tilde{\varepsilon}:-$ 'bring', which preserves its unique /LHL/ melody in both of these morphological contexts.

Modifications of the tone melody of the bare stem also occur in several other inflections. In the unsuffixed imperfective, monosyllabics and bimoraic bisyllabics shift to $\{\mathrm{H}\}$-toned stems if not already lexically $/ \mathrm{H} /$. Within the perfective system, the reduplicated perfective and the reduplicated stative have an $\{\mathrm{HL}\}$ overlay on the stem (following the reduplicative segment).

Significant tonal changes also occur in the imperative and hortative forms.

### 3.7.2.2 Grammatical tones for noun stems

When they are present, tone overlays on noun stems completely erase lexical melodies.
Nouns undergo tone-dropping to $\{\mathrm{L}\}$ when followed by a reference-restricting modifier (adjective, demonstrative pronoun); see §6.1.4. Thus ìsê: 'village', ìsè. ${ }^{\text {L }}$ èsú 'a good village', ì ìsè: ${ }^{\text {L }}$ ŋ̀gá 'that-Distant village'. There is no tone-dropping before definite singular kù or definite plural bû., which are only borderline reference restrictors.

When a noun has escaped tone-dropping from such NP-internal controllers, if the NP functions as head NP of a relative clause, the noun drops its tones. Therefore in a relative like 'a village that I know' or 'the village that is on top of the hill', ìsê: 'village' will appear as ìsè: even without a following adjective or demonstrative. This is best modeled by having the relative clause (another reference restrictor) originate as a postnominal modifier, then allowing the portion of the overall NP to the left of the relative clause move down/rightward into the relativization site, but only after tone-dropping §14.1.1.

In some kinds of compounds, a nominal compound initial drops its tones; see §5.1.1-3.
Nouns, and more generally core NPs (also including, for example, an adjective) have an $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ overlay when preceded by a possessor. In the case of $\{\mathrm{HL}\}$, the H-tone element is confined to the first syllable of a bisyllabic or longer noun, or to the first mora of a monosyllabic noun ( $C v$ : or $C v C$ ). This $\{H L\}$ contour is clearly heard when the possessor ends in an H-tone, as in $u{ }^{H L}$ ísè: 'your-Sg village'. When the possessor ends in an L-tone, we get an apparent $\{\mathrm{L}\}$ overlay, as in $\hat{u}$. ${ }^{\mathrm{L}}$ ìè: 'your- Pl village'. One can argue whether this is a true $\{\mathrm{L}\}$ overlay, or is the more general $\{\mathrm{HL}\}$ possessed-noun contour plus an idiosyncratic toneassimilation process applying (locally) to the first syllable of the possessed noun, deleting the H-tone. See §3.7.3.4 for discussion.

### 3.7.2.3 Grammatical tones for adjectives and numerals

A modifying (i.e. NP-internal) adjective not followed by a reference restrictor (another adjective or a demonstrative) has its regular tones in most syntactic enviroments. The same is true of all cardinal numerals.

An adjective that is followed by another modifying adjective in the same NP drops its tones, as a noun would in the same position. Therefore only the final word in a core NP (noun plus adjectives) escapes tone-dropping.

In adjectival predicates with following 'be' verb bû-, the final mora of the adjective shifts to H -tone, with some further adjustments. The adjective ends up with H - or LH-tones at word level. The phonological analysis depends on whether the adjectival stems (minus nominal suffixes) are assumed to have $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ melodies, or are assumed to have $/ \mathrm{HL} /$ and $/ \mathrm{LHL} /$. See §11.4.1.

If a demonstrative pronoun follows a core NP , the final word in the core NP is tonedropped. See ( $124 \mathrm{a}-\mathrm{c}$ ) in $\S 6.5 .2$.

Numerals do not interact tonally with a preceding core NP. Therefore in e.g. [[house ${ }^{\mathrm{L}}$ big] [two] 'two big houses', there is no tonal interaction between the numeral and the core NP, and both have the same tones they would have elsewhere. However, a demonstrative pronoun following the numeral forces simultaneous tone-dropping on the numeral and on (the last word of) the core NP. For example, in [[[house big] [two $\left.\left.{ }^{\mathrm{L}}\right]\right]$ that] 'those two big houses', the demonstrative forces tone-dropping on both 'big' and 'two'. For an example see (125b) in §6.5.2.

Any modifying adjectives and/or numerals in a NP are bundled together with the noun in constituting the target domain of the possessed-noun tone overlay required by a preceding possessor. Since the possessed-noun overlay is $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$, and since the initial H-tone in $\{H L\}$ never extends beyond the first syllable of the noun, the effect is that a modifying adjective or a numeral in the tonal scope of a possessor always appears in L-toned form. A complicating factor is that the order of adjective and numeral may be inverted in the presence of a possessor. See, for example, (102a-e) in §6.2.3.

A modifying adjective or a numeral that has dodged all of these bullets is still subject to stem-wide tone-dropping when the NP in question is the head of a relative clause (§14.1.1).

### 3.7.3 Tonal morphophonology

### 3.7.3.1 Autosegmental tone association (verbs)

Verbs, whether underived or suffixally derived (e.g. causative, reversive), may have a lexical all-high $/ \mathrm{H} /$ or rising $/ \mathrm{LH} /$ tone melody. In the $/ \mathrm{LH} /$ case, the break between the L - and H toned portions is at the onset of the stem-final syllable. In cases like wàsá- 'remain' and its causative wàsà-wú- (the latter often subsequently apocopated to wàsà-w), we see that the /LH/ melody is (re-)applied to the derived trisyllabic stem, there being no tonal trace of an earlier cycle with an H-tone on the sa syllable.

As in e.g. Jamsay, this suggests an autosegmental analysis with /LH/ on a tonal tier separate from the segmental tier.

### 3.7.3.2 Phonology of $\{\mathrm{HL}\}$ and $\{\mathrm{LH}\}$ tone overlays

We start with $\{\mathrm{HL}\}$. Lexically /HL/-toned nouns position the tone break near the right edge. For example, trisyllabic nouns have syllable sequence H.H.L if the final syllable is light, and either H.H.L or H.H. $<\mathrm{HL}>$ if the final syllable is heavy (§3.7.1.5).

However, tonosyntactic $\{H L\}$ overlayworks differently. The main context for this overlay is the possessor-controlled $\{\mathrm{HL}\}$ on possessed nouns (the target domain includes an adjective, and under some conditions a following numeral), see $\S 6.2$. $\{\mathrm{HL}\}$ is also overlaid on adjectives in comparative clauses after mégé 'more, most' (§12.1.1). There is also a type of 'while VERB-ing' clause involving $\{H L\}$ overlaid on an imperfective verb (§15.2.1.5), and the reduplicated perfective has $\{\mathrm{HL}\}$ on the base following L-toned reduplicant, §10.2.1.9.

If the domain targeted for $\{\mathrm{HL}\}$ has more than one syllable, the H -tone is positioned on the initial syllable and the L-tone is spread out over the remaining syllables. Thus in ú túngùrùm 'your-Sg stool', the initial H-tone is coterminous with the syllable [tuy]. If the target domain is monosyllabic, the $\{\mathrm{HL}\}$ overlay is, as we would expect, realized as a falling tone: $u^{\mathrm{HL}} b \hat{\varepsilon} y^{n}$ 'your-Sg beard', phonetically [úbéj ${ }^{\mathrm{n}}$ ] with the L-tone on the final semivowel.

Although a modifying adjective following the noun is included in the target domain of the possessed-noun tone overlay controlled by the possessor, the boundary between the noun and the adjective is still recognized. For example, a monosyllabic noun like něy 'meal' has falling tone in (28c), even though an adjective follows. If the boundary between the noun and the adjective were not recognized, so that the segmental string /ncy ${ }^{n}$ dumdo:/ were treated as an undifferentiated unit, we would have expected that the tone break between the H and the L of the $\{\mathrm{HL}\}$ overlay would have occurred at the syllable boundary (\#ú nદ́y ${ }^{n}$ dùmdò:), as in e.g. ú ársè: 'your animal'.
a. $n \varepsilon ̌ y^{n}$
meal
b. ú $\quad{ }^{\mathrm{HL}} n \hat{\varepsilon} y^{n}$

2SgPoss ${ }^{H L}$ meal
'your-Sg meal'

Lexically /LH/-toned trisyllable noun stems are usually realized as L.L.H, or L.L. $<$ LH $>$ if the final syllable is heavy, but there are a number of cases of L.H.H (perhaps mainly frozen *LHH compounds), see §3.7.1.5. /LH/-toned trisyllabic verb stems likewise appear as L.L.H with the tone break near the right edge.

The same bias is found in tonosyntactically controlled $\{\mathrm{LH}\}$ overlays. This pattern occurs in the final of agentive compounds, as in tògòrò-[tògùrú-m] 'meat-chewer' (§5.1.3) from verb tógóró- ‘chew’.

### 3.7.3.3 Tone-Grafting (1 Sg possessor)

The only clear case of a floating tone that must be grafted (or docked) onto an adjacent morpheme is the 1 Sg possessor morpheme. Possessors precede possessed nouns, and pronominal possessors control $\{\mathrm{HL}\}$ overlay on the possessum, with the H -tone on the first syllable (or the first mora of a monosyllabic stem).

The 1 Sg possessor morpheme is a floating L-tone, so when it is grafted onto the left edge of the possessed noun, the posssessed noun ends up with $\{\mathrm{LHL}\}$, analysable as $\mathrm{L}+\{\mathrm{HL}\}$. If the noun is monosyllabic, this produces an $<$ LHL $>$ syllable. If the noun has more than one syllable, we get rising tone on the first syllable, then L-tones starting with the second syllable.

| noun | gloss | possessed $\{\mathrm{HL}\}$ | 'my ...' |
| :--- | :--- | :--- | :--- |
| a. nǎ: | 'hand' | nâ: | nă: |
| b. túngúrúm | 'stool' | túngùrùm | tǔygùrùm |
| c. bànàkû: | 'cassava' bánàkù: | bǎnàkù: |  |

The articulatorily and perceptually difficult case is (29c), because the 1 Sg possessor form has a rising tone on a nonfinal monomoraic $C v$ syllable. On occasion the H -tone element spills slightly into the onset of the second syllable, which makes it easier for an addressee to catch the bell-shaped LHL-tones. I have also noticed pronunciations, especially in elicitation, where an initial voiced consonant, especially $\{b m\}$, is slightly prolonged, again making it easier to hear the tones.

### 3.7.3.4 Phonology of possessed noun tone overlays

A possessed noun, with or without a following adjective and/or numeral, is subject to an overlay $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$. Some syntactic types of possessor require $\{\mathrm{HL}\}$ on the possessum. Other syntactic types of possessor require either $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ on the possessum, depending on whether the possessor itself ends in an H - or L-tone.

The basic rules for choosing between $\{\mathrm{HL}\}$ and $\{\mathrm{L}\}$ overlay on the possessum are these. First, if the possessor is a determined NP, defined here as one ending in definite kù or in a non-numeral quantifier such as plural bè, it controls $\{\mathrm{HL}\}$ on the possessum. An example is [úrò bè] ${ }^{\text {HL }}$ yí-tè: '(the) children of (the) houses', for markup see (93a) in §6.2.1. Further examples are in (31) below. Second, if the possessor is a pronoun or an undetermined NP, i.e. one ending in a noun, adjective, or numeral, its final tone ( L or H ) determines the form of the overlay. Final $L$ on possessor requires $\{\mathrm{L}\}$ on possessum, as in á:mádù ${ }^{L}$ ùrò 'Amadou's house' (91a). Final H on possessor requires $\{\mathrm{HL}\}$ on possessum, as in yǎ-m ${ }^{\mathrm{HL}}$ úrò '(the) woman's house' (92a).

The same distribution of $\{\mathrm{H}\}$ and $\{\mathrm{HL}\}$ overlays on the possessum occur when the possessor is an N -Adj or N -Num combination, as long as there is no following definite morpheme or non-numeral quantifier. Therefore ìsê: 'village' as possessum appears as ${ }^{H L}$ ísè: or ${ }^{\mathrm{L}}$ isè: after N -Adj (30a-b) or N -Num ( $30 \mathrm{c}-\mathrm{d}$ ), depending on the final tone of the preceding word. If the possessor is itself possessed, like 'your uncle' in (30e), the final possessum
('village') always has $\{\mathrm{L}\}$ overlay, but this is only because the medial possessum ('uncle') itself has $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ overlay and therefore always ends in an L-tone.
a. $\begin{array}{ll}a_{1} r^{n a}{ }^{\mathrm{L}} & \left.\text { díy }{ }^{n} \text { à }\right] \quad{ }^{\mathrm{L}} \text { ìsè: }\end{array}$
[man. $\mathrm{Pl}^{\mathrm{L}}$ big. Pl ] ${ }^{\mathrm{L}}$ village
'a big men's village' (=a village of big [=old] men)
b. [à $\left.r^{n a}{ }^{\mathrm{L}} \quad \grave{\text { èsú }}\right]^{\mathrm{L}} \quad{ }^{\mathrm{HL}}$ ìsè:
[man. $\mathrm{Pl}^{\mathrm{L}}$ good.Pl] ${ }^{\mathrm{L}} \quad{ }^{\mathrm{HL}}$ village
'a big men's village' (=a village of good men)
c. [ár ${ }^{\text {àà }}$ kúròy] ${ }^{\mathrm{L}}$ ìsè:
[man.Pl six] ${ }^{\text {L }}$ village
'a village of six men'
d. [ár ${ }^{n a ̀ ~ t a ̀: n u ́] ~}{ }^{\mathrm{HL}}$ ísè:
[man.Pl three] ${ }^{H L}$ village
'a village of three men'
e. [ú ${ }^{\mathrm{HL}}$ lésù] ${ }^{\mathrm{L}}$ ìsè:
[2SgPoss ${ }^{\text {HL }}$ uncle] ${ }^{\text {L }}$ village
'your-Sg uncle's village'

Only $\{\mathrm{HL}\}$ overlay is allowed when the possessor ends in plural bè (31a-b) or definite kù (31c), so we get strictly the $\{\mathrm{HL}\}$ overlay on ${ }^{\mathrm{HL}}$ ísè: in spite of the L-tones of these particles.
a. [ú
${ }^{\text {HL }}$ lésù bè $]$
${ }^{H L}$ ísè:
[2SgPoss
${ }^{\mathrm{HL}}$ uncle Pl$]$
${ }^{\mathrm{HL}}$ village
'your-Sg uncles' village'
b. [pèré bè] ${ }^{\mathrm{HL}}$ ísè:
$\left.\begin{array}{ll}\text { sheep } & \mathrm{Pl}\end{array}\right] \quad{ }^{\mathrm{HL}}$ village
'a village of sheep- Pl '
c. [[árnà-m kù] ${ }^{\text {HL }}$ ísè:]
[[man-AnSg Def] ${ }^{\text {HL }}$ village
'the man's village'

One might assume that $\{\mathrm{HL}\}$ on the possessum is also controlled by a postnominal demonstrative ('this', 'that'). This is correct, but since all such demonstratives end in an Htone (§4.4.1) we can’t be certain that their final tones are not a factor.

One might speculate that the (historical) reason why definite kù and plural bè allow following $\{\mathrm{HL}\}$-toned possessums is that they were originally H-toned *kú and *bé. Definite kù is etymologically an offshoot of near-distant demonstrative kú, and the definite marker is still heard with H-tone in a few combinations, for example with 'it is' clitic in [árà̀-m $k u ́]=\grave{m}$ 'it’s the (aforementioned) man' (333b) in §11.2.1.1. Likewise, bè becomes bé: before some clitics and simple postpositions, see (127) in §6.6. But these H-toned forms are vestigial, and there is no phonological process in BenT that would account for dropping
underlying H -tones to L in these morphemes. In most contexts, definite kù is distinct from near-distant kú, precisely by their tones (§4.4.1). So the fact that NP-final kù and bè control $\{\mathrm{HL}\}$ overlay is synchronically a morphosyntactic fact.

Still, one is tempted to unify the $\{\mathrm{HL}\}$ and $\{\mathrm{L}\}$ melodies, taking one of them as underlying and the other as derived by a tone sandhi process, even if morphosyntactically conditioned. Since $\{H L\}$ has the broader distribution, we could take it as basic and derive $\{\mathrm{L}\}$ by a tone-sandhi rule (perhaps called "Initial H-Tone Suppression") of the type L\#HL $\rightarrow$ L\#LL, essentially a tone-flattening process by which the final L-tone of the first word spreads into the second work, killing its initial H .

There are scattered examples elsewhere in the grammar of more or less similar alternations. mégé 'more' can be lowered to mègè after a dative comparandum, which always ends in an L-tone. However, the tone-lowering here is optional (§12.1.1). A better comparison is with the alternation of $<\mathrm{HL}>$ and L - toned forms of conjugated 'it is' clitics matching the final tone of the preceding noun, e.g. $1 \mathrm{Sg}=m-i-1 \hat{y}^{n}$ versus $=m-i-y^{n}(\S 11.2 .1 .2)$. This could be analysed as an L\#HL $\rightarrow$ L\#LL process. However, here too it is unclear whether the HL-toned or L-toned forms are more basic. Moreover, there is no regular L\#HL $\rightarrow$ L\#LL process in BenT. This is shown by the persistence of initial H-tone on the stative negative clitic in 1 Sg $X=\grave{m}=$ dá- $-\grave{\prime}$ ' I am not X ', and in $3 \mathrm{Pl} X=$ rá-bó 'they are not X ' after L-tone as in ìnjê: $=\varnothing=$ rá-bś 'they are not dogs' (§11.2.1.5-6). Unpossessed nouns with lexical /HL/ melody (§3.7.1.3) do not lose their H-tone after a word ending in L. So an L\#HL $\rightarrow$ L\#LL process, if we posit one, would have to be quite severely morphologically restricted. This makes it difficult to argue that such a tone sandhi process should be separated from the overlay process itself.

The other way to reduce $\{\mathrm{HL}\}$ and $\{\mathrm{L}\}$ to one basic overlay is to choose $\{\mathrm{L}\}$ for this honor. In this case, the $\{H L\}$ version require a tone sandhi rule of the type H\#LL $\rightarrow \mathrm{H} \# \mathrm{HL}$, i.e. a rightward spreading of a final H-tone into the onset of an L-toned word. Again, however, this would have to be sharply restricted morphologically, to possessed NPs and to the 'it is' clitic paradigm. Elsewhere there are many combinations of H-final word and following L-initial word, as in ú [nù ${ }^{\text {L }}$ yàyá-só-m̀ kù] 'you-Sg who fell' (427) or gàmbú dùwj̀-y.: 'we left some' (110b). Many African languages have productive H\#LL $\rightarrow \mathrm{H} \# \mathrm{HL}$ processes, but not BenT.

I therefore see no good alternative to the complex, two-part rule formulated above, making reference both to syntactic type of the possessor and, if the possessor is an undetermined nonpronominal NP, the final tone of the possessor.

See $\S 6.2 .1$ for more detail.

### 3.7.3.5 Atonal-Syllabic-Suffix Tone-Spreading

The 3 Pl pronominal-subject suffix has a wide range of allomorphs depending on the AN category (-bó, -yغ̀, etc.). Of interest here is the 3 Pl perfective- 1 b form -tí-yà. The
 The general tonal structure of verbal inflectional suffixes suggests that 3 Pl -ya (like most other pronominal-subject suffixes) is atonal, acquiring its tone from the preceding morpheme. To get from /-tî-ya/ to -tí-yà, the L-tone part of the HL-tone in /-tî-/ must be delinked from the perfective-1b suffix and must be transferred to the 3Pl ending -ya.

Arguably, the same thing is going on in the recent perfect, with suffix /-jê-/. The 3Pl form appears as $-j$ - $\hat{a}$., which could be derived from /-jê-a/ via /-jé-à/.

A similar process may be at work in a suffix -ma, which occurs both as yet another 3Pl subject allomorph, in experiential perfect -tá-mà (§10.2.1.7), and as a participial suffix for (animate) plural head NP in perfective relative clauses (§14.1.6.1). If we represent the experiential perfect suffix as -tâ- with $<\mathrm{HL}>$ tone, its other forms (-tâ-m, -tâ- $w$ ) are analysable as having atonal suffixes. One could envision a similar analysis for -tá-mà, namely as underlying /-tâ-ma/, the only difference being that this time the final L-tone element is realized on a syllabic suffix.

### 3.7.4 Low-level tone rules

### 3.7.4.1 Contour-Tone Mora-Addition

At the end of a word, a mora is added to a final short-voweled $C v$ syllable, lengthening its vowel, to allow a contour (i.e. non-level) tone to be articulated with ease. Contour tones are $<\mathrm{HL}>,<\mathrm{LH}>$, and $<\mathrm{LHL}>$. In the case of final $<\mathrm{LH}>$, lengthening is pre-empted when the preceding syllable is L-toned. In this case, Final- $C_{V}<\mathrm{LH}>$-to-H Reduction (§3.7.4.3) applies, simplifying the final $<\mathrm{LH}>$ to H , at which point there is no contour tone and therefore no basis for adding a mora (i.e. lengthening the vowel).

Contour-Tone Mora-Addition is observable in verbal morphology, when an aspectnegation (AN) suffix of the shape $/-\mathrm{C} \hat{\mathrm{V}}-/$ is followed by 3 Sg (zero) pronominal-subject ending. The relevant suffixes are perfective-1b $/-\mathrm{t} \hat{\mathrm{i}}-/(\$ 10.2 .1 .5)$ and recent perfect $/-\mathrm{j} \hat{\varepsilon}-/$ (§10.2.1.8). The 3Sg forms are heard as $-t \hat{i}:-\varnothing$ and $-j \hat{\varepsilon}:-\varnothing$, respectively, which show the extra mora in the form of vowel length. For the underlying short vowel of the AN suffixes, cf. e.g. 3 Pl perfective -1 b -tí-yà and 2 Sg recent perfect $-j \varepsilon$ - $-\bar{W}$.

All cases of this type in verbal morphology involve falling tone. In nouns and adjectives, examples with rising as well as falling tone can be adduced. 'Woman' is an example of rising tone. In singular yă-m, the suffixal sonorant is sufficient to carry to final H-tone element, but in the unsuffixed plural /yǎ/ there is no such cushion, so the vowel is lengthened and we get yǎ: 'women'. A bisyllabic example is /púlǒ/ 'Fulbe (ethnic group)', where singular púlǒ-m corresponds to plural púľ̌:. However, if the penult is L-toned, lengthening does not apply to a final rising tone, which instead shifts to H-tone as mentioned earlier. An example is /ìnjě/ 'dog' with singular ìnjě-m and plural ìnjé. A final short $<H L>$ vowel in a noun stem is lengthened in all available examples, which are either monosyllabic, or nommonosyllabic with L-toned penult: /ô/ 'mouse' with singular $\hat{o}-\mathrm{m}$ and plural $\hat{o}$ :, /cèngû/ 'agama lizard' with singular cèngû-m and plural cèngû:.

Adjectives are treated like nouns as far as the data reveal. Adjectives: /pž-/ 'old' with animate singular $p \check{\varepsilon}-m$ and animate plural $p \check{\varepsilon}$ :, /nà: $r^{n} \hat{a} /$ 'easy, cheap' with animate singular nà: $r^{n} \hat{a}-m$ and animate plural nà: $r^{n} \hat{a}:$. The only relevant numeral is 'one', and here the data are somewhat tricky, as both tù $w^{n} \hat{\jmath}$ : and tù $w^{n}$ ó are attested (in different senses) alongside tù $W^{n} \hat{\jmath}$ $m$, see $\S 4.7 .1 .1$.

There is no lengthening of vowels in non-final syllables. Contour tones are rare in monomoraic nonfinal syllables, but they can be created secondarily by adding the 1 Sg possessor morpheme (floating L-tone) to a noun. The result is a noun whose first sylalble begins with LH tones, as in ǔrò 'my house' (úrò 'house'). Speakers have difficult articulating the contour tone on the first syllable (the H-tone element may spill into the onset of the second syllable), but I have never observed lengthening of the first-syllable vowel to accomodate the contour tone.

### 3.7.4.2 Contour-Tone Stretching

In cases where a vowel-final stem is followed by an atonal suffix consisting of a (sonorant) consonant, such as $1 \mathrm{Sg}-\mathrm{y}, 1 \mathrm{Pl}-y . \therefore, 2 \mathrm{Sg}-W$, or $2 \mathrm{Pl}-W . \therefore$ in inflected verbs, or (animate) singular $-m$ for nouns and adjectives, the tone of the stem-final vowel spreads to the end of the syllable. This is phonetically trivial when the tone in question is a simple high or a simple low. When it is a contour tone (falling, rising, or $<L H L>$ ), the final tone gravitates toward the suffixal sonorant. For example, recent perfect $-j \hat{\varepsilon}$ - combines with (atonal) $2 \mathrm{Sg}-W$ as $-j \varepsilon-\grave{W}$, where the pitch drop is roughly coterminous with the final semivowel. Likewise, in yǎ-m 'woman' from noun stem /yǎ/ plus (atonal) animate singular $-m$, the H-tone peaks on the suffixal nasal.

### 3.7.4.3 Final-Cv<LH>-to-H Reduction (after L-tone)

A few nonmonosyllabic animate noun stems ending in short vowels have an L-toned penult, and a final short syllable that has $<\mathrm{LH}>$-tone when animate singular $-m$ is present but becomes H-toned when unsuffixed (i.e. in the plural). Example: ìnjě-m 'dog', plural ìnjé. See (37c) in §4.1.1, below.

It seems reasonable to posit lexical representations of the type /injě/ with a rising-toned short final vowel. When a suffix consisting of a sonorant consonant is added, the rising tone is articulated over the now bimoraic final syllable, as in ìnjě-m, phonetically [ìndzèńn]; see Contour-Tone Stretching (§3.7.4.2), above. When there is no suffixal consonant, the rising tone cannot be articulated since the final syllable is monomoraic. If it is a falling tone as in /cèngû/ 'agama lizards', or if it is a rising tone following an H-toned syllable as in /jémbě/ 'blacksmiths', the vowel is lengthened by Contour-Tone Mora-Addition (cèngû: 'agama lizards', jémbě: 'blacksmiths'). This lengthening is pre-empted in stems like 'dog', i.e. those with underlying final $/ \ldots \mathrm{Cv}(\mathrm{C}) \mathrm{C}$ v̌/, by Final- $\mathrm{Cv}<\mathrm{LH}>$-to-H Reduction, resulting in final ... $C$ v̀ $C$ v́.

Another type of final $<\mathrm{LH}>$-to-H raising affects final rising-toned long vowels in nonmonosyllabic stems that are followed by a word beginning in an H-tone. Examples of the words affected are yàry̌: 'sky', kòmbǐ: 'burrow, animal's hole' (distinct from kòmbî: 'shell'), and àrš̌: '(livestock) animal'. The raising seems to be most consistent before monosyllabic postpositions (locative wó) and similar clitic-like elements, but it is at least optional in some other combinations.

Examples (using the nouns just listed), involving locative wó, are yàrí: wó 'in the sky' and kòmbí: wó 'in the burrow'. An example with conjunction particle yá $\rightarrow$ is àrś́: yá $\rightarrow$ 'animals and ...'. An example with a numeral is àrsé: kúròy 'six animals', contrast àrš̌: lěy 'two animals'.
<LH>-to-H raising does not apply to monosyllabic stems. For example, mǎ: 'dry' remains rising-toned in gə̀yò mǎ: wó 'in the dry season', as does tǎ: 'pond' in tǎ: wó 'in the pond'.

### 3.7.4.4 <LHL $>$. H to downstepped $<\mathrm{LH}>.{ }^{\downarrow} \mathrm{H}$

There are few opportunities for $\mathrm{a}<(\mathrm{L}) \mathrm{HL}>$ syllable to be followed within a word by an $\mathrm{H}-$ toned suffix or clitic. This is because verb stems (with one exception) end in an H-tone, and because nominal suffixes are atonal (acquiring their surface tone by spreading) or L-toned.

However, there is one $<$ LHL>-toned verb, $j \check{\varepsilon}$ :- bring'. When it is followed by an H-toned suffixal or clitic syllable, the verb stem simplifies to $<\mathrm{LH}>$ and its final L-tone is heard as downstep (partial pitch drop) on the H-toned suffix or clitic. An example is perfective negative $j \varepsilon ̌$ : $^{\star}{ }^{\star}$ rí- $\varnothing$ 'he/she didn't bring'. The symbol ${ }^{\downarrow}$ indicates downstep of the following syllable. If the suffixal/clitic syllable is $<\mathrm{HL}>$-toned, the delinking and downstep do not occur; instead, the falling tone is clearly articulated. See §10.1.3.4 for more examples.

The external conditions for downstep are also present in some complex verb forms. The most common is the imperfective negative - $-\grave{m}-d o ́-(3 \mathrm{Pl}$ form $-\grave{m}-n-\hat{\varepsilon}$ ) which is preceded by an H-tone ( $\S 10.2 .3 .3$ ). However, in this case the L-tone does not delink; it is clearly audible on the - $\grave{m}$ - formative. The pitch of the following -dó- is usually lower than that of the preceding H-tone, so we have a kind of downdrift, but this is not quite the same as downstep.

A somewhat similar reduction of $<\mathrm{LHL}\rangle$ syllable to $<\mathrm{LH}\rangle$ occurs in certain combinations involving the high-frequency noun yìtť̌;, irregular plural of yí-m 'child' (§4.1.2), especially in yì-tě: mà:, which can be either dative mâ: $\sim{ }^{L}$ mà: (§8.3) or quotativesubject má: ~ ${ }^{\mathrm{L}}$ mà: (§17.1.1.1). Since both morphemes take L-toned form after an L-tone, the underlying final L-tone of yì-tẽ: is manifested indirectly. Similarly, a possessum or noun-like postposition following yìt tě: takes $\{\mathrm{L}\}$ rather than $\{\mathrm{HL}\}$ tone overlay, as it would after any common noun ending in L-tone: [yìteč: 'tùlù] wò 'behind (the) children'.

### 3.7.4.5 $\mathrm{H} .<\mathrm{LH}>$ to H.M, or to H.L before H

There are a number of $\mathrm{H} .<\mathrm{LH}>$ bisyllabic noun stems, see (26) in §3.7.1.6. In isolation, the structurally <LH> syllable is usually pronounced as a level mid-tone, as in bá:r"ǎm 'tree sp. (Acacia nilotica)' pronounced [bá: $\mathrm{n}^{\mathrm{n}} \overline{\mathrm{a} m}$ ]. That it is structurally $<\mathrm{LH}>$ is shown by the fact that a following possessum, including noun-based postpositions, have $\{\mathrm{HL}\}$ rather than $\{\mathrm{L}\}$ tone overlay, which occurs when a common-noun possessor ends in an H-tone: [bá: $r^{n}$ àm ${ }^{\text {HL }}$ túlù] ${ }^{\mathrm{L}}$ wò 'behind (a/the) acacia'. However, in this combination the noun has lost its final H-tone. púlǒ: $=\varnothing=$ rá-bó 'they are not Fulbe (people)', see (345c) in §11.2.1.6, with H. $<$ LH $>$-toned púlŏ: ‘Fulbe (people)' followed by H-toned stative negative = rá, I hear [púlō:rāb̄̄], i.e. the 乞̌: is not dropped to $\grave{j}$ :, and the ceiling for the pitch of H-tones is lowered.

### 3.8 Intonation contours

### 3.8.1 Phrase and clause-final nonterminal contours $\left({ }^{\uparrow},{ }^{\downarrow}, \rightarrow, \rightarrow^{\uparrow}, \rightarrow^{\downarrow}\right)$

Especially in texts transcribed from recorded dialogues, I use arrows from time to time to indicate a conspicuous terminal intonation of a clause.

In many cases, intonation functions in BenT, as in English, to characterize the pragmatic relationship between a phrase or clause and others that it adjoins. Dogon discourse is rich in parallelistic phrasing. A final pitch rise ( ${ }^{\dagger}$ ) and/or prolongation $(\rightarrow)$ is typical of nonfinal phrases in such parallel constructions; I use $\rightarrow^{\dagger}$ to indicate that both prolongation and at least
somewhat higher than usual pitch are present. The final phrase in the parallelistic progression typically has neutral or unusually low final pitch; the latter is indicated by ${ }^{\downarrow}$. Where the final phrase ends with intonational prolongation in addition to a low pitch, I use $\rightarrow^{\downarrow}$.

Before (rather than after) a word or syllable, ${ }^{\star}$ indicates downstep.

### 3.8.2 Lexically built-in intonational prolongation $(\rightarrow)$

Many expressive adverbials have a lexically built-in intonational prolongation, symbol $\rightarrow$. This is distinct from vowel length, as seen especially in cases like dém $\rightarrow$ 'straight', where the prolonged segment is the final nasal, not the vowel. For examples of expressive adverbials, see §8.6.7.

### 3.8.3 Dying-quail word-final prosody ( $\therefore$ )

This final-syllable prosody involves prolongation and a terminal low pitch.
In Jamsay, a conspicuous dying-quail intonational effect is observed on both coordinands in NP or pronoun conjunction. This is not the case in BenT conjoined NPs. Instead, in BenT the dying-quail effect is used to pluralize pronominal-subject suffixes, taking the corresponding singular as input. This is also the case in Nanga, but with many differences in detail.

The phonetic implementation of $\therefore$ is also different from language to language. In Jamsay, the final syllable begins with high or low pitch depending on its phonological tone, so a pitch decline is only observable when the phonological tone is high (or falling). In Jamsay, the prolongation applies to the syllable coda, so that $C v n$ with final nasal prolongs the nasal rather than the vowel. H-toned Cv́n. $\therefore$ is heard as [Cv́n̄̀n], with most of the pitch decline realized slowly as the nasal is prolonged.

In BenT, $\therefore$ with pronominal-subject suffixes is realized as [HL] pitch, erasing the phonological tone, combined with lengthening of the vowel. In Nanga, the phonetic realization of $\therefore$ is more complex, and in some contexts it involves the penult as well as the final syllable.

In BenT, prosodic effects of this general type (prolongation and final low pitch) are associated with plural pronouns and with their associated pronominal-subject suffixes in verbal inflection. However, there is an issue whether this is intonational (notably, with high variability in duration) or phonological (combination of ordinary tones and vowel-length).

First, consider the plural independent pronouns as they relate to the corresponding singulars (32).

| person | singular | plural |
| :--- | :--- | :--- |
| first | í | $\hat{1}:$ |
| second | ú | $\hat{u}:$ |
| third | $\varepsilon^{n} r^{n} \varepsilon$ | bû: |
| logophoric/reflexive | $\hat{a}$ | $\hat{a}:$ |

In three of the four persons, the plural is transparently derived from the singular by lengthening the vowel and by transitioning from high to low pitch. The remaining plural
form, $b \hat{u}$ :, is unrelated segmentally to the corresponding singular but shows the same prosodic shape as the other plurals. Structurally, an interesting possibility would be to transcribe the plurals as $1 . \therefore$, ú $\therefore$, bú $\therefore$, and á $\therefore$, with the understanding that $\therefore$ is phonetically implemented as length plus terminal low pitch. This would essentially match the Jamsay dying-quail intonational effect. Since the BenT pronouns lack coda consonants, it is moot whether the extra duration would be on such a coda consonant if present (as in Jamsay).

However, I cannot detect any consistent audible difference between the duration of the syllabic nucleus in the plural pronouns and that of ordinary stems of $C \hat{v}$ : shape, in similar clausal positions. Independent pronouns are always nonfinal in clauses, except in rather artificial citation-form pronunciation. In nonsubject relative clauses, these pronouns occur in immediate preverbal (i.e. preparticipial) position, so it is possible to compare their duration with those of $C \hat{v}$ : nouns as objects in subject relatives. The plural pronouns in (33a) directly precede the participle, as does 'millet' in (33b). I was unable to detect any difference in the pitch or duration of the long $\langle\mathrm{HL}\rangle$-toned vowels in the pronouns and in 'millet' in this position. Likewise, in (33a), no prosodic distinction was audible in the sequence of 'millet' and a plural pronoun.

$$
\begin{align*}
& \text { a. ùsù }{ }^{\mathrm{L}} \quad \text { yû: } \hat{u}:(\hat{i}:, b \hat{u}:, \hat{a}:)  \tag{33}\\
& \text { day }{ }^{\mathrm{L}} \quad \text { millet 2P1Sbj (1PlSbj, 3PlSbj, LogoP1Sbj) } \\
& \text { kósú-Ẁ kù } \\
& \text { harvest.Pfv-Ppl.Inan Def } \\
& \text { 'the day when we (you-Pl, they, they-Logophoric) harvested the millet' }
\end{align*}
$$

$\begin{array}{llll}\text { b. } & \text { àr }^{n}{ }^{\text {a }} & \text { yû: } & \text { kósú-ìm } \\ \text { man }^{\mathrm{L}} & \text { millet } & \text { harvest.Pfv-Ppl.AnSg } & \text { kef }\end{array}$
'the man who harvested the millet'

Similar examples, this time with a $C \hat{1}$ : noun ('water') as the comparandum, are in (34). Again, I could detect no prosodic difference between the plural pronouns and the noun.

> a. ùsù ${ }^{\mathrm{L}}$ nî: $\hat{i}:(\hat{u}:$, bû:, â:)
> day ${ }^{\mathrm{L}} \quad$ water $1 \mathrm{PlSbj}(2 \mathrm{PlSbj}, 3 \mathrm{PlSbj}$, LogoPlSbj)
> nǒ- $\grave{W}^{n}$ kù
> drink.Pfv-Ppl.Inan Def
> 'the day when we drank the water'
b. àr $r^{n a ̀}-m^{\mathrm{L}} \quad n \hat{i}: \quad n \check{\prime}-m \grave{m}$
$\operatorname{man}^{\mathrm{L}}$ water drink.Pfv-Ppl.AnSg Def
'the man who drank the water'

3Pl bû: is also homophonous (to my ear) with inanimate participial bú-ẁ from the existentiallocational quasi-verb bù- 'be' (§14.1.6.3), and with 3 Sg bû:- $\varnothing$ 'he/she/it is' in adjectival predicates (§11.4.1).

I will therefore transcribe the plural pronouns as $\hat{1}:$, $\hat{u}:$ : bû:, and $\hat{a}:$. However, the prosodic derivation from singulars suggested above remains attractive.

The situation is different for pronominal-subject suffixes on verbs. Unlike independent pronouns, inflected verbs are clause-final (except for emphatic particles and clause-linking morphemes). Furthermore, the relevant prolongation and pitch modification occur in
noninitial syllables within the verb (or tightly-knit verb chain, if suffixally marked perfective verbs are analysed as chains). A further difference is that the pronominal-subject cases involve superheavy $C \hat{v}: C$ rather than just $C \hat{v}$ : syllables. Such syllables are rare even in monosyllabic stems and do not otherwise occur at the end of multisyllabic words (in the absence of a compound break). Since the terminal prosody of the relevant inflected verb forms stands out in sharp relief in this context, and since it is typically clause-final (prepausal), I consider it to be intonational in the same sense as the Jamsay dying-quail intonation on coordinands, although the phonetic implementation differs from BenT to Jamsay. I will therefore transcribe the relevant plural-subject forms as the corresponding singular-subject forms plus $\therefore$

This dying-quail intonation applies to 1 Pl and 2 Pl suffixes on indicative (but not imperative or hortative) verbs and other predicates. There is no logophoric category in verbal inflection, as logophoric subjects have the usual 3 Sg and 3 Pl verbal suffixes.

1 Sg suffix $-y$ and $2 \mathrm{Sg}-W$ are word-final in verbs, following the stem and any nonzero AN suffix. The effect is to create a final $C v-y$ or $C v-W$ syllable with "v" a short vowel. In the great majority of cases, this syllable is noninitial in the word (or tightly-chained sequence). A monosyllabic $C V-y$ or $C V-W$ inflected verb is possible when a $C V$ stem (verb or quasi-verb) is followed directly by the pronominal suffix (in the unsuffixed perfective). A monosyllabic $C v:-y$ or $C v:-W$ inflected verb occurs in similar forms of $j \varepsilon \tilde{\text { : }}$ 'bring'.

The dying-quail effect is realized on 1 Pl and 2 Pl counterparts of these 1 Sg and 2 Sg forms as follows: the vowel is prolonged, and a falling [HL] pitch contour replaces the regular phonological tone of the final syllable.
(35) gives examples for 1 Pl suffixes; the 2 Pl forms with $-W . \therefore$ are parallel prosodically. The table shows the 1 Sg form in the central column. The right-hand column shows the phonetic realization of the 1 Pl form, which consists structurally of the 1 Sg form plus the $\therefore$ effect. Verbs in (35) are dùyó 'pound (in a mortar, to dislodge grains from grain spike)' in several forms, ló 'go' (perfective-1 a), and bì-yé 'lie down' (statives).
(35) Dying-quail intonation for 1 Pl suffixes
a. $\operatorname{Sg} C \hat{v}-y>\operatorname{Pl}[C \hat{v}:-j]$
'have' (H-toned)
'be there'
b. $\operatorname{Sg} C \grave{v}-y>\operatorname{Pl}[C \hat{v}:-j]$
progressive
perfective-1a
reduplicated stative
simple stative
c. $\operatorname{Sg} C \hat{v}-y>\operatorname{Pl}[C \hat{v}:-j]$
unsuffixed perfective perfective negative perfective-1b experiential perfect resultative recent perfect
$1 \mathrm{Sg} \quad 1 \mathrm{Pl}$ (i.e. 1 Sg plus $\therefore$ )
yá só-y [jásô:j]
yá bú-y [jábû:j]
[dùjó:râ:j]
[ló:rê:j]
[bìbíjê:j]
[jábíjê:j]
dùyó:-rà-y
ló:-rè-y
bì-bíyè-y
yá bí-yé-y
dùyò-ỳ dùyò-rí-ỳ dùyó-tí-ỳ dùyó-tá-ỳ dùyó-só-ỳ
dùyó-jé-ỳ
[dùjô:j]
[dùjòrî̀:j]
[dùjótî:j]
[dùjótâ:j]
[dùjósô:j]
[dùjójê:j]

| imperfective | dúyó-ỳ | [dújô:j] |
| :---: | :---: | :---: |
| ve negat | dúyó-m̀- ${ }^{+}$dó- | [dújóm ${ }^{\text {dô }}$ :j] |
| st imperfective | dúyó-m̀ $=~ b \grave{e}-y$ | [dújóm${ }^{\text {hê.j] }}$ |
| st stative | (bì-) $i_{1}$ í-yé- $W=b \varepsilon$ - $-\grave{y}$ | [(bì)bíjéwbê:j] |
| tive negativ | bì- $y$ è- $W=$ rá-ỳ | [bìjèwrâ:j] |
| ogressive negativ | dùyó:-rà = rá-ỳ | [dùjó:ràrâ:j] |
| ot have' | sò-ló-y | [sòlô:j] |
| jectival predicat | mòsú bú-ỳ | [mòsúbû:j] |
| 'be (a child)' (copula) | $y i ́-m=m-i ́-\grave{y}^{n}$ | [jím:î:j] |
| 'be (a Fulbe)' (copula) | púlò- $m=m-1 /-\grave{y}^{n}$ | [púlòm:î:j${ }^{\text {n }}$ ] |
| 'not be (somewhere)' | ற̀gó-ỳ | [ı̀gô:j] |

Whether the 1 Sg form has a final syllable with H -tone (35a), L-tone (35b), or $<\mathrm{HL}>$-tone $(35 \mathrm{c})$, the 1 Pl has $<\mathrm{HL}>$-tone. In other words, $\therefore$ erases the input tone on this syllable. The vowel (but not the suffixal semivowel) is also noticeably prolonged; in (35c) prolongation is the only audible change from the 1 Sg .

To determine whether the dying-quail effect can be expressed by regular phonological vowel-length and regular falling tone, it would be necessary to compare the forms in the 1 Pl column of (34) with other $C V: y$ and $C V: W$ syllables in comparable positions in the word and the clause. Such syllables do occur in noun and verb stems, but only in a limited number of surface monosyllabics. All verbs of these (apparent) shapes are really bisyllabic Cv:yi and $C v: w u$, respectively.

Among true nouns, the only examples of $C v: y$ and $C v: w$ stems known to me are tǎ: $y^{n}$ 'shed', p̌̌: $y^{n}$ 'fonio (a cultivated grain)', dúwâ:w 'blessing' (<Arabic), and jìrè- jě: $y^{n}$ as cognate nominal in the collocation jìrè- $j \check{\varepsilon}: y^{n}{ }^{j} \dot{\varepsilon}: y^{n} 1 \mathbf{1}$ 'glare at'. 'Shed' and 'fonio' are frozen diminutives with ${ }^{*}-y^{n}$, see $\S 5.1 .4$. There are also a few $C v:-m$ nouns including the animate singular suffix, e.g. nǎ:-m 'cow' and ǎ: ${ }^{n}-m$ 'monitor lizard'.

Among adjectives, I can cite wă:w 'distant' and the related noun ('distance') or adverb ('far away') wă:w, gŏ:w 'short', suffixed forms of dâ:- 'small' (dâ:-w, dâ:-m), and gǎ: $y^{n}$ in ìr ${ }^{n}$ ì gǎ: $y^{n}$ 'molar tooth'.

The marginal status of superheavy syllables in final syllables of nonmonosyllabic stems, combined with the productivity of the prosodic features in 1 Pl and 2 Pl suffixal forms, suggests that the latter do have a special prosodic status outside of the regular tone system. I will therefore transcribe them with $\therefore$ following the transcription used for the singular.

## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

### 4.1.1 Simple noun stems

Inanimate nouns (including flora terms) have no regular singular/plural distinction. Thus tìW ${ }^{n} \check{\varepsilon} y^{n}$ 'tree' may denote a single tree or a number of trees. These nouns appear as simple stems with zero suffix.

Most animate (including human) nouns take animate singular $-m$ suffix and zero plural suffix. For exceptional animate nouns that do not allow animate singular -m, including several kin terms, see §4.1.3. I will often simplify "animate singular" to "singular" and "animate plural" to "plural," especially in interlinears (Sg, Pl).

Nominal Suffixes
$-m$ (animate) singular

- $\varnothing$ (animate) plural, inanimate

Animate singular suffix -m may follow a vowel or a semivowel. It is omitted when the noun is followed by an adjective or demonstrative pronoun (in this case, the noun is also tonedropped). Because of alternations of final long and short vowels there are some phonological decisions to make. Length patterns for final vowels in nonmonosyllabic animate stems of two or more syllables are exemplified in (37).

$$
\begin{align*}
& \text { Animate nouns (nonmonosyllabic) }  \tag{37}\\
& \text { gloss } \quad \text { singular } \quad \text { plural } \quad \text { before adj }
\end{align*}
$$

a. final level-toned short vowel not subject to lengthening

| 'European' | ànsá:rá-m | ànsá:rá | ànsà:rà ${ }^{\text {l }}$ |
| :---: | :---: | :---: | :---: |
| 'man' | ár ${ }^{n}{ }^{\text {àm }}$ m | ár ${ }^{n}$ à | àr ${ }^{n}{ }^{\text {a }}{ }^{\text {L }}$ |
| 'farmer' | wòngùrò- | wòngù̀ | wòngù |

b. final $<\mathrm{HL}>$-toned short vowel subject to lengthening, §3.7.4.1
'Messor ant' cì-cèr ${ }^{n} \hat{u}-m \quad$ cì-cèr ${ }^{n} \hat{u}: \quad$ cì-cèr $r^{n}{ }^{\text {L }}$
c. final short $<\mathrm{LH}>$-toned after L-tone, simplified to H-tone, §3.7.4.3

| 'dog' | ìnjě-m | ìnjé | ìnjè ${ }^{\mathrm{L}}$ |
| :--- | :--- | :--- | :--- |
| 'snake' | àwǎ-m | àwá | àwà ${ }^{\mathrm{L}}$ |

d. final short $<\mathrm{LH}>$ - after H-tone, subject to lengthening, §3.7.4.1

| 'blacksmith' | jémbě-m | jémbě: | jèmbè ${ }^{\mathrm{L}}$ |
| :--- | :--- | :--- | :--- |
| 'Fulbe' | púlŏ-m | púlŏ: | pùlふे |

e. final <LH>-toned long vowel not subject to shortening (only known ex.)
'animal' àrsě:-m àrsě: àrs ${ }^{\text {L }}$
f. final semivowel (rare)


The basic types of monosyllabic animate nouns are in (38).
Animate nouns (monosyllabic)
gloss singular plural before adj
a. short $<\mathrm{LH}>$ or $<\mathrm{HL}>$ tone subject to lengthening, §3.7.4.1

| 'woman' | yă-m | yă: | yà |
| :--- | :--- | :--- | :--- |
| 'person' | nŭ-m | nŭ: | nù |
| 'hawk' | tìtề-m | tì-tê: | tìtè |

b. long vowel not subject to shortening

| 'chief' | 0:-m | $\hat{0}$ : | j: |
| :---: | :---: | :---: | :---: |
| 'hyena' | tìtă:-m | ti-tà: | tìtà |

Compounds may preserve archaic $C v$ - forms of stems that are now regularly $C v$ :. For more examples and discussion, see §6.3.1.

Animate singular $-m$ is a puzzle historically. Jamsay and other languages outside the BenT/Bankan Tey/Nanga subgroup have human/animate singular $-n(v)$ (possibly related to a noun 'person') and human/animate plural $-m$, $-m b o$, etc. I suspect that BenT (and Bankan Tey) $-m$ is a mutation from ${ }^{*}$-n, possibly via a lenited ${ }^{*}-\eta$ (preserved in Nanga as a rare singular suffix in e.g. yă- $\boldsymbol{\eta}$ 'woman'). The 'it is' (also focalizing) clitic very likely played a decisive role. Its fullest variant is $=\grave{m}$ but it is often reduced to $=\varnothing$ in BenT. It readily fuses with nominal suffixes to the left, and with pronominal-subject suffixes to the right, in a manner favoring resegmentations and reanalyses.

### 4.1.2 Irregular human nouns ('child’, 'boy’, 'girl')

As an uncompounded noun, 'child' has the forms in (39a). The singular has suffix $-m$ as expected. The plural is irregular, though it begins in the same yi segmental sequence. Since yi in yìteť: has L-tone, yìtte:: may have originated as a noun-adjective sequence ('child-small'). As compound final with human reference (39b), we get -yî-m (with <HL>-tone) and regular plural -yî: in terms for 'boy' and 'girl' (39b).

> a. 'child' yí-m yì-tě:
> b. 'boy’ àsùwnè-yî-m àsùwnè-yî:~ a àsùwnè-[yìtcť:]
> 'girl' yà:-yî-m yà:-yî:~ yà:-[yì-ť̌:]

For -yî: as compound final with nonhuman reference (e.g. 'seed/fruit of X'), see §5.1.4.

### 4.1.3 Use of singular and plural suffixes with kin terms

Many kin terms (and a few other nouns) have a distinctive morphosyntax; I refer to them as "inalienable" although they may occur in unpossessed as well as possessed forms.

Most kin terms do not require the animate singular suffix $-m$ in either possessed or unpossessed forms (but see below). Instead, the unsuffixed form is interpreted as singular, and plural particle bè is added to mark plurality. Thus nàrná 'mother', plural nàrná bè 'mothers', possessed ú nárnà 'your-Sg mother' and û: nàrnà bè 'your-Pl mothers'.

In the terms for 'cross-cousin' and 'younger sibling' (usually same-sex but not always), animate singular suffix $-m$ appears consistently in possessed forms. It is usually absent in unpossessed forms, though I did record tìyě-m as a variant of tìyé for 'cousin'.
gloss
singular
plural
a. '(a) cousin'
tìyé, tìyě-m tìyé bè 'your-Sg cousin'
ú tíyè-m ú tíyè bè
b. 'younger sibling'
ònjó
ònjó bè
'your-Sg y. sibling'
ú ónjò-m
ú ónjò bè

As noted just above, animate singular $-m$ is not required with most kin terms even when the reference is singular. However, $-m$ can be used with apparently unpossessed singular kin terms when they have specific reference, that is, when a specific possessor is implied. In the indefinite context 'I don't have a (father, mother, ...)', singular $-m$ is absent (by̌:, nàr ná, ...). However, in texts one finds such forms as bǒ:-m '(the) father' and nàr nǎ-m '(the) mother', with a contextually clear, already named possessor, i.e. as alternatives to an explicit thirdperson possessor combination. Other attested forms of this type are ònjǒ-m 'younger sibling' and dèrě-m 'elder sibling'.

The term for 'child' (singular yí-m, plural yì-tě:), which is in essence a common noun that can also be used (with a possessor) as a kin term, has singular $-m$ in unpossessed and possessed forms (yí-m 'a child', ú ${ }^{\mathrm{HL}}$ yî-m 'your child').

### 4.1.4 'So-and-so' (mâ:n, à-mâ:n)

The 'So-and-so' noun, denoting a variable personal name, is à-mâ:n or mâ:n (as in Jamsay). It is common in descriptions of generic activities, as in a text about name-giving ceremonials (baptisms) where the generic father is quoted as saying 'I want the newborn child to be called So-and-so.'

### 4.1.5 Reduplicated noun stems

### 4.1.5.1 Frozen $C i ̀$ - or $C u ̀$ - reduplication in nouns

Examples of a more or less frozen initial $C i \grave{l}$ or $C u ̀$ - reduplication are in (41). The form is often but not always heard as Cu - when the first syllable of the base has a rounded vowel. The reduplicant is normally L-toned, but there are a handful of apparent H -toned cases. If the base is V-initial, the resulting vowel sequence is pronounced with a glottal stop.
(41) $C i ̀-$ and $C u ̀-$ nouns
form gloss related form
a. insects/arthropods
cì-cê:-m
'beetle, bug'
kì-kă:-m
sì-sî:-m
tù-tû:-m
gì- $g \check{\varepsilon}:{ }^{n}-m$
cì-cèr ${ }^{n} \hat{u}-m$
cì-cé $W^{n} \dot{\varepsilon}-m$
nì-nò: $r^{n} \partial y^{n}-m$
mù-mùr ${ }^{n} \hat{u}-m$
gù-gòngórù-m
'grasshopper'
'grub, worm'
'termite'
'fly'
'Messor ant'
'mosquito'
'spider'
'scorpion'
'ant' (generic)
$H$-toned reduplicant
kí-kéré-m 'cricket’
b. birds/bats
gì-gísì-m 'bat; swift'
tì-tê-m 'hawk'
c. other fauna
kù-kòsú-m~kì-kòsú-m 'viper sp.'
nì-nìwň̌-m 'cat'
tì-tằ:-m 'hyena'
gù-gùsú-m 'giant pouched rat'
d. plants and plant parts
(jì-)jèlêy
gù-gùmtò:ró
[jì-jàm]-dòró
'leaf’
kù-kòmbî: ~ kì-kòmbî:
'thorny herb (Tribulus)' dòró 'thorn'
$H$-toned reduplicant
$1-1 \varepsilon \check{\varepsilon} W^{n} r^{n} \dot{\varepsilon}$
tí-táwrù
kú-kóró
'tree sp. (Boscia angustifolia)'
kí-kós̀̀
'tree sp. (Sarcocephalus)'
'dried-out leaves on ground'
e. body parts and similar
sù-sǒ: 'sweat'
pì-pǎ: 'shank'
gù-gùwǒ: 'front-leg section (butchery)'
kì-kìlê: ~kì-kìlé 'shade'
gì-gòlî: ~gù-gòlî: 'soft spot below knee'
tì-tòsî: ~ tù- ̀̀sî: 'calf (of leg)'
$H$-toned reduplicated syllable
nà:-[tí-t仑̂W] ~ -[tú-tôW] 'elbow' nǎ: 'hand'
f. verbal concepts
kù-kǒ: ~ kì-kǒ:
lù-ló:rùm
tì-tírù 'mission' verb tí- 'send'
tì-tây 'dancing ground'
g. weather, time, space
tì-tǎm
'cool weather'
nì-nǐ: 'sun'
H-toned reduplicant
tí-têm
'dune, elevation'
dú-dûm 'mound'
h. artefacts

| dì-dê: 'statuette' <br> tù-tù:lú  <br> pì-pàtàrá  <br> H-toned reduplicant  <br> dí-dâm  | 'horn (for blowing)' | dì-dê:-m 'midgit' |
| :--- | :--- | :--- |
| 'vat, basin' | -pàtàrá in cpds |  |
|  | 'large basin/vat' |  |

i. substances
$\begin{array}{ll}\text { kù-kùmbó } & \text { 'smoke' } \\ \text { pì-pı̀tú~pù-pı̀tú } & \text { 'mud' }\end{array}$
4.1.5.2 Other reduplicated and iterated nouns

The data are presented in (42) without further commentary.
(42)
a. $C \grave{v} C-C \grave{v} C \hat{v} C$ (noisy birds, onomatopoeic)
kà $W^{n}$-kàr ${ }^{n} \hat{a} W^{n}-m \quad$ 'white-bellied bustard' $c \varepsilon W^{n}-c \grave{\varepsilon} r^{n} \hat{\varepsilon} W^{n}-m \quad$ 'black-headed lapwing'
b. final $-C v$ : or $-C v C$ with repeated initial $C$
final is $<L H L>$-toned

| kàtà-kă:-m | 'spotted thick-knee' |
| :--- | :--- |
| pété-pé:-m | 'grasshopper sp. (Oedaleus)' |
| sénér $n$ ह́-sê:-m | 'small grasshopper sp. (Kraussella)' |

```
    kj̀tò-kŏ:-m 'louse'
    [ki-kàrà]-kăy 'gravelly terrain' (variant kàgàrà-kăy)
final is <HL>-toned
    tì-tà: kónórnó-kôyn 'spotted hyena` (tì-tă: 'hyena', 2 spp.)
final is <LH>-toned
    pùtùm-pǔ:
    wà:rùm-wǎ:
    bà:rnàm-băm
    'herb sp. (Commelina)'
    'vine sp. (Cissus)'
    'tall grass sp. (Panicum)'
```

c. full iteration
gù:-gŭ: $\quad$ 'shrub sp. (Calotropis)'
pé:-pé: 'herb sp. (Evolvulus)'
wîl-wîl 'hawk-moth' (hums)
tîm-tîm 'herb sp. (Scoparia)'
d. double or triple iteration with final or medial $a$-vowel(s)
$o-a$
òsòy-[kòró-kàrá] 'tree sp. (Grewia flavescens)'
o-a-o
tó:-tà:-tó:-m 'woodpecker'
hó:-hà:-hó: 'loud chatter'
kòró-kàrà-kòró 'noise, din'
u-a-u
kúr-kàr-kúr 'hubbub’
e-a-e
tèm-tàm-tê-m 'black cricket'
$\varepsilon$-a- $\varepsilon$
cé: ${ }^{n}$-cà: ${ }^{n}-c \varepsilon \varepsilon^{n} \quad$ 'rattling sound'
$k \check{\varepsilon}$ :-kà:-ǩ̌: $\quad$ 'croacking (of toad)'
$i-a-i$
cí: ${ }^{n}$-cà: ${ }^{n}-c i ́:{ }^{n} \quad$ 'creaky sound'
$i-0-i$
pì:-pj̀:-pî: 'motorcycle' (archaic)
e. iteration (?) flanking an unrelated medial (only example)
dò̀-gòm-dòrrú 'burry herb sp. (Pupalia)'
cf. Jamsay dò̀-nà:-dŏy for this sp.
f. miscellaneous pèlěm-pérù 'tall herb sp. (Aeschyomene)' jàsúm-jàsárà 'tiny grass sp. (Tripogon)' gòrǒm-gómjó-m 'giant millipede’

Roughly similar to (42b) are expressive adverbials gómbó-góm and jémbé-gém, both meaning 'jutting out' (along with gòmbò-gómbó $\rightarrow$ ).

### 4.1.6 Frozen initial à- in nouns

An original *à- prefix of unclear meaning may survive in the 'so-and-so' noun à-mâ:n with variant mâ:n, in à-jèrú 'wrestling', in cognate nominals à-pétù '(a) jump' and à-jǎy" 'act of sowing in a pit with manure' (§11.1.5.1), and in several fauna terms: à-kǐ: 'edible winged termites', à-bù:lǒ-m 'spotted skink', à-sèmbě-m 'five-lined skink', and á-kùngùrǒ-m 'giant tortoise'. In some other cases where Jamsay has initial à, the BenT form lacks this vowel: kèngû-m 'agama lizard', pàrâ: 'millet-cake meal', témbù 'tradition(s)' (Jamsay à-cě: $\eta \sim$ cě: $\eta$, à-pàlá, à-têm). I refrain from segmenting the initial a in àsàpèrú 'herb sp. (Cassia nigricans)' and àsàgùsô: 'tree sp. (Combretum)', since they can be parsed prosidically as $\mathrm{CvCV}-\mathrm{CvCV}$ compounds (àsàgùsô: is also a borrowing, from Songhay).

### 4.2 Derived nominals

### 4.2.1 Characteristic derivative (-gú-)

The characteristic nominal derivational suffix is -gú-. The animate singular is -gú-m and its plural is -gú. Examples are in (43).

$$
\begin{equation*}
\text { stem gloss } \quad \text { characteristic gloss } \tag{43}
\end{equation*}
$$

a. mostly nominal
dǎy 'wealth' dày-gú-m 'rich person'
b. mostly adjectival

| lóỳ̀ | 'filth' | lò ̀̀̀-gú-m | 'dirty (one)' |
| :--- | :--- | :--- | :--- |
| tèré | 'intelligence' | tèrè̀-gú-m | 'smart (one)' |

### 4.2.2 Verbal nouns (-î: $\sim-y ̀)$

The regular verbal noun suffix is -î:. With a monosyllabic $C v$ - or $C v$ :- stem we get $C \check{v}-\grave{y}$ with short stem vowel). For longer stems (which always end in a short vowel), the -î: replaces the final vowel.

The stem syllables drop tones to $\{\mathrm{L}\}$ before the suffix. This is automatic with nonmonosyllabic stems. Most monosyllabic stems respect the rule, hence $C \grave{v}-\hat{i}$., but there are a few exceptional monosyllabic stems with H-toned verbal noun ( $C \hat{v}-\hat{i}:$ ).

With monosyllables, the $-\hat{i}$ : suffix shows a tendency to desyllabify. One can transcribe either $C \grave{v}-\hat{1}$ : or $C \check{v}-\grave{y}$ (or even $C \grave{v}-\hat{y}$ ), for example $d \grave{j}-\hat{i}$ : or $d \check{o}-y^{\prime}$ 'arriving'. I still hear three tonal components ( $\mathrm{L}, \mathrm{H}, \mathrm{L}$ ), so if we transcribe $C \check{v}-\grave{y}$ we must recognize that the two moras manage to express three tone components.

The rare semivowel-final verb-stem type, namely in gǎy ${ }^{n}$ 'put' and káy ${ }^{n}$ 'do', has a $<$ LHL> verbal noun pattern $C a ̀-1 .:^{n}\left(\right.$ or $\left.C a ̌-\grave{y}^{\prime \prime}\right)$, indistinguishable from that of $C a(:)^{n}$ - stems.
gloss bare stem VblN
a. nonmonosyllabic

| 'hide' | bàngí | bàng-î: |
| :---: | :---: | :---: |
| 'hit' | súyó | sùy-î: |
| 'tie' | páyá | pàg-î: |
| 'shout' | píyé | pìy-î: |
| 'winnow in wind' | $n \varepsilon r^{n}{ }^{1} y^{n} 11$ | $n \grave{\text { r }}{ }^{n}{ }^{1} y^{n}-\hat{1}$ |

b. monosyllabic

| 'drink' | nŏ | nǒ-ỳ |
| :--- | :--- | :--- |
| 'go' | ló | lǒ-y |

c. irregular monosyllabic verb
'bring' $\quad j \tilde{\varepsilon}$ :
$j \check{\varepsilon}-\grave{y}$
d. $C v y^{n}$ stems

| 'put' | gǎy $^{n}$ | $g \check{n}^{n}-\grave{y}^{n}$ |
| :--- | :--- | :--- |
| 'do' | káy $^{n}$ | kăn$^{n}-\grave{y}^{n}$ |

A number of verbs have a high-frequency cognate nominal (§11.1.5.1) that is often used instead of the verbal noun. However, even here the regular verbal noun is also in use, especially in combination with the cognate nominal (i.e. in compound form). For example, the phrase jáy jàyá- 'fight a fight' with cognate nominal jáy '(a) fight' has a verbal noun $j a ̀ y{ }^{\mathrm{L}}$-[jày-î:] 'fighting fights', where the cognate nominal takes the form of an L-toned compound-initial.

Suffix -ú after $\{\mathrm{L}\}$-toned nonmonosyllabic stem, which corresponds in form to the productive Jamsay verbal noun, is found in BenT only in its secondary Jamsay function as a device for converting verbs into resultative modifiers (compound finals or adjectives), see §5.1.10.

### 4.2.3 Deverbal nominals with final í: and $y$

A number of nouns or adjectives have an H-tone and final í:, suggesting that this was once a regular suffixal derivation. In (45a), the noun is still clearly related to the verb or other stem from the same word-family. In (45b), the noun is isolated, and whether it belongs with (45a) even historically is unclear. Adjectives or perhaps compound finals are in (45c).
stem gloss related form
a. cognate nominals
mó:lí: 'collective (feast)' mò:lí- 'gather'
yórí: '(s) stroll' yàrìyí- 'take a stroll'
górí: 'blanket, sheet' gòró- 'cover (w. blanket)'
jéwí: '(a) curse’ jèwé- 'curse’ (note e/ $\varepsilon$ alternation)
òròsù-págí: 'woman's wrap' págí- 'tie'
yà-pémbí: 'woman's wrap' pémbí- 'gird (with rifles)'

| tímbí: | 'lid' | tímbí- 'cover' |
| :---: | :---: | :---: |
| má:ní: | 'thought, worry' | mà:ní- 'think' |
| sú: ${ }^{n}$ í: | 'rest (noun)' | sú:r ${ }^{n} u$ - 'rest, relax' |
| túmbí: | 'small mound' | túmbú- 'make (mound)' |
| ùsù-dér ${ }^{\text {nj: }}$ | 'daytime' | dèr ${ }^{n} \dot{\varepsilon}$ - 'spend mid-day' |
| dá:rí: | 'nostalgia' | dà:rá- 'miss (sb)' |
| túmdí: | 'beginning' | túmdí- 'begin' |
| úsúrí: | 'question' | úsúrú- 'ask (question)' |

b. other nouns

| té:lí: | 'wooden bed' | - |
| :--- | :--- | :--- |
| túní: | 'mortar' | (Nanga túndí etc.) |
| bíní: | 'ladder' |  |
| ùrò-jéngí: | 'neighbors' |  |

c. adjectives or compound finals
kúsí: 'private (field)'
túmbí: 'massive (rock)'
There are also a few instrument nominals with $\{\mathrm{L}\}$-toned stem and suffix -î:, like $\grave{\varepsilon} m b \hat{i}$ : 'tweezers' (verb émbí- 'hold by pinching'), dì:sî: 'file (tool)' (verb dì:sé- 'file'), and perhaps inirr ${ }^{n} \hat{1}$ : 'name'. In BenT this is the productive verbal noun formation, so I do not include these examples in (45).

Final -y occurs in túmbó-y 'sunrise', cf. verb túmbú '(sun) rise', ùmgǒ-y 'draught, mouthful', verb úmgó- 'fill up (mouth)', kòsǒ-y '(millet) harvest', cf. verb kósú- 'harvest (with knife)', mù $y^{n} \grave{\jmath}-y^{n}$ 'patience', cf. múy ${ }^{n}$ ó- 'be patient, wait', pòrǒ-y 'row', cf. verb póró'align, form into rows', and pàyǎ-y 'tied bundle', from páyá- 'tie'. The compound final in kòsù-[nàr $\left.n a \check{a}-y^{n}\right]$ 'gourd fruit' and yù:-[nàr $\left.n a \check{a}-y^{n}\right]$ 'millet plant that has grown a substantial spike' is related to verb nàrnáa 'give birth, bear (fruit)'. See also the cognate nominals tǒy, jìmbǎy, and mòngǒy in §11.1.5.1. Note the predominance of $\mathrm{L} .<\mathrm{LH}>$ tone patterns except for 'sunrise'.

### 4.2.4 Uncompounded agentives

Agentives (always animate) are based on verb stems but have nominal inflection. The regular singular suffix $-m$ is used, and the plural is unsuffixed, as with other animate nouns. In the predominant agentive formation, the stem ends in $i \sim u$ before animate singular $-m$ and with $u$ in the unsuffixed plural, and the stem has $\{\mathbf{L H}\}$ overlay.

Most agentives include a compound initial, so for further examples of the forms see (§5.1.3). jòngú-m 'healer’ ( Pl jòngú) is attested both in a simple form, see C’s second turn in (678) in the sample text, and with a cognate nominal as $\{L\}$-toned compound initial: jòngì-jว̀ngú-m.

One older speaker used a morpheme -mù in apparent agentive plural function, following a stem-shape identical to that of the singular (46). My younger assistant had difficulty understanding this, and it is clearly not typical of agentives.

| búnúgóy |  | yèy, |  |
| :---: | :---: | :---: | :---: |
| group |  | two, |  |
| [[mă: | ${ }^{\mathrm{HL}}$ 1ósゝ̀] | dìmbì-yí-mù | yà $\rightarrow^{\dagger}$ ] |
| [[dry | ${ }^{\mathrm{HL}}$ foot] | follow-MP.Agent-Pl | and] |
| [ $[n \hat{1}$ : | ${ }^{\text {L }}$ lòsò] | dìmbì-yí-mù | yà $\rightarrow$ ] |
| [[water | ${ }^{\text {L foot] }}$ | follow-MP.Agent-PI | and] |

'two groups, those who followed a dry route, and those who followed the water route (along the river).' [2005.2a.08]

I can cite one uncompounded noun with agentive sense in common use (47), but it does not have the same morphological structure as the productive agentive compound construction.

| verb | gloss | agentive | agentive plural |
| :--- | :--- | :--- | :--- |
| dànní- | 'hunt', | dǎnnà-m | dǎnnà |

Underived nouns with agentive-like sense include wáyá:jè-m 'butcher' and jémbě-m 'blacksmith'. Most such nouns really denote a social category or caste rather than a trade as such.

### 4.2.5 Irregular reduplicated nominal (tì-tírù)

The noun tìtírù 'mission, commissioned task' (also in Jamsay) is irregularly related to the verb $t i ́-$ 'send (sb, on a mission)'.

### 4.2.6 Deadjectival abstract nominals

Abstractive nominals are most common with scalar adjectives. In (48), the modifying adjectives (leftmost column) are shown in the inanimate form, which is generally expressed by the suffix $-w$ (opposed to animate singular $-m$ and animate plural $-y \grave{\varepsilon}$ ). Adjectives already ending in a consonant, including those with a final formative $-m$, have no suffix (48b). The productive abstractive nominal has $\{\mathbf{L H}\}$ tone overlay, with only the final mora H-toned. In most cases the abstractive is segmentally identical to the inanimate form of the adjective, including the suffixal $-w$. However, some $u$-final adjectives have inanimate $-w$ but no suffix on the nominal (48a). Many abstractive nouns shift to an $\{\mathrm{H}\}$-toned form in comparative constructions, after mégé 'more', specifying the domain of comparison (e.g. ' X is more than Y with respect to height'). Some other abstractives keep their $\{\mathrm{LH}\}$ tones in comparatives. The forms used with mégé recur in predicative adjectives before 'be' quasi-verb variant bû-, see $\S 11.4 .1$. Not shown here is a $\{H L\}$-toned form that is also used in comparatives, but which is syntactically adjectival rather than nominal (§12.1.1).

Abstractive nominals from adjectives

| adjective gloss | noun |  |
| :---: | :---: | :--- |
|  | regular with mégé <br> /LH/ $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$ |  |

a. $u$-final, no $\{\mathrm{H}\}$-toned form
inanimate $-W$

| dùgû-W | 'fat, thick' | dùgú | dùgú | 'thickness' |
| :---: | :---: | :---: | :---: | :---: |
| dùsû-w | 'heavy' | dùsú | dùsú | 'weight; respect' |
| sòsû-W | 'near' | sòsú | sòsú | 'vicinity' |
| yòrû-W | 'soft' | - | yòrú | 'softness' |
| $n \grave{r} r^{n} \hat{u}-W$ | 'light' | - | $n \varepsilon r^{n} u ́$ | 'lightness (weight)' |
| inanimate - $\varnothing$ |  |  |  |  |
| mòsú- $\varnothing$ | 'nasty' | - | mòsú | 'nastiness' |
| èsú- $\varnothing$ | 'good' | èsú | èsú | '(good) quality' |

b. consonant-final

| final w or | m, | no $\{H\}$-toned form |  |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
| gằw- $\varnothing$ | 'tall' | gǎw | gǎw | 'height' |
| Wă:w- $\varnothing$ | 'distant' | Wǎ:W | Wă:W | 'distance' |
| ăm- $\varnothing$ | 'plump' | - | ăm | 'plump' |

like preceding, but reduplicated in basic abstractive form
tâm- $\varnothing$ 'cold, cool' tì-tǎm tám 'coolness'
nǔm- $\varnothing$ 'difficult' nù-nǔm nǔm 'poverty'
final-m formative, $\{H\}$-toned in comparative

| ع́rù-m | 'sweet' | غ̀rǔ-m | ह́rú-m | 'sweetness' |
| :--- | :--- | :--- | :--- | :--- |
| gárù-m | 'bitter' | gàrǔ-m | gárú-m | 'bitterness' |

c. ends in vowel other than $u$
$\{H\}$-toned form in comparative

| díy ${ }^{n}$ à-W $W^{n}$ 'big' | dìy ${ }^{\text {nǎa }} \mathrm{W}^{n}$ | díy ${ }^{\text {náa }} \mathrm{W}^{n}$ | 'size' |
| :---: | :---: | :---: | :---: |
| wór ${ }^{\text {ºj- }} W^{n}$ 'deep’ | wòr ${ }^{\text {nǒ }}$ - $W^{\text {n }}$ | wór ${ }^{\text {ºsó- } W^{n}}$ | 'depth' |
| káwà-w 'thick' | kàwǎ-W | káwá-w | 'thickness' |
| no $\{H\}$-toned form |  |  |  |
| gùrô-w 'long' | gùrǒ-W | gùrǒ-W | 'length' |

For 'big', cf. also the noun dìyná 'status of being the oldest freeborn man in the village'. wă:$W$ can also be used adverbially ('far').

In addition to these morphologically marked abstractives, ordinary adjectives are attested in nominal function. These are arguably headless core NPs with the noun omitted. They do not allude to scales, rather they have a more absolute sense (cf. take the good along with the $b a d$ ). (49) is from a passage discussing the typically bad relations among co-wives (women who share a husband). The first adjective 'bad' is combined with a semantically light noun 'thing'; the second adjective 'good' has no noun.

| [yà-nว̀r ${ }^{n} u$ |  | mâ:] | [kò: ${ }^{\text {L }}$ | mòsú] | $j \mathrm{a}: W^{n}$, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [co.wife |  | Dat] | [thing ${ }^{\text {L }}$ | bad] | normal, |
| èsú | $\left[\varepsilon r^{n}{ }^{n}\right.$ | ¢́ mâ:] | jà:W |  |  |
| good | $[3 \mathrm{Sg}$ | g Dat] | norm | Neg |  |

'(For) to a co-wife, (giving/doing) something bad is normal. (To give) something good to her isn't normal.' (2005.1a.05)

There are no nominals derived from expressive adverbials.

### 4.3 Pronouns

### 4.3.1 Basic personal pronouns

The basic morphological series are those in (50).
(50) a. independent (also used for preparticipial subject [e.g. in relative clauses], and optionally for object)
b. accusative (optional for direct object)
c. pronominal-subject suffix on verbs
d. possessor form, also used for complements of postpositions

The basic forms are given in (51). 3 Sg and 3 Pl are animate categories (including humans and animals), while Inan[imate] applies to plants and non-living things.

Personal Pronouns
subject
indep. accusative _Verb Verb-_ poss/PP
a. $1 \mathrm{Sg} \quad i \quad 1 \quad=n i ̀ \quad i \quad-y \quad \varnothing(+\mathrm{L})$
$1 \mathrm{Pl} \hat{1}: \quad \hat{i}:=n i ̀ \quad \hat{i}: \quad-\grave{y} . \therefore \quad \hat{i}:$
b. 2 Sg ú ú=nù ú $-\grave{W} \quad$ ú
$2 \mathrm{Pl} \hat{u}: \hat{u}:=n i ̀ \quad \hat{u}: \quad-\grave{W}: \therefore \quad \hat{u}:$
c. $3 \mathrm{Sg} \quad \hat{\varepsilon} r^{n} \dot{\varepsilon} \quad \dot{\varepsilon} r^{n} \dot{\varepsilon}=n i ̀ \quad \dot{\varepsilon} r^{n} \dot{\varepsilon} \quad$ [see below] $\quad \dot{\varepsilon} r^{n} \dot{\varepsilon}$

3 Pl bû: bû: =nì bû: [see below] bû:
d. Inan kú kú=nù kú [see below] kú
e. 3ReflSg á á=nì á [see below] á 3ReflPl $\hat{a}:$ â: =nì â: [see below] â:

The morphology is rather simple and regular. In both first and second persons, there is a singular/plural split expressed by vowel-length and tone (the singular has a short vowel and H-tone, the plural has a long vowel and $<\mathrm{HL}>$-tone). The accusative is $=n i ̀$ except for 2 Sg
 the suffixal syllable.

Of interest is the use of $\dot{\varepsilon} r^{n} \dot{\varepsilon}$ as all-purpose nonsuffixal 3 Sg morpheme. It is evidently cognate to Jamsay $\grave{\varepsilon} n \varepsilon$, which however is an anaphoric 3 Sg pronominal (used for reflexive possessor and as a logophoric). It is likely that Jamsay (not BenT) shifted the functions of this morpheme.

In the verbal suffixes, the animacy opposition is neutralized, so 3 Sg and Inan[imate] have the same forms. For this $3 \mathrm{Sg} /$ Inan category, and even more so for often irregular 3Pl, the form of the verbal suffix depends on the AN category. This is seen in (52), using ló- 'go' and (for the perfective-1b) dàmbí- 'push'. For fuller discussion of pronominal-subject suffixes, see §10.3.

$$
\begin{equation*}
\text { category } \quad 3 \mathrm{Sg} / \text { Inan } \quad 3 \mathrm{Pl} \tag{52}
\end{equation*}
$$

a. perfective-1a

| ló:-rغ̀- $\varnothing$ | ló:-r-à: |
| :---: | :---: |
| dàmbí-tî:- $\varnothing$ | dàmbí-tí-yà |
| lì-ló-m̀ | lìló-yè |
| lò-rí- $\varnothing$ | lò-r-á |
| ló-m̀-ló | ló-m̀-n-غ́ |

### 4.3.2 Discourse-definite function of inanimate pronoun $k u ́$

Inanimate kú in its various forms can be used to denote an abstraction, such as a situation or eventuality just described in preceding discourse. A good example of this is (53), where kú toward the end resumes the earlier proposition.

```
nǔ-m ह́rń\varepsilon gòr n
person-AnSg 3SgObj be.stronger.Pfv-3SgSbj,
[bê:n nù-m] kú
[B person-AnSg}\mp@subsup{}{}{\textrm{L}}] InanSgObj accept-PfvNeg-3SgSbj
'(That) someone (else) has dominated (=been stronger than) him, the person (=man)
of Beni did not accept that.' [2005.2b.04]
```

This discourse-resuming function of kú is apparent in a number of adverbial phrases that resume something just stated. For example, instrumental PP [kú nǎyn] 'with that' or 'in that way' is a common phrase in texts, connecting one clause or paragraph to the next.
kú can also be used as a prenominal pseudo-possessor $\left(k u^{(H) L} X\right)$ in a similar resumptive fashion. This construction functions as a strong discourse-definite, as opposed to the weak discourse-definite postnominal kù (i.e., $X$ kù), see $\S 4.4 .1$ below and §6.5.1. In this prenominal pseudo-possessor function, the interlinear abbreviation is "DiscDef." Prenominal kú and postnominal kù often co-occur: kú ${ }^{(\mathrm{H}) \mathrm{L}} X$ kù.

### 4.4 Demonstratives and definites

### 4.4.1 Demonstrative pronouns ('this', 'that') and definite markers

Animate and inanimate demonstrative pronouns and definite markers are shown in (54). They follow nouns, adjectives, and numerals within NPs. As usual, overt pluralization of inanimates is optional.

$$
\begin{equation*}
\text { form }(\mathrm{Sg}) \quad \text { gloss } \tag{54}
\end{equation*}
$$

Pl form
A. deictic categories (control tone-dropping)

| a. mǔ: ற̀gú | 'this' (proximal, animate) | mǔ: bè |
| :---: | :---: | :---: |
|  | 'this' (proximal, inanimate) | !̀gú bè |
| b. -m kú | 'that' (near-distant, animate) | -m kú bè |
| - $\varnothing$ kú | 'that' (near-distant, inanimate) | - $\varnothing$ kú bè |
| c. m̀bá~ $\grave{m}^{b}$ á ŋ̀gá | 'that' (far-distant, animate) | m̀bá bè |
|  | 'that' (far-distant, inanimate) | ற̀gá bè |

B. definite marker (does not control tone-dropping)
d. $-m$ kù 'the (same)' (definite, animate) $-\varnothing b \hat{u}$ :
$-\varnothing$ kù 'the (same)' (definite, inanimate) $-\varnothing$ kù bè
[see also the strong discourse-definite prenominal kú, §4.3.2]
For more on the definite morphemes, see $\S 6.7$. Definite plural bû: is identical in form to the 3 Pl independent pronoun. Definite kù is normally distinguishable from near-distant kú by tones (including those on the preceding noun if present).

The deictic categories (proximal, near-distant, far-distant) apply to entities at successive distances from the speaker. Near-distant is often specifically associated with the addressee, but the precise spatial range is flexible and relative. The far-distant category can be used in discourse as a kind of obviative, denoting the 'other' of two paired or otherwise homologous protagonists or locations ("Meanwhile, the other brother was ..."). For example, in a tale where Hare and Hyena travel together, after a passage focusing on Hyena the topic shifts to Hare, who is reintroduced into the discourse as m̀bá 'that (far-distant) one'. A similar example is $\grave{m}^{b}$ á in the second line of (660) in the sample text. Except for this special case, the usual postnominal discourse-definite forms are those in (54d).

The animate singular suffix $-m$ is not used on the noun stem before mǔ: or m̀bá. Example: yă-m 'woman', yà mǔ: 'this woman', yà m̀bá 'that woman'. One could argue that the $m$ of $m u \check{:}$ and that of móba are actually instances of the (animate) singular suffix $-m$, but since the demonstratives can be used absolutely (mǔ: 'this one', m̀bá 'that one'), and since they are not dropped in the plural, I take the $m$ to be part of the demonstrative. Before neardistant kú and definite $k u ̀,-m$ is present on animate singular nouns.: yǎ-m kù 'that (aforementioned) woman', cf. plural yǎ: kù bè.

Tone-dropping occurs on a modified noun before all of the deictic demonstratives: proximal, near-distant, and far-distant. Tone-dropping does not occur before definite kù. Tones (on both words) distinguish near-distant from definite NPs (55).
a. nà:-m ${ }^{\mathrm{L}} \quad k u ́$
cow-AnSg ${ }^{\mathrm{L}} \quad$ NearDist.Inan
'that cow (e.g. near you)'
b. nă:-m kù
cow-AnSg Def 'that (same) cow (e.g. that we were talking about)'

The plural is expressed by adding bè. For mǔ: and m̀bá, the noun (if present) has the same form as in the singular: yă-m 'woman' and plural yă: 'women', with demonstrative yà ${ }^{\mathrm{L}}$ mǔ: 'this woman' and plural yà: ${ }^{\text {L }}$ mǔ: bè 'these women'. For near-distant kú, the plural is expressed by adding kú bè to the regular plural form of the noun (with tones dropped): yà- $m^{\mathrm{L}}$ $k u ́ ~ ' t h a t ~(a f o r e m e n t i o n e d) ~ w o m a n ', ~ p l u r a l ~ y a ̀: ~ ' ~ k u ́ ~ b e ̀ ~ ' t h o s e ~(a f o r e m e n t i o n e d) ~ w o m e n ' ~(t h e ~$ plural is based on yă: 'women' with long vowel).

### 4.4.2 Demonstrative adverbs

### 4.4.2.1 Locative adverbs

The adverbs in (56) are the most common all-purpose spatial adverbs based on demonstrative stems, and may be used to indicate specific, well-defined locations. The forms with -dá: (sometimes pronounced -rá:, though not by all speakers) denote a more general space (56).
a. ŋ̀gú-rù ~ pú-rù
'here'
ŋ̀gá-rù ~ ŋá-rù
'there' (deictic)
yâ: 'there' (discourse-definite)
b. ŋ̀gú-dá: 'around here; on this side'
ŋ̀gá-dá: ~ à ŋá-dá: 'around there; on that side'
yá-dá: ~ yá-rá: 'around there' (discourse-definite)
kú-dá: ~ kú-rá: 'there' (discourse-definite)

### 4.4.2.2 Emphatic/approximative modifiers of adverbs

já:tì, a regional emphatic (e.g. Fulfulde), can be added to a demonstrative adverb: ỳgú-rù já:tì 'right here', yâ: já:tì 'right there (in that same place)'.

For approximate location, there are expressions like bèlè ̀̀gú-rù 'around here' and (especially for younger speakers) tàngày ìgú-rù 'around here'.

For 'the near/far side of X' (with reference to the deictic center and to a fixed location X), we get expressions involving a motion verb 'reach' or 'pass' (57).
a. ${ }^{\mathrm{L}+\mathrm{HL}} \check{I r}^{n}$ à

1SgPoss. ${ }^{\text {HL }}$ field
[bé:nì ú dǒ:-rè mà:] bù- $\varnothing$
[Beni 2SgSbj reach-Pfv1a before] be- 3 SgSbj
'My field is this side of Beni.' (lit. "... it is before you reach Beni")
b. ${ }^{\mathrm{L}+\mathrm{HL}_{\check{\prime}} r^{n}{ }^{n}}$

1SgPoss. ${ }^{\text {HL }}$ field
[bé:nì láwá:-rè-w dé] bù- $\varnothing$
[Beni pass-Pfv1a-2SgSbj if] be-3SgSbj
'My field is on the far side of Beni (lit. "... it is when you have passed Beni')

### 4.4.2.3 'Like this/that' (áyày")

áyàyn 'like this, like that, thus' is normally accompanied by a visual demonstration or by preceding explanatory text. It differs tonally from àyâyn 'how?'.

### 4.4.3 Presentatives

The presentative morpheme is úngòy, used with following 'be' quasi-verb, a stance or motion verb, or a VP denoting an activity. A subject NP generally precedes úngòy, presumably as a topicalized NP. However, a subject NP can optionally follow úngòy if there is at least one other constituent separating the subject NP from the verb. Non-subject NP's (if not topicalized) follow úngòy.

```
a. ô:-m ú\etagòy bù-\varnothing
    chief-AnSg here's! be-3SgSbj
    'Here's the chief!'
b. úngòy y-\hat{\varepsilon}
    here's! come.Ipfv-3P1Sbj
    'Here they come!'
c. úngòy éw-yê-y
    here's! sit-MP.Ipfv-1SgSbj
    'Here I am, sitting!.' (= 'I'm sitting over here!')
d. ú\etagòy bíré bír\hat{\varepsilon}-m
    here's! work(n) work.Ipfv-3SgSbj
    'Here he/she is, working!'
e. ú\etagòy bír\varepsiloń bíre-m
e'. úngòy M bíré bírê-m
    M here's! M work(n) work.Ipfv-2SgSbj
    'Here is M (personal name), working!'
```


### 4.5 Adjectives

### 4.5.1 Underived adjectives

The adjectives in (59) are used in modifying function after a noun. There is frequently a three-way distinction between inanimate $-w$, (animate) singular $-m$, and (animate) plural $-y \grave{\varepsilon}$ (59a). In another important set of forms, the inanimate form is unsuffixed, versus singular $-m$ and plural $-y \grave{\varepsilon}(59 b)$. If the stem itself ends lexically in $m$, both the inanimate and animate singular forms are unsuffixed, or at least have no audible suffix, and the $m$ is heard before animate plural $-y \varepsilon ̇(59 \mathrm{c})$. A number of adjectives have $-m$ as an inanimate/animate singular suffix, versus animate plural $-y \grave{\varepsilon}$ without the $m(59 \mathrm{~d})$. There are a handful of adjectives with a noun-like unsuffixed plural instead of animate plural suffix -yغ̀ (59e). For nouns that do allow $-y \grave{\varepsilon}$, the suffix is sometimes omitted in collective contexts. For example, the phrase nù ${ }^{\text {L }}$ díynà 'big (i.e. old) people' occurs frequently in texts with collective plural sense, although the form díynà-yè is attested elsewhere.

A number of other adjectives have incomplete paradigms for semantic reasons. They are inapplicable either to inanimates (59f) or to animates (59g). In ( 59 g ), if the only existing form ends in $m$, the decision whether to segment it as the inanimate or animate singular suffix mentioned above, or to take it as part of the lexical stem, can be decided when there is an associated inchoative verb. The absence of $m$ from the inchoative verb suggests segmentation in the cases of bisyllabic ásù- $m$, párù- $m$, and kúnjù- $m$. The inclusion of $m$ in the inchoative verbs for monosyllabic sîm- $\varnothing$ 'pointed' and nǔm- $\varnothing$ 'difficult' shows that in these cases the $m$ is lexical. No verb corresponding to $g \hat{\jmath} m-\varnothing$ 'foul' or to $g \hat{u} m-\varnothing$ 'bland' is known, so this test does not work for them. However, all monosyllabic Cvm stems that do have full paradigms (ầm- $\varnothing$ 'plump', tâm- $\varnothing$ 'cold, slow') or for which the inchoative-verb test is available (sîm- $\varnothing$, nǔm- $\varnothing$ ) have lexical $m$, so there is no good reason to segment the $m$ as a suffix in monosyllabic $g \hat{m}-\varnothing$ and $g u ̂ m-\varnothing$.

The suffixes $-W$ (inanimate) and $-m$ (animate singular) are atonal (in my analysis), so the tone of the final syllable of the adjectival stem proper simply fills out the relevant syllable including the suffix; see Contour-Tone Stretching (§3.7.4.2). An alternative analysis in which these suffixes are L-toned would work for many cases, but $-m$ is atonal as nominal suffix (animate singular), and is clearly not L-toned in several adjectives in (59b) and (59f). The suffix -yغ̀ is always L-toned.

Nasalization-Spreading affects inanimate $-w$ (which is tautosyllabic with the source of the nasalization), but $y$ in plural $-y \grave{~ i s ~ u n a f f e c t e d . ~ I n ~ g e n e r a l, ~}-y \varepsilon ̀$ acts like an independent particle and does not interact phonologically with the stem. It reflects a very old plural noun $*$ ye/ $\varepsilon$ (Nanga yé 'things') that evolved into a plural suffix for adjectives or demonstratives (e.g. Najamba adjectival inanimate plural yé), or into a plural possessive classifier (e.g. Nanga $\left.{ }^{H L} y \hat{\varepsilon}\right)$.

## Adjectives

gloss Inan AnSg AnPl
a. Inan $-w, \operatorname{Sg}-m, \mathrm{Pl}-y \grave{\varepsilon}(\operatorname{Inan} \ldots \hat{u}-w$ arguably just lengthened $\ldots \hat{u}:-\varnothing$ )
/HL/-toned, stem-final unrounded vowel

| 'big, adult' | díy $^{n}$ à- $W^{n}$ | díynà-m | díy ${ }^{n}$ à-yè |
| :--- | :--- | :--- | :--- |
| 'spacious' | káwà-W | káwà-m | káwà-yè |

'small, young' dâ:-W dâ:-m dâ:-yغ̀
like preceding, colors (for bàr ${ }^{n} \hat{a}-y^{n}, j e ̀ W^{n} \hat{e}-y^{n}$, see discussion below)

| 'red' | bár ${ }^{n}$ à- $W^{n}$ | bár ${ }^{n}$ à-m | bár ${ }^{n}$ à-yè |
| :---: | :---: | :---: | :---: |
| 'black' | $j{ }^{\text {je }}{ }^{n}$ èe- $W^{n}$ | $j e ́ W^{n}$ è-m | $j^{\text {é }}{ }^{n}$ è̀-yè |
| /LH/-toned |  |  |  |
| 'good' | غ̀sú $\sim$ ès ${ }^{\text {a }}$-W | èsú-m~ | $\grave{\varepsilon} s i ́-y \varepsilon ̀$ |
| /LHL/-toned |  |  |  |
| 'fat, thick' | dùgû-W | dùgû-m | dùgú-yè |
| 'heavy' | dùsû-W | dùsû-m | dùsú-yè |
| 'soft (skin)' | yòrû-W | yòrû-m | yòrú-yè |
| 'lightweight' | $n \grave{r} r^{n} \hat{u}-W^{n}$ | $n ⿻{ }^{\text {r }}{ }^{n} \hat{u}-m$ | $n \grave{r} r^{n} u ́-y \varepsilon ̀$ |
| 'nearby' | sòsû-W | sòsû-m | sòsú-yè |
| 'bad, ugly' | mòsû-W | mòsû-m | mòsú-yè |
| 'long, tall' | gùrô-W | gùrô-m | gùró-yè |
| 'thin' | $m \varepsilon ̀ n j \hat{\varepsilon}-W$ | $m \varepsilon ̀ n j \hat{\varepsilon}-m$ | $m e ̀ n j \varepsilon ́-y e ̀ ~$ |

b. Inan $-\varnothing, \mathrm{Sg}-m, \mathrm{Pl}-y \grave{\varepsilon}$
/H/-toned
'white'
'respectable'
'skinny'
'living'
/HL/-toned
'hot, fast'
'new'
/LH/-toned
'old'
'empty, bare'
'unripe, raw, fast'
'crooked'
/LHL/-toned
'tight'
'short'
'distant'
'young'
'flat'
'easy, cheap'
pílé- $\varnothing \quad$ pílé-m
nínáy ${ }^{n}-\varnothing \quad$ nínáy ${ }^{n}-m$
kómbó- $\varnothing$ kómbó-m


乞̂W- $\varnothing \quad \hat{\jmath} W-m \quad \hat{\jmath} W-y \varepsilon ̀$
kálà- $\varnothing$ kálà-m kálà-yè
$p \check{:}-\varnothing \quad p \check{-}-m \quad p \varepsilon \check{:}$ - $-\bar{\varepsilon}$
kòrǒy- $\varnothing$ kòrǒy-m kòrǒy-yè
cèsú- $\varnothing$ cèsú-m cèsú-yè
gòlú- $\varnothing \quad$ gòlú-m gòlú-yè
$\tilde{\varepsilon} W-\varnothing \quad \tilde{\varepsilon} W-m \quad \check{\varepsilon} W-y \grave{\varepsilon}$
$g$ gh:: $W-\varnothing \quad$ gõ:W-m gõ:w-yè
wầ:w- $\varnothing$ wằ:w-m wầ:w-yè
sǒ:rò- $\varnothing$ sǒ:rò-m sǒ:rò-yè
pàtà-pátà- $\varnothing$ pàtà-pátà-m pàtà-pátà-yè
nà: $r^{n a ̂}:-\varnothing \quad$ nà: $r^{n a ̂}-m \quad n a ̀: r^{n a ́-y e ̀ ~}$
c. $m$-final with Inan $-\varnothing, \mathrm{Sg}-\varnothing, \mathrm{Pl}-y \grave{\varepsilon}$
/LHL/-toned 'plump' âm- $\varnothing$ ăm- $\varnothing$ ǎm-yغ̀
/HL/-toned
'cold, slow' tâm- $\varnothing$ tâm- $\varnothing$ tâm-ỳ̀
d. Inan $-m, \mathrm{Sg}-m, \mathrm{Pl}-y \grave{\varepsilon}$
/HL/-toned

| 'sweet; sharp' | Érù-m | ह́rù̀̀-m | Érù-yè |
| :--- | :--- | :--- | :--- |
| 'bitter' | gárù-m | gárù-m | gárù̀-yè |

'smooth, sleek' órù-m órù-m órù-yè

| e. unsuffixed plural <br> /LH/-toned <br> 'other' |  |
| :--- | :--- |
|  | lǎ-w |
| [blind', lǎ- $m$ is often adverbial 'otherwise, further'] |  |
|  | jìmdú $\quad$ jìmdí-m $\quad$ jìmdú- $\varnothing$ |

f. no inanimate form
/H/-toned
'runty'
g. no animate forms

| /LH/-toned |  |  |  |
| :---: | :---: | :---: | :---: |
| 'half-ripe' | bòlòrǒy- $\varnothing$ | - | - |
| 'ripe, cooked' | ìrěy- $\varnothing$ | - | - |
| 'rotten' | ̀̀mbú- $\varnothing$ | - | - |
| 'weak, diluted' | sèré- $\varnothing$ | - | - |
| 'dry' | mă:- $\varnothing$ | - | - |
| 'difficult, costly' | nǔm- $\varnothing$ | - | - |
| /HL/-toned |  |  |  |
| 'deep' | Wór ${ }^{n} \grave{\mathrm{j}}$ - $W^{n}$ | - | - |
| (variant wór ${ }^{n} \grave{O}-W^{\prime \prime}$ ) |  |  |  |
| 'coarse' | kúnjù-m | - | - |
| 'dense' | úlì- $\varnothing$ | - | - |
| 'full' | bâ:- $\varnothing$ | - | - |
| 'pointed' | sîm- $\varnothing$ | - | - |
| 'unflavored, bland' | gûm- $\varnothing$ | - | - |
| 'foul (odor)' | gôm- $\varnothing$ | - | - |
| 'half-bitter' | ásù-m | - | - |
| 'sour, salty' | párù-m | - | - |
| /LHL/-toned |  |  |  |
| 'thin (wall)' | pèngû-W | - | - |

For 'red' and 'black' there are alternative forms, perhaps archaic, with suffix $-y$ instead of $-W$ and with $\mathrm{L}<\mathrm{HL}>$ tones. These forms occur in a few highly lexicalized combinations, all inanimate. For 'black': sè̀gù jè $W^{n} \hat{e}-y^{n}$ 'earthenware cooking pot' (lit. "black pottery") and غ̀lèy jè $W^{n} \hat{e ̂} y^{n}$ 'groundnut' (lit. "black peanut"). For 'red': nà $W^{n}$ à: bàr $n \hat{a}-y^{n}$ 'flesh, muscle tissue' (lit. "red [i.e. not cooked] meat"), and combinations of bàrnâ- $y^{n}$ with terms for certain fruits (mango, wild grape, zaban, kola) denoting ripeness as manifested by redness.

A probably unresolvable issue is whether inanimate forms of $u$-final stems like dùĝ̂- $W$ should be treated as having inanimate suffix $-W$, or as having suffix $-\varnothing$ with long vowel due to Contour-Tone Mora-Addition. In the latter case, they should be transcribed as dùgû:- $\varnothing$, and shifted from (59a) to (59b). There is no audible difference between $\hat{u}$ : and $\hat{u} w$ in BenT, to my ear.

Vowel-length is distinctive in $C v(:)$ and $C v(:) C$ adjectives, as in nouns. We see consistent long vowels in dâ:- 'small, young' (59a), and in gŏ:w 'short' and wầ:w'distant' (59b), though in the two latter cases the final $-W$ might be segmentable. lǎ- 'other' (59e) and perhaps $p \check{\varepsilon}$ -
'old' (59b) are lexically short-voweled, but are lengthened when unsuffixed (and not tonedropped) by Contour-Tone Mora-Addition (§3.7.4.1). Plural pě:-yغ̀ might argue against this formulation, but $-y \grave{e}$ itself is arguably a clitic or even a separate particle (it does not interact phonologically with the stem, for example resisting Nasalization-Spreading). We also have short-voweled $C v C$ adjectives (ôW- 'hot, fast', $\hat{w}$ - 'tight', âmm- 'plump', tâm- 'cold').

Many adjectives use a form segmentally identical to the inanimate modifying form (but with final H-toned syllable) as an all-purpose predicative form for all pronominal categories (§11.4.1).

The two semantically adjective-like elements meaning 'many, much' are $j o ́ \rightarrow$ and $b a ̆ y^{n} \rightarrow$. Both are syntactically (expressive) adverbials, though like adjectives they immediately follow the element they have scope over. They have no suffixal morphology. Tone-dropping (as for nouns before true adjectives) occurs only sporadically with $j o b$, so that in e.g. úrò jó $\rightarrow$ 'many houses', úrò 'house' has lexical tones. However, there are some textual occurrences where a noun is tone-dropped before $j o ́ \rightarrow$.

### 4.6 Participles

Participles are forms of verbs with more or less adjective-like suffixes that agree with the head NP of a relative clause. The forms are rather complex and depend on the aspect-negation (AN) category of the verb. For the morphology, see §14.1.6.

### 4.7 Numerals

### 4.7.1 Cardinal numerals

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

The numeral for ' 1 ' is based on a stem tù $w^{n}$ ', which has a presuffixal (and occasionally unsuffixed) form tù $W^{n} \hat{\jmath}-($ note the $\mathrm{L} .<\mathrm{HL}>$ tone pattern). It is treated as a modifying adjective, so a preceding noun drops tones and omits its own inflectional suffix (the L. $<\mathrm{HL}>$ pattern is likewise characteristic of adjectives). Examples: nà: ${ }^{L}$ tùwn $\hat{\jmath}-m$ 'one cow' (nǎ:-m 'cow'), àr ${ }^{n} \grave{a}^{\mathrm{L}} t u ̀ w^{n} \hat{\jmath}-m$ 'one man' (ár$r^{n a ̀}-m$ ), kùr ${ }^{n} \grave{u}^{\mathrm{L}} t u ̀ w^{n} \mathfrak{\jmath}$ 'one stone' (kúr$\left.{ }^{n} u ̀\right)$.

In the sense '(the) same' (indicating identity or other substantive sameness), the inanimate form is tù $W^{n} \hat{0}$ : with $\mathrm{L} .<\mathrm{HL}>$ tones, and the animate forms are the same singular tù $W^{n} \hat{\jmath}-m$ and plural tù $W^{n}$ '́-yè as in the numeral function. The 'same' function is most common in predicates, either as a modifier of a predicative noun (60a) or as an adjectival predicate (60b).
a. $\left[n \grave{u}{ }^{\mathrm{L}}\right.$ mǔ: bè] [nù ${ }^{\mathrm{L}}$ tùwn${ }^{n}$ ó-yè]
[person ${ }^{\mathrm{L}}$ Prox.An Pl ] [person ${ }^{\mathrm{L}}$ one-Pl]
'Those people are the same (e.g of a single extended family).'
b. [kóróbórò yà $\rightarrow^{\dagger}$ ] [púlǒ: yá $\rightarrow^{\dagger}$ ] tùw ${ }^{n}$ :
[Songhay and] [Fulbe and] same.be
'Songhay and Fulbe (ethnicities) are the same.'

The common phrases 'one (=same) mother' and 'one (=same) father', used in phrases distinguishing full from half-siblinghood, are nàrná tùwn ${ }^{n}$ and bǒ: tù $W^{n} \delta$, respectively.

In the phrase ùsú tù ${ }^{n} \hat{\jmath}-m$ 'one day' (i.e. a certain day in the past), we unexpectedly get $-m$ suffix (elsewhere animate singular), as in (527) in §15.2.4 and in (616) in §18.2.2. I am hesitant to suggest a connection with the use of suffix $-m$ for both animate singular and inanimate in some adjectives, such as ह́rù-m 'sweet' (§4.5.1).

Warning: English 'same' in the discourse-definite sense ('that same dog that I mentioned before') can be expressed using definite kù (§6.7) or a prenominal demonstrative pseudopossessor kú(§4.3.2).

### 4.7.1.2 ' 2 ' to ' 10 '

The forms of these simple numerals are in (61).
(61) gloss form

| '2' | yěy |
| :---: | :---: |
| '3' | tà:nú ~ tă:n |
| '4' | nǐ: $y^{n}$ |
| '5' | nùmǔy ${ }^{n}$ |
| '6' | kúròy |
| '7' | súy ${ }^{n} \mathrm{j}^{\text {y }}{ }^{n}$ |
| '8' | gá:rày |
| '9' | tè:Sǐm |
| '10' | pérú |

Numerals ' 6 ' to ' 8 ' have a fixed H.L tone pattern with final $y$ (or $y^{\prime \prime}$ ), a pattern that is conspicuous when reciting the numeral sequence.

With numerals other than ' 1 ', a preceding modified noun has its regular tones (no tonedropping occurs).

With a preceding noun and before a pause (or in isolation), numerals with final-syllable $<\mathrm{LH}>$-tone (i.e. '2' to 5' and '9') regularly omit the final H-tone component and appear with all-L-tone: nǎ: yèy 'two cows', úrò nùmùy" 'five houses'. The lexical <LH>-tone reappears if there is a following modifier, like the definite marker in nǎ: yěy bû: 'the two cows' and in úrò nùmǔy ${ }^{n}$ kù 'the five houses'. The lexical tone is also usually audible when an NP ending in the numeral is followed quickly by a verb or other clause-internal constituent: nǎ: yěy $s \grave{\varepsilon} W^{n} \dot{\varepsilon}-y^{n}$ 'I slaughtered two cows'. The lexical tone is also audible in isolation (e.g. in counting sequences): yěy 'two'.

Both the preservation of the tone of a preceding modified noun, and the dropping of the final $<\mathrm{LH}>$-tone of the numeral prepausally after a modified noun, distinguish noun-numeral combinations for numerals ' 2 ' and up' (62a) from ordinary sequences of noun plus modifying adjective (62b), including the numeral ' 1 ' (62c) and ordinals.
a. nǎ: yèy
cow two
'two cows'

```
b. nà: \({ }^{\mathrm{L}} \quad p \varepsilon \check{:}-m\)
    cow \(^{\mathrm{L}} \quad\) old-AnSg
    '(an) old cow' (nǎ:)
c. tòrò \({ }^{\mathrm{L}}\) tùwn \({ }^{n}\)
    mountain \({ }^{\mathrm{L}}\) one
    'one mountain' (tórò)
```

4.7.1.3 Decimal units (' 10 ', ' 20 ', ...) and combinations ( ${ }^{\prime} 11$ ', ' 59 ', ...)

The decimal terms, with pérú ' 10 ' as the base, are in (63). pérú is modified in various ways when compounded with a following single-digit numeral to produce ' 20 ' through ' 90 '.

| gloss | form |
| :--- | :--- |
| '10' | pérú |
| '20' | pèrí-yěy |
| '30' | pé-tă:n~ pé-tà:nú |
| '40' | pé-nǐ:y |
| '50' | pé-nùmǔy |
| '60' | pèr-kúròy |
| '70' | pèr-súyǹ̀ ${ }^{n}$ |
| '80' | pèr-gá:rày |
| '90' | pèr-tè:sǐm |

When one recites the list out loud, as one would do in counting, one notices more readily that adjacent decimal terms have similar forms of pérú-. Thus '30' through ' 50 ' begin with pé-, while ' 60 ' through ' 90 ' begin with $p e ̀ r$-. The tonal difference between these two variants correlates inversely with the first tone component of the following single-digit numeral, so we get H-toned $p \varepsilon$ - before an L-initial numeral in ' 30 ' to ' 50 ', and L-toned pèr- before an H -initial numeral in ' 60 ' through ' 90 '. However, there is no phonological basis for the loss of $r$ in $p \varepsilon$ - and its preservation in $p \varepsilon ̀ r-$. Note that in ' 30 ' and ' 90 ' the following numeral begins in $t$.

As with the numerals ' 2 ' to ' 9 ' (see just above), a modified noun preceding a decimal numeral has its regular lexical tones (64a-b). If the decimal numeral itself ends in an $<\mathrm{LH}>$ toned syllable (' 20 ' through ' 50 '), the $<\mathrm{LH}>$-tone reduces to L-tone prepausally and in isolation (64a) but not before another constituent (64b).
a. úrò pèrí-yèy
house ten-two
'twenty houses'
b. nǎ: pé-nùmǔy ${ }^{n} \quad$ kù
cow ten-five Anaph
'those (same) five cows'

A decimal term may be combined with a single-digit ('1-9') numeral to produce compound numerals like ' 11 ' and ' 59 '. The morpheme sâ: follows the single-digit numeral; I gloss it as 'plus' but it is confined to numerals.
(65)
$\begin{array}{llll}\text { a. } & \text { péré } & {\left[\text { ť̀ }{ }^{n} \text { ó }\right.} & \text { sâ: }] \\ & \text { ten } \\ \text { 'eleven, }, & {[\text { one }} & \text { plus }]\end{array}$ 'eleven'
b. pé-nùmǔy ${ }^{n}$ [tè:sǐm sâ:] ten-five [nine plus] 'fifty-nine'
c. ùsú [pé-tǎ:n tǎ:n sâ:] day [ten-three three plus] 'thirty-three days'
4.7.1.4 Large numerals (' 100 ', ' 1000 ', ...) and their composites

The key stems are in (66). They can be considered to be nouns, and (like any countable noun) can be followed by any of the numerals given above.

$$
\begin{equation*}
\text { gloss } \quad \text { form } \tag{66}
\end{equation*}
$$

a. 'hundred' té:mdérè (<Fulfulde)
b. 'thousand' mùsú
c. 'million' milyô: ${ }^{n} \quad$ ( $<$ French $)$

Like other numerals ' 2 ' and up, these numerals do not force tone-dropping on a preceding modified noun: nǎ: té:mdérè '(one) hundred cows', nǎ: mùsú '(one) thousand cows', nă: mìlyô:" '(one) million cows'.

The archaic term sùngú is still used among older people for ' 80 ' in connection with currency (see below).

These nouns may be directly followed by a single-digit numeral ' 2 ' to ' 9 ' denoting the number of higher units: té:mdérè yěy 'two hundred', mùsú tǎ:n 'three thousand’. A singledigit numeral ending in $<\mathrm{LH}>$-tone drops to L-tone under the usual conditions, hence e.g. té:mdérè yèy prepausally.

Numerals involving more than one level (' $1-99$ ', hundreds, thousands) normally require repetition of a modified noun (67).


When there is no modified noun, ya $\rightarrow$, which might be analysed as a variant of the 'and' particle, is optionally used between a hundred (or thousand) term and a '1-99' term. In careful speech, it is grouped prosodically with the following component (68). It is always heard with intonational prolongation. Although there may be prosodic breaks after the two nonterminal right brackets in (68), these breaks are associated with nonterminal intonation (i.e. anticipating more to come), so the final $<\mathrm{LH}>$-tones in yěy and nùmǔy ${ }^{n}$ are audible.

| [mùsú [thousand | yěy ${ }^{\text {T] }}$ | [té:mdérè | $\left.\check{y r}^{n t}\right]$ |
| :---: | :---: | :---: | :---: |
|  | two] | [hundred | five] |
| [yá $\rightarrow$ | pèrí-yěy] |  |  |
| [and | ten-two] |  |  |
| wo thous | d, five hu | dred, (and) |  |

### 4.7.1.5 Currency

The official unit is the CFA franc. In all native languages, the unit for currency expressions less than one million CFA francs is what in colonial times was called the riyal, equivalent to five CFA francs. Thus ' 100 ' when referring to money means ' 100 riyals', i.e. ' 500 CFA francs'. The noun meaning 'riyal' is bú:dù, shared with Fulfulde, Jamsay, and some other regional languages. ' 5 CFA francs' is therefore bù: dù tùwn', ' 10 CFA francs' is bú:dù yěy, etc.

For very large amounts, mìlyô:n 'million' is used, meaning 'one million CFA francs (not riyals)'.

### 4.7.1.6 Distributive numerals

A numeral may be iterated to denote price per unit, or other distributive numeral (e.g. 'ten each', 'ten by ten', 'ten at a time').

| mángórò | [pèrí-yěy | pèrí-yěy] | tíyé-yè |
| :--- | :---: | :---: | :---: |
| mango | [ten-two | ten-two] | sell.Ipfv-3PlSbj |
| 'They sell mangoes for twenty riyals $(=100$ | francs $)$ each.' |  |  |

With ' 1 ', the form is invariant tùwnó-tùwn's even with animate referents (70). Compare animate singular tùw ${ }^{n} \hat{\jmath}-m$.

| nǎ:- $\varnothing$ | tù $W^{n}$ 万-tù $W^{n}$ ¢́ | yè-bó |
| :---: | :---: | :---: |
| cow-Pl | one-one | come.Pfv-3P1Sbj |

'The cows came one by one.'

### 4.7.2 Ordinal adjectives

### 4.7.2.1 'First' and 'last'

These ordinals differ in form from the bulk of ordinals (on which see just below). They both end in 厄́:, which is otherwise not observed with numerals or with modifying adjectives. As with ordinary adjectives, a modified noun drops its tones before 'first' and 'last'.
a. ùrò ${ }^{\mathrm{L}}$ kùyó:
house ${ }^{\mathrm{L}} \quad$ first
'the first house'
b. ùrò ${ }^{\mathrm{L}}$ dùmdó:
house $^{\mathrm{L}}$ last
'the last house'
Singular forms are seen in $n u{ }^{\mathrm{L}}$ kùyó:-m 'the first person' and $n \grave{u}^{\mathrm{L}}$ dùmdó:-m 'the last person'. The plurals are $n \grave{u}^{\mathrm{L}}$ kùyó: and $n u{ }^{\mathrm{L}}$ dùmdó:.

### 4.7.2.2 Other ordinals (suffix -n $\hat{\varepsilon}$ )

All other numerals have an ordinal with suffix -né after tone-dropped numeral stem. Slightly irregular forms are tày-né 'third' and pèr-né 'tenth'. Representative examples are in (72). Ordinals behave morphosyntactically like modifying adjectives and induce tone-dropping on a preceding noun: ùrò ${ }^{\mathrm{L}}$ yèy-nદ́ 'the second house'.

> form gloss
a. single-digit numeral

| $y e ̀ y-n \varepsilon ́$ | 'second' |
| :--- | :--- |
| tày-né | 'third' |
| nì:-né | 'fourth' |
| kùròy-né | 'sixth' |
| pèr-né | 'tenth' |

b. decimal
pèrì-yèy-nદ́ 'twentieth'
c. decimal plus single-digit numeral
pèrè tùwn ${ }^{n}$ sà:-nモ́ 'eleventh'
d. huindred
tè:mdèrè-né 'hundredth'
e. hundred plus '1-99' numeral (two levels)
té:mdérè yà: pèrì-yèy-né 'hundred and twentieth'

### 4.7.3 Fractions and portions

'Half', or more accurately 'large fraction', is pékérè. (Someone's) 'share' of a whole is kèrìyêy, e.g. kěrìyèy 'my share'. The noun or adjective 'some, certain (ones)' is gàmbú (variant găm), see §6.3.2.

## 5 Nominal and adjectival compounds

### 5.1 Nominal compounds

Many compounds are expressed with the initial X in its regular (lexical) tone, and the final N in all-L tone (tone-dropped), schematically ( $\bar{x} \grave{n}$ ). This is indistinguishable from the possessive construction with any possessor X other than a first or second person pronoun.
a. bé:nì ${ }^{\mathrm{L}}$ yà:

B L woman.Pl
'the women of Beni'
b. ìsê: $\quad{ }^{\mathrm{L}}$ ̀̀:-m
village $\quad{ }^{\mathrm{L}}$ chief- AnSg
'village chief'
In addition to these productive types, the lexicon (especially for flora-fauna) contains many compounds where both initial and final have tone patterns not attributable to tone-dropping or to possessor control. For example, in ná:-lèmdê: 'herb sp. (Portulaca)', we have an unexpected H-toned variant of nă: 'cow' before lèmdê. 'tongue'. One would have expected \#nà: ${ }^{\mathrm{L}}$-lèmdê: matching Bankan Tey nà:-lèmbìrê: (applied to the same herb sp.). The regularly possessed form is nǎ: lémdè: 'cow's tongue', but this is not used as the flora term. There are quite a few compounds, and prosodically compound-like terms with four or more syllables, that likewise do not fit into the productive patterns that I focus on in this chapter. Some that have a reduplicative flavor are listed in §4.1.5.2.

### 5.1.1 Compounds of type ( $\bar{x} \bar{n}$ )

In this construction, the initial drops its tones, while the final has its regular lexical melody. The initial may denote the source, location, substance, or other characteristic of the referent denoted by the final noun.
a. màrpà: ${ }^{\mathrm{L}}$-gìyé
rifle ${ }^{\mathrm{L}}$-dance
'rifle dance (dance in which rifles are shot off)' (màrpâ:)
b. $\grave{\varepsilon} n j \grave{\varepsilon}^{\mathrm{L}}$-sùwó
chicken ${ }^{\mathrm{L}}$-excrement
'chicken excrement' ( $\grave{\text { nj }} \hat{\varepsilon}-m$ )
c. kù: ${ }^{\mathrm{L}}$-ùrùyí:
head $^{\mathrm{L}}$-pain
'headache' (kû:)

```
d. sùk̀̀rjे \({ }^{\mathrm{L}}\)-kilô:
    sugar \({ }^{\text {L }}\)-kilo
    'kilo of sugar' (súkóř̀)
e. \(p \grave{\varepsilon} \grave{\varepsilon}^{\mathrm{L}}-k \hat{u}\) :
    sheep \({ }^{\text {L }}\)-head
    'sheep's head' (pèrè̀-m)
f. ìnjè \({ }^{\mathrm{L}}\)-úrò
    dog \(^{\mathrm{L}}\)-house
    'doghouse' (ìnjě-m)
```

Tone-dropped initials are flagged with superscript ${ }^{\mathrm{L}}$ in this section, but I usually omit wordinternal superscripts in texts.

### 5.1.2 Compounds with final verbal noun, type ( $\bar{x} \bar{n}$ )

This ( $\bar{x} \bar{n}$ ) pattern is also used when the final is a verbal noun and the initial denotes the complement (usually a direct object), as in (75).

```
nàwnà L
meat}\mp@subsup{}{}{L}-[eat-VblN
'eating meat'
```

In some compounds of this structure, the verbal noun functions as an adjective-like modifier for the noun, which is therefore the logical head. An example is nì: ${ }^{L}$ - $t$ tegir- $\left.\hat{i}:\right]$ 'antivenin (antidote for snakebite)' in line 7 of (671) in the sample text, with nî: 'water' and verbal noun of tégírí 'revive', i.e. 'water (liquid) of/for reviving'. However, this type of sense, where the compound final specifies the function or purpose of the entity, can also be expressed by instrumental relative compounds (§5.1.9).

### 5.1.3 Agentive compounds of type ( $\begin{gathered}x \\ \check{y}-\mathrm{Ppl})\end{gathered}$

Most agentives are not simple ('dancer'), rather they are compounds with an initial L-toned noun ('dance-dancer'). In the regular pattern described in this section, the initial drops its tones, while the final has $\{\mathrm{LH}\}$ tones with just the final syllable high. Examples with ordinary noun as compound initial are in (76).
a. màngòrò ${ }^{\text {L }}$ - ${ }^{\text {H }}$ [tiỳí-m]
mango ${ }^{\mathrm{L}}{ }^{\mathrm{LH}}$ [sell.Agent-AnSg]
'mango seller' (màngórò tíyé-)
b. àrsè: ${ }^{\text {L_LH }}$ [èré-m]
animal ${ }^{\text {L }}{ }^{\text {LH }}$ [tend.Agent-AnSg]
'herder, shepherd' (àrš̌: bèré-)
c. wèrè ${ }^{\mathrm{L}}{ }^{\text {LH }}$ [dǎnnà-m]
gazelle ${ }^{\mathrm{L}}-^{\mathrm{LH}}$ [hunt.Agent-AnSg]
'gazelle-hunter' (wéré-m dànní-)

Of the examples in (76), that in (76a) illustrates the regular morphophonology of the agentive verb (i.e., the compound final), in that the stem has a final $i \sim u$ before singular $-m$, and a final $u$ in the unsuffixed plural form. (For trisyllabics, the medial vowel also raises.) The final in 'herder' (76b) is related to the noun bèré: 'pasture'. 'Hunter' (76c) belongs to the same word-family as verb dànní- 'hunt' but is not a regular derivational form.

Examples with cognate nominals as compound initials are in (77).
a. yògùu ${ }^{\mathrm{L}}{ }_{-}^{\mathrm{LH}}[y \grave{\text { Ly }}$ gú- $m]$
running ${ }^{\mathrm{L}}{ }^{\mathrm{LH}}$ [run.Agent-AnSg]
'runner' (yógù yòvó-)
b. bì̀̀ ${ }^{\text {L }}{ }_{-}^{\text {LH }}$ [bìrí-m]
work(n) ${ }^{\mathrm{L}}{ }^{\mathrm{LH}}$ [work.Agent-AnSg]
'worker' (bíré bìré-)
Further examples of morphologically regular agentive finals are in (78). The initial has the same form in the singular and plural agentives. (78a) shows the shift of the final vowel from low or mid-height to high in the agentive, for verb stems of two or more syllables. This does not apply to monosyllabic stems, and gǎyn 'put' loses its final semivowel (78b).

verb gloss | agentive |
| :---: |
| singular | glural

a. séwé- 'saw' kòsù ${ }^{\text {L }}{ }_{-}^{L H}\left[s \varepsilon ̀ W^{n} u ́-m\right] \quad-s \varepsilon ̀ W^{n} u ́ c ~ ' c a l a b a s h-c u t t e r ' ~$

tíyé- 'weave’ gòrn $\grave{u}^{\mathrm{L}}{ }^{-}{ }^{\text {LH}}[t i ̀ y i ́-m] ~-t i ̀ y u ́ ~ ' b a s k e t-w e a v e r ' ~$

wàrá- 'farm' wòngùrò ${ }^{\text {L_L }}$ [Wàrú-m]-wàrú 'farmer'
nù $W^{n} \check{o}-\quad$ 'sing' $\quad n u ̀ W^{n} \grave{\partial}{ }^{\mathrm{L}}{ }^{\text {LH}}\left[n u ̀ W^{n} u ́-m\right] ~-n u ̀ w^{n} u ́$ 'singer'
jìyé- 'dance' jìyè ${ }^{\text {L }}{ }^{\text {LH }}[j i ̀ y i ́-m] ~-j i ̀ y u ́ ~ ' d a n c e r ' ~$
tí- 'send' lè:tèrè ${ }^{\text {L LH }}$ [tìyí-m] -tìyú 'letter-sender'
b. tóró- 'pound' tòrì: ${ }^{\text {L }}$ - ${ }^{\text {LH }}$ [tòrúu-m] -tòrú 'pounder (of grain)'
pété- 'jump' àpètù ${ }^{\text {L_L }}$ [pètú-m] -pètú 'jumper'
c. tó- 'stomp' gùsù ${ }^{\text {L }}$ - ${ }^{\text {LH }}[t o \check{-m}]$-tǒ: '(hide-)tanner'
gǎy ${ }^{n}$ - 'put' gàrà ${ }^{\mathrm{L}} \mathrm{L}^{\mathrm{LH}}\left[g a^{n}-m\right]$-gǎ: ${ }^{n} \quad$ '(indigo-)dyer'
káy ${ }^{n}$ - ‘do, make’ mòsù̀ ${ }^{\text {L }}{ }^{\text {LH }}\left[k \check{a n}^{n}-m\right] \quad-k a \check{:}{ }^{n} \quad$ 'evil-doer'
dú- 'carry' dù: ${ }^{\mathrm{L}-{ }^{\text {LH }}[d u \check{u}-m] \quad-d u ̌: ~ ' p o r t e r, ~ c a r r i e r ' ~}$
d. tógóró- 'chew' tògòrò ${ }^{\text {L }}{ }^{\text {LH }}$ [tògùrú-m] -tògùrú 'meat-chewers'

These agentive compounds should be distinguished from the superficially similar resultative compounds (alternatively, noun-adjective sequences) presented in §5.1.10.

As indicated before, tone superscripts are used here, but are usually omitted in text transcriptions.

### 5.1.4 Compounds with -yî: 'child of'

With a nonhuman referent, a compound with L-toned initial followed by -yî: 'child' can denote the fruit or other product (of a plant), or other small object closely associated with a larger object. The larger entity may be unmarked, or may itself be a compound with -ná: (§5.1.8).
a. mò:nò: ${ }^{\mathrm{L}}-y \hat{1}:$
wild.date-child
'wild date' (mò:nô: or mò:nò:-ná: 'wild date tree')
b. [nùm-nà: $]^{\mathrm{L}}-y \hat{1}$ :
[?-big]-child
'small round grinding stone' (held in hand for grinding on nùm-ná: 'large flat grinding stone')

These compounds are distinct from simple possessor-possessed combinations involving yî-m 'child' or related forms, like that in (80). Here the possessor has its regular tones, while the possessed noun has an $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ overlay.

| úrò | $\quad$Lyì-tè: <br> house |
| :--- | :--- |
| ${ }_{\text {L children }}$ |  |

'the children of the house'

Numerous nouns with final rising tone and ending in $y^{n}$, such as tǎ: $y^{n}$ 'shed', غ̀mと̌ $y^{n}$ 'sorghum', dò $y^{n} \check{y} y^{n}$ 'ashes', jèměyn 'waterjar shard', and p̌̌: $y^{n}$ 'fonio (grain)', originated as diminutive compounds with *-ýn (another 'child' form) after L-toned stem. Compare Nanga tǎ: $:^{n}$, è:mbé, dùyá, $j \grave{\varepsilon}: m b \varepsilon ́, ~ a n d ~ p \check{: n} .{ }^{n}$. The BenT forms, however, are now frozen.

### 5.1.5 'Woman' (yà-, yà:-), 'man' (àr nà̀-)

'Woman' is singular yă-m, plural yǎ:. The short-voweled form yà is used as a compound initial (or preadjectival noun form) in yà ${ }^{\mathrm{L}}$-gùr̂̂-m 'adolescent girl', yà ${ }^{\mathrm{L}}$-ságtárá-m 'fullgrown woman', yà ${ }^{\mathrm{L}}-p \varepsilon \check{:}$ :-m 'old woman', yà ${ }^{\mathrm{L}}$ dâ:-m 'junior wife', yà ${ }^{\mathrm{L}}$ díy ${ }^{\text {nà }}-m$ 'senior wife', yà ${ }^{\mathrm{L}}-n \grave{r} r^{n}$ ú 'co-wife', yà ${ }^{\mathrm{L}}$-bírím 'betrothal', yà ${ }^{\mathrm{L}}$-[tàl-1̂:] 'bridal procession' and yà ${ }^{\mathrm{L}}$ kálà-m 'new bride'. The phonologically more regular long-voweled preadjectival form yà: ${ }^{L}$ is less common but occurs in yà: ${ }^{\mathrm{L}}$ yî-m 'girl' and yà: ${ }^{\mathrm{L}} k \hat{u}-m$ 'unmarried woman'.
'Man' is ár ${ }^{n} \grave{a}-m$, plural ár $r^{n} \grave{a}$. It has the regular form àr ${ }^{n} a ̀$ as compound initial or before an adjective: àr $r^{n}{ }^{\mathrm{L}} p \varepsilon \check{c}-m$ 'old man', àr $n^{n}{ }^{\mathrm{L}} k \hat{u}-m$ 'bachelor', etc.

As modifying adjectives ('female', 'male'), the same forms as in the nouns 'woman' and 'man' are used, with appropriate agreement.

### 5.1.6 Possessive-type compounds ( $\bar{n} \hat{n}, \bar{n} \grave{n}$ )

A construction indistinguishable in form from a possessor-possessed combination may be lexicalized and function as a compound. The initial is a noun with its lexical tones, and the final is $\{\mathrm{HL}\}$ - or $\{\mathrm{L}\}$-toned following the usual rules for possessor-controlled tone overlays. Such combinations compete with the basic ( $\overline{\mathrm{x}} \overline{\mathrm{n}}$ ) compound type, but are generally less thoroughly lexicalized, and new ones can readily be constructed.

There are many examples in the flora-fauna vocabulary. For example, pété-pě:-m denotes a conspicuous and abundant grasshopper (Oedaleus senegalensis), which is common in fields and meadows. Less conspicuous species of the same subfamily that occur in gravelly terrain are called kì-kàrà-kăy ${ }^{\mathrm{L}} p \grave{t} t \grave{\text { cheplè }}$--m, literally "gravel's Oedaleus." Creatures associated with a specific plant sp . have similar names, e.g. gùrù-pírú ${ }^{H L} k i ́-k a ̀:-m ~ ' g r a s s h o p p e r ~ s p . ~$ (Acrodideres)', literally "Guiera tree's grasshopper."

### 5.1.7 'Owner of' (Sg bòygá ~ bòyó)

As an uncompounded noun, we have bòngǒ-m ~ bòクǒ-m 'owner', plural bòngó ~ bòyó 'owners'.

Much more often, this noun has possessed-noun tone overlay, i.e. $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ depending on the structure and final tone of the preceding noun or NP. In this construction there is no singular $-m$, instead we get singular ${ }^{\mathrm{HL}}$ bóng̀̀ $\sim{ }^{\mathrm{L}}$ bòng̀̀, with the plural expressed by adding plural bè.
a. úrò $\quad{ }^{\mathrm{L}}$ bòngò
house ${ }^{\text {L }}$ owner
'home-owner (head of household)'
b. wògòtórò ${ }^{\mathrm{L}}$ bòngò bè
cart $\quad$ Lowner $\quad \mathrm{Pl}$
'cart-owners'
c. [[ùrò tà:n] ${ }^{\mathrm{L}}$ ŋ̀gú] ${ }^{\mathrm{HL}}$ bóngò
[[house three] ${ }^{\mathrm{L}}$ Prox.Inan] ${ }^{\mathrm{HL}}$ owner
'the owner of these three houses'
d. [úrò $\quad$ kù $] \quad{ }^{\mathrm{HL}}$ bóngò
[house Def] ${ }^{\text {HL }}$ owner
'owner of the (aforementioned) house'
The sense can be 'owner of X' or more generally 'someone associated with X' (e.g. 'resident or native of X village'). For the latter, see two examples near the end of (673) in the sample text.

### 5.1.8 Loose and tight compounds with ná: ('authentic', 'entire')

With flora terms, adding ná: to the L-toned noun as compound initial unambiguously denotes the entire plant. ná: is often omitted since the most common reference is to the entire plant, but without ná: the noun can also loosely denote the fruit or other part. ná: can also be used adjectivally in the sense '(the) main, (the) primary', denoting the most prototypical or most important member of a set. Since the initial noun is $\{L\}$-toned in both noun-adjective sequences and noun-noun compounds, there is no sharp boundary between the two analyses.
a. òsòrò ${ }^{\mathrm{L}}$-ná:
baobab ${ }^{\mathrm{L}}$-entire
'baobab tree'
b. tà: $y^{n \mathrm{~L}} \quad$ ná:
shelter ${ }^{\mathrm{L}} \quad$ main
'togu-na, main palaver shelter of a village'
c. sùngòy ${ }^{\mathrm{L}}$ ná:
boubou ${ }^{\mathrm{L}}$ main
'large, elegant boubou (man's robe)'
d. yù: ${ }^{\text {L }}$ ná:
millet $^{\mathrm{L}}$ main
'ordinary millet'
nùm-ná: 'large grindstone' is now fused; the small grindstone held in the hand while grinding on the larger stone is [nùm-nà:] ${ }^{\mathrm{L}}$-yî:, not \#nùm-yî:.

### 5.1.9 Instrumental relative compounds with $-y \grave{\varepsilon}$ ('oil for rubbing')

A loose compound consisting of a nominal compound initial (L-toned) and an imperfective verb with suffix $-y \varepsilon ̀$ is used to define a type of object by its typical function. The verb stem plus $-y \varepsilon ̀$ has the form of a 3 Pl imperfective, but here it is used as a participle; see discussion of (436) in §14.1.6.2.

In the cases relevant to the present section, e.g. 'drinking water' is phrased as 'water (that) they drink'. This and other examples are in (83).
a. nì: ${ }^{\mathrm{L}}-[n \overline{-}-y \bar{\varepsilon}]$
water ${ }^{\text {L }}$-[drink.Ipfv-Ppl.AnPl]
'drinking water’
b. nì: ${ }^{\text {L }}$-[dìyé-yè]
water ${ }^{\text {L }}$-[bathe.Ipfv-Ppl.AnPl]
'water for bathing'
c. $n \grave{\varepsilon} y^{n \mathrm{~L}}-[n \hat{\varepsilon}-y \grave{\varepsilon}]$
food ${ }^{\mathrm{L}}$-[eat.Ipfv-Ppl.AnPl]

```
'food to eat'[2005.1a.05]
```


### 5.1.10 Resultative compounds ending in nominalized verb (-ú)

There are also some combinations where a verb in L-toned form with suffix -ú functions as a compound final (or, arguably, modifying adjective) to a preceding $\{\mathrm{L}\}$-toned noun. The final denotes an event or process that has left the entity in a changed state. (In Jamsay, the form in $u$ is the productive verbal noun for nonmonosyllabic verb stems, but it is also used in resultative modifying functions.)
a. yù: ${ }^{\text {L }}$-[yàg-ú]
millet ${ }^{\mathrm{L}}$-[fall-Nom]
'fallen-off millet grain spikes' (verb yà yá 'fall')
b. nà $w^{n}{ }^{\text {à }}{ }^{\text {L }}-[\operatorname{sìmb-ú]~}$
meat ${ }^{\mathrm{L}}$-[roast-Nom]
'roasted (=grilled) meat' (verb símbé)
c. pìr ${ }^{n a}{ }^{\mathrm{L}}$-[sàr-ú]
cream.of.millet-[coarsely.grind-Nom]
'coarsely ground millet' (verb sárá)

Perhaps also mùr ${ }^{n} \grave{u r}^{\mathrm{L}}-[k \varepsilon ̀ s-u ́]$ 'long pants' (verb késé ‘cut').
These resultative compounds superficially resemble agentive compounds with incorporated theme nouns (§5.1.3).

### 5.1.11 Phrasal compounds

[kǎ: lè] ìré-m 'I am bigger than a grasshopper', borrowed entirely from Jamsay, denotes tiny birds such as the cricket warbler (Spiloptila [=Prinia] clamans).
sǒ:-ìmí-lè-m, from a Tommo-So phrase meaning 'talk-doesn't.like', i.e. unsociability, denotes a psychid caterpillar that carries its sheath around and hides in it when disturbed.

### 5.2 Adjectival compounds

### 5.2.1 Bahuvrihi ("Blackbeard") compounds ( $\bar{n} \hat{a}$ )

In this type, the initial has its usual tones, while the final has an $\{\mathrm{HL}\}$ tone overlay. In the uncommon case where the final has more than two tones, the $H$ spreads to the penultimate syllable, leaving just one L-toned syllable.

### 5.2.1.1 With adjectival compound final

Examples are in (85).
(85)
a. àr ${ }^{n}{ }^{2}{ }^{\mathrm{L}}$ pìré- ${ }^{\mathrm{HL} \text { dúgù-m kù }}$ man ${ }^{\mathrm{L}}$ belly- ${ }^{\mathrm{HL}}$ fat(adj)-AnSg $\operatorname{Def}$
'the big-bellied (=pot-bellied) man' (dùgú)
b. àr ${ }^{n a ̀ a} \quad$ pìré- ${ }^{\mathrm{HL}}$ dúgù-yè
$\operatorname{man}^{\mathrm{L}} \quad$ belly- ${ }^{\mathrm{HL}}$ fat)adj)-Pl
'big-bellied men'
c. pìré- ${ }^{\mathrm{HL}}$ [pátá-pátà]-m
belly- ${ }^{\text {HL }}$ flat-AnSg
'flat-bellied' (pàtà-pátà)
d. kû:- ${ }^{\mathrm{HL}}$ kóròy-m
head- ${ }^{\text {HL }}$ empty-AnSg
'empty-headed' (kòrǒy)
e. lòsô:- ${ }^{\text {HL }}$ césì-m
foot $-{ }^{\mathrm{HL}}$ fast- AnSg
'fleet-footed' (cèsú) [2005.2a.09]
A double bahuvrihi is tém- ${ }^{\mathrm{HL}}$ dúgù nàwnáa ${ }^{\mathrm{HL}}$ ह́rù, literally "fat-femured, sweet-meated." It denotes (and accurately describes) the grasshopper Acorypha glaucopsis. This compound also occurs in Jamsay.

### 5.2.1.2 With numeral compound final

Examples are in (86).
(86)
a. nà: ${ }^{\mathrm{L}} \quad k \hat{u}:-{ }^{\mathrm{HL}} n \hat{1}: y^{n}-m$
$\operatorname{cow}^{\mathrm{L}}$ head- ${ }^{\text {HL }}$ four-AnSg
'four-headed cow' (nǐ:y')
b. gìré $-{ }^{\mathrm{HL}} t u ́ w^{n} \grave{j}-m$
eye- ${ }^{\mathrm{HL}}$ one-AnSg
'one-eyed person' ( $</$ tùwn $\hat{\imath} /$ )
c. sàmbà: ${ }^{\text {L }}$ mǒ:- ${ }^{\text {HL }}$ yêy
spear ${ }^{\mathrm{L}}$ mouth- ${ }^{\mathrm{HL}}$ two
'spear with blades at both ends' (yěy)

## 6 Noun Phrase structure

### 6.1 Organization of NP constituents

### 6.1.1 Linear order

The ordering of elements within NPs is indicated in (87).
(87) Order within NP
a. prenominal possessor
$\mathrm{b}_{1}$. possessor NP
$b_{2}$. pronominal possessor
$\mathrm{b}_{2}$. inanimate kú 'its' in discourse-anaphoric sense
b. noun
c. modifying adjective(s)
d. cardinal numeral (or distributive)
e. deictic demonstrative pronoun 'this/that'
f. definite morpheme kù (~ kú)
g. plural bè
h. universal quantifier 'all' ( dà $\left.{ }^{n}-w \hat{o} y\right)$

The primary ordering relationships can be seen in (88). (88a) has all slots filled except that for numerals. A numeral does occur in (88b).
a. á:mádù ${ }^{\mathrm{L}}$ ùrò ${ }^{\mathrm{L}}$ dìynà- $W^{n}$ g̀gú $\quad$ kù bè dàn-wôy Amadou ${ }^{\text {L }}$ house ${ }^{\text {L }}$ big-Inan Prox.Inan Def Pl all 'all of those big houses of Amadou'
$\begin{array}{lllll}\text { b. ú } & { }^{\text {HL }} \text { [úrò } & \text { dìy }^{n} \text { à } W^{n} & \text { tà:nù] } & \text { kù } \\ \text { 2SgPoss } & { }^{\text {HL }} \text { [house } & \text { big } \\ \text { 'your-Sg three big houses' }\end{array}$
When plural bè is combined with a demonstrative, the sequence is tightly-knit and may be followed by a numeral: mǔ: bè yěy 'these two'.

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

ற̀gú 'this' (inanimate, proximal) can be used absolutely: ŋ̀gú mă: ní 'give me this!'.
An adjective can be used absolutely, with an understood but unexpressed noun: [bár ${ }^{n}$ à- $W^{n}$ kù] mă: ní 'give me the red one!'.

A numeral can be used absolutely: tà:nú mă: ní 'give me three!'.

### 6.1.3 Bifurcation of NP (in relatives)

As head NP of a relative (chapter 14), a NP is (seemingly) bifurcated, with a core portion remaining clause-internal and the remainder appearing after the verbal participle.

The bifurcation point in a long head NP is usually after, but may also be before, the numeral. So at least the core NP, and often an entire N-(Adj-)Num sequence, remains clauseinternal. Late-NP morphemes (determiners, 'all', the independent plural morpheme), and occasionally the numeral, follow the verb-participle. See chapter 14 for more examples. (89a) shows the numeral following the participle, (89b) shows it preceding.

b. [[nà: kùròy] í ${ }^{\mathrm{L}}$ ह́wé-mà bû:]
$\left[\begin{array}{llll}{[\text { cow }} & \text { six }\end{array}{ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj} \quad\right.$ buy-Pfv.Ppl DefPl]
án-dá: $\quad b-\varepsilon$ : $^{n}$
where? be-3PlSbj
'Where are the six cows that I bought?'
In $\S 14.1$ below, I show that apparent "bifurcation" is due to the initial location of the relative clause in the position between numeral and determiner, prior to movement.

### 6.1.4 Internal bracketing and tone-dropping of NPs

BenT NPs have internal structure over and above linear ordering of NP elements and the location of the bifurcation point in relatives. This section gives a schematic outline of this internal structure. Examples and further details are given in later sections in this chapter and in chapter 14 on relative constructions.

The following elements control tone overlays on an adjacent noun or on a word-string containing the noun: adjectives, demonstratives, relative clauses, and possessors. Elements that do not control tone overlays on other words in the NP are numerals from ' 2 ' up', definite morphemes, 'all' quantifiers, and discourse-functional elements (topic, 'also', 'even', 'only'). The generalization is this: elements that restrict reference by intersecting the set denoted by a common noun, thereby including and excluding specific individuals in the set, are tonosyntactic controllers.

The noun stem (simple or compound), plus any modifying adjectives, constitutes the core NP. Within the core NP, leaving aside the tonal effects of a possessor NP, all nonfinal words drop their tones. In other words, an adjective controls $\{\mathrm{L}\}$ overlay on the noun and any preceding adjective. Therefore N -Adj appears as $\left[\mathrm{N}^{\mathrm{L}} \operatorname{Adj}\right]$, and $\mathrm{N}-\operatorname{Adj}_{1}-$ Adj $_{2}$ appears as $\left[\mathrm{N}^{\mathrm{L}}\right.$ $\mathrm{Adj}_{1}{ }^{\mathrm{L}} \mathrm{Adj}_{2}$ ], analysable tonosyntactically as [ N Adj$]_{1}{ }^{\mathrm{L}} \mathrm{Adj}_{2}$ ].

An additional feature of core NPs is that animate singular -m, the only overt animacynumber suffix that can appear on a noun, is added to the adjective if one is present. Thus ìnjě-m '(a) dog', but ìnjè ${ }^{\mathrm{L}}{ }^{j e ́} W^{n} \grave{e ̀}-m$ '(a) black dog'. See $\S 6.3$ below for full treatment of NAdj combinations.

A numeral follows the core NP. tù $W^{n}$ '́ ' 1 ' behaves like an adjective. Higher numerals have no tonal interaction with preceding nouns or N -Adj sequences, and do not show animacy-number agreement. See $\S 6.4$ for examples.

A demonstrative pronoun ( $\S 6.5 .2$ ) controls $\{\mathrm{L}\}$ on a preceding word or word-string going back to the noun. The resulting combinations are $\left[N^{L} \operatorname{Dem}\right],\left[\left[N^{L} A d j\right]^{\mathrm{L}}\right.$ Dem $]$, $[[\mathrm{N}$ Num $]^{\mathrm{L}}$ Dem], and [ $\left[\mathrm{N}^{\mathrm{L}} \text { Adj Num }\right]^{\mathrm{L}}$ Dem], where all words enclosed in a bracket marked with following ${ }^{\mathrm{L}}$ superscript are tone-dropped under the control of the word to the right.

Definite morphemes (§6.7) have the same linear position as demonstratives, but they do not control $\{\mathrm{L}\}$ on preceding words. Universal quantifiers ('all') and discourse-functional morphemes bring up the rear in the NP. They too fail to control $\{\mathrm{L}\}$ on preceding words.

These comments take care of postnominal modifiers (except relative clauses). The only tone overlay controlled by any of these postnominal elements is $\{\mathrm{L}\}$, and it always targets words to the left of the controller. However, an NP may also be preceded by a possessor, either a pronoun or a nonpronominal NP. Possessors also control tone overlays on the noun (and some postnominal modifiers). In BenT, the possessor controls either $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ on the possessed NP depending on its own structure and final tone. Simple possessed nouns therefore appear either as [Poss ${ }^{\mathrm{HL}} \mathrm{N}$ ] or as [Poss ${ }^{\mathrm{L}} \mathrm{N}$ ]. Here the tone superscript is on the left edge of the noun, "pointing" toward the controller, which in this case targets words to its right.

When multiple right-to-left (R-to-L) controllers occur in the same NP, the effect is that all nonfinal words are tone-dropped. There is no uncertainty about the output, but there is an analytical question whether tone-dropping applies cyclically or in one step. For example, in $\left[\left[\mathrm{N}^{\mathrm{L}} \mathrm{Adj}\right]^{\mathrm{L}}\right.$ Dem] both the noun and the adjective are $\{\mathrm{L}\}$-toned. This result can be achieved either by having the demonstrative tone-drop both preceding words, or by having the adjective tone-drop the noun on an inner cycle and then having the demonstrative tone-drop the adjective.

When a possessor (the only L-to-R controller) co-occurs with one or more R-to-L controllers, conflicts ensue. This is most obvious when the possessor is of the type that controls $\{\mathrm{HL}\}$ rather than $\{\mathrm{L}\}$ on the following possessed NP. Just one example of conflict resolution will be given in this section. In (90a-b), úrò 'house' and ìnjě-m 'dog' have overlaid \{HL\} overlay controlled by the preceding possessor '(a) woman'.
a. yǎ-m HLúrò ìgú
woman-AnSg ${ }^{H L}$ house Prox.Inan
'this house of a woman' (< úrò)
b. yǎ-m $\quad{ }^{H L}$ ínjè mǔ:
woman-AnSg ${ }^{H L} \operatorname{dog} \quad$ Prox.An
'this dog of a woman' (<ìnjě-m)

In the absence of a possessor, the demonstrative controls $\{\mathrm{L}\}$ on the noun: ùrò ${ }^{\mathrm{L}}$ ŋ̀gú 'this house'. However, in (90a-b) the demonstrative has no effect on the tone of 'house' or 'dog' (or for that matter on 'woman'). One could emphasize the demonstrative's lack of tonosyntactic effect by showing the Poss-N sequences as tonosyntactic islands, e.g. $\subset y a ̆-m$ ${ }^{\mathrm{HL}}$ ínjèゝ mǔ:.

### 6.2 Possessives

Several Dogon languages sharply distinguish alienable from inalienable (kinship) possession; for example, pronominal possessors precede kin terms but follow alienables. This does not happen in BenT, where all possessors are prenominal.

There is likewise no tonosyntactic distinction between simple alienable and inalienable Poss-N combinations, as both types of possessors control $\{H L\}$ and $\{L\}$ tone overlays under the same conditions. However, when additional postnominal modifiers are added, specifically numerals, some distinctions between alienable and inalienable possession become apparent. In addition, kin terms have some distinctive morphological features.

1 Sg possessor is segmentally zero but is expressed by a floating L-tone that docks on the left edge of the possessed NP, which always has $\{\mathrm{HL}\}$ tone overlay, resulting in a bell-shaped surface melody that we can represent as $\mathrm{L}+\{\mathrm{HL}\}$. For possessors other than 1 Sg , the basic rules for possessum overlays are as follows.
a) If the possessor is a pronoun or an undetermined NP (i.e. not ending in definite kù or plural bè), the final tone of the possessor determines the overlay. Possessor-final H-tone requires $\{\mathrm{HL}\}$-toned possessum, while possessor-final L-tone requires $\{\mathrm{L}\}$-toned possessum.
b) If the possessor is an NP ending in definite kù or plural bè, the following possessum gets the $\{\mathrm{HL}\}$ overlay, even though kù and bè are L-toned.

The possessum also gets $\{H L\}$ if the possessor ends in a demonstrative. However, since all demonstratives end in H-tones, the correct overlay could be produced by either (a) or (b).

For detailed discussion of possible (but flawed) ways to model the relationship between $\{\mathrm{HL}\}$ and $\{\mathrm{L}\}$ overlays, see §3.7.3.4

### 6.2.1 Nonpronominal NP possessor

There is no genitive marking on the possessor, which has its normal form and is simply juxtaposed to a following possessed noun. The latter, however, undergoes a tonal change to $\{\mathrm{L}\}$ or to $\{\mathrm{HL}\}$.

When the possessor is a nonpronominal NP ending in a noun, modifying adjective, or cardinal numeral, the final tone of the possessor determines the tone of the possessum. If the NP ends in an H-tone (including rising $<\mathrm{LH}>$ ), the possessum has $\{\mathbf{H L}\} \boldsymbol{o v e r l a y}$, with the H component on the first syllable (or the first mora of a monosyllabic stem). If the NP ends in an L-tone (including falling $<\mathrm{HL}>$ ), the possessum has $\{\mathbf{L}\}$ overlay.

In the following examples, the unpossessed form of the possessed noun, revealing the lexical tones, is shown in parentheses after the free translation. In (91), the possessor NP ends in an L-tone, so the possessed noun has the $\{\mathrm{L}\}$ overlay.
(91)
a. á:mádù Lùrò

Amadou ${ }^{\mathrm{L}}$ house
'Amadou's house' (úrò)
b. á:mádù ${ }^{\mathrm{L}}$ yà-m

Amadou $\quad$ woman-AnSg
'Amadou's woman (=wife)' (yă-m)
c. á:mádù
${ }^{L}$ ìnjè̀- $m$
Amadou $\quad{ }^{\mathrm{L}}$ dog-AnSg
'Amadou's dog' (ìnjě-m)
d. á:mádù ${ }^{\mathrm{L}}$ wògòtòrò

Amadou ${ }^{\text {L pushcart }}$
'Amadou's pushcart' (wògòtórò)
e. [yǎ: gá:rày] ${ }^{\text {Linnjè }}$-m
[woman eight] ${ }^{\mathrm{L}}$ dog
'the dog of (the) eight women' (inj $\check{\varepsilon}-m$ )
f. [yà ${ }^{\mathrm{L}}$ dâ:-m] ${ }^{\mathrm{L}} \mathrm{i} n j \grave{\varepsilon}-m$
[woman ${ }^{\mathrm{L}}$ small-AnSg] ${ }^{\mathrm{L}}$ dog
'the dog of (the) small woman' (injě-m)
In (92), the possessor NP ends in an H-tone, so the possessed noun has the $\{\mathrm{HL}\}$ overlay.
a. yǎ-m ${ }^{\text {HL úrò }}$
woman- $\mathrm{AnSg} \quad{ }^{\mathrm{HL}}$ house
'(the) woman's house' (úrò)
b. yǎ-m
${ }^{\mathrm{HL}} \mathrm{ínjè}-m$
woman-AnSg $\quad{ }^{H L} \operatorname{dog}-A n S g$
'(the) woman's dog' (ìnjě-m)
c. yǎ-m
${ }^{H L}$ wógòtòrò
woman-AnSg
${ }^{\text {HL }}$ pushcart
'(the) woman's pushcart' (wògòtórò)
e. [yǎ:
yěy] ${ }^{\mathrm{HL}}$ ínjè̀-m
[woman.Pl two] ${ }^{\text {HL }} \operatorname{dog}-\mathrm{AnSg}$
'the dog of (the) two women' (ìnjě-m)
f. [yà $\left.{ }^{\mathrm{L}} \quad p \check{\varepsilon}-m\right] \quad{ }^{\mathrm{HL}}$ ínjè-m
[woman ${ }^{\mathrm{L}}$ old-AnSg] ${ }^{\mathrm{HL}} \mathrm{dog}-\mathrm{AnSg}$
'the dog of (the) old woman' (ìnjě-m)
If the possessor NP ends in a free plural morpheme bè or in a determiner (definite or demonstrative), we again get $\{\mathrm{HL}\}$ on the possessed noun. The plural and definite
morphemes end in an L-tone (93a-b), while demonstratives end in an H-tone (93c), so in these cases the syntactic category of the final word in the possessor (determiner, non-numeral quantifier) trumps the phonology (final tone of possessor). If the possessor is itself a possessed NP, as in '[X's Y]'s Z', but it does not end in one of these determiners/quantifiers, it is treated as undetermined. The first possessor ( X ) will always control $\{\mathrm{L}\}$ or $\{\mathrm{HL}\}$ on the next NP (Y). Therefore, so [X's Y] always ends in an L-tone, and as possessor it will then always control $\{\mathrm{L}\}$ on a following possessum $(Z)$, as in (93d). See also $\S 6.2 .4$ on recursive possession.
a. [úrò
bè]
${ }^{H L} y i ́-t e ̀$ :
[house
$\mathrm{Pl} \quad{ }^{\mathrm{HL}}$ children
'(the) children of (the) houses' (yì-tě:)
b. [nǔ
yěy
kù]
[person two Def]
'the dog of the two people' (inj $\check{\varepsilon}-\mathrm{m}$ )
c. $\left[n \grave{u}{ }^{\mathrm{L}} \quad\right.$ mǔ:] ${ }^{\mathrm{HL}}$ ínjè $-m$
[person ${ }^{\text {L }}$ Prox.An] ${ }^{\text {HL }}$ dog-AnSg
'this person's dog'
d. ${ }^{\mathrm{L}-\mathrm{HL}} b$ ô: $\quad{ }^{\mathrm{L}}$ ìnjè $-m^{\mathrm{L}}$
1 SgPoss. ${ }^{\mathrm{HL}}$ father ${ }^{\mathrm{L}}$ dog- $\mathrm{AnSg}^{\mathrm{L}}$
'my father's dog'
${ }^{H L}$ ínjè-m
${ }^{\mathrm{HL}} \operatorname{dog}-\mathrm{AnSg}$

The phonology of the $\{\mathrm{HL}\}$ overlay is illustrated in more detail in (94). In (94a), there is no audible change since the lexical melody happens to already be /HL/. In (94b-d) we do observe audible changes. The monosyllabic stems in (94b) end up with $<H L>$-tone. The nonmonosyllabic examples have H -tone on the first syllable, whether this first syllable is short ( $C v-$ ), heavy ( $C v C$-, $C v:-$ ), or superheavy ( $C v: C$-) (94c-e).
gloss lexical form $\{H L\}$ possessed form

e. 'short hoe' dà:mbâ: ${ }^{\text {HL } d a ́: m b a ̀: ~}$

### 6.2.2 Pronominal possessor

Pronominal possessor forms are in (95). They are identical to the forms used as postpositional complements, reflecting the close relationship between possessor-possessed and complementpostposition constructions (§8.2-5). Except for the zero 1 Sg , these forms are also identical to those used as independent pronoun, as preparticipial subject pronominal, and optionally as direct object.

| category | possessor form (preceding possessed noun) |
| :---: | :---: |
| 1Sg | (zero, with floating L-tone) |
| 1 Pl | î: |
| 2 Sg | ú |
| 2 Pl | û: |
| 3 Sg | $\varepsilon r^{n}{ }^{\text {c }}$ |
| 3 Pl | bû: |
| Inan | kú |
| 3ReflSg | á |
| 3ReflPl | â: |

The tonal pattern of the following possessum depends on which pronominal possessor is at hand, as summarized in (96). Except for the special case of 1 Sg possessor, the pronominal data are consistent with those seen for nonpronominal NPs above. Specifically, if the possessor ends in an H-tone, the possessed noun has $\{\mathrm{HL}\}$ tone overlay, while if the possessor ends in an L-tone, the possessed noun has all-L tones.

```
possessors possessed noun
```

a. 1 Pl î:, 2Pl û:, 3Pl bû:, 3ReflPl â: \{L\}
b. 2 Sg ú, 3Sg ér ${ }^{n} \varepsilon ́, 3 R e f l S g$ á, Inan kú $\{\mathrm{HL}\}$
c. 1 Sg (segmentally zero) $\mathrm{L}+\{\mathrm{HL}\}$

The 1 Sg possessor is segmentally zero, but is expressed by a bell-shaped tone overlay on the possessed noun. The initial L of this tone pattern is presumably the real 1 Sg possessor morpheme, i.e. a floating L-tone that "docks" on the onset of the possessed noun, while the residual ...HL is identical to the $\{\mathrm{HL}\}$ overlay controlled by other singular possessors. However, the details of tone association for the 1 Sg differ from those that are valid for the other pronouns that precede $\{\mathrm{HL}\}$-overlaid possessed nouns. Consider the data in (97).

| possessed, after ... |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | stem | gloss | ...2Sg | ...1Pl | ...1Sg |
|  |  | 'millet' | $u^{\text {HL }}$ yû: | 1: yù: | ${ }^{\mathrm{L}+\mathrm{HL}}$ yû: |
|  | kû: | 'head' | $u^{\text {HL }}$ kû: | t: kù: | ${ }^{\text {L+HL }}$ kû: |
|  | SîW | 'hoe' | $u^{\text {HL }}{ }_{\text {SilW }}$ | i: Sìw | ${ }^{\mathrm{L}+\mathrm{HL}}{ }_{\text {SilW }}$ |
|  | $\check{\varepsilon}$ : | 'well' | $u^{\mathrm{HL}} \hat{\varepsilon}$ ¢ | ̂̀: $\grave{\varepsilon}$ : | ${ }^{\text {L+HL }}$ ¢ $\check{\varepsilon}$ : |
|  | $b \check{\varepsilon} y^{n}$ | 'beard' | $u^{\text {HL }}$ bêy ${ }^{n}$ | ̂̂: bèy ${ }^{n}$ | ${ }^{\text {L+HL }}$ bĕy ${ }^{\text {n }}$ |
|  | á:rá | 'rice' | $u^{\text {HL }}$ á:rà | 1: ${ }^{\text {L }}$ à:rà | ${ }^{\text {L+HL }}$ ă:rà |
|  | ènjî: | 'roselle' | ú ${ }^{\text {HL}}$ énjì: | ̂̂: ${ }^{\text {L }}$ ènjì: | ${ }^{\text {L+HL ĕnjì: }}$ |
|  | dà:mbâ: | 'short hoe' | ú ${ }^{\text {HL }}$ dá:mbà: | î: ${ }^{\text {L }}$ dà:mbà: | ${ }^{\text {L+HL }}$ dă:mbà: |
|  | gŏ:rò | 'kola nut' | $u^{\text {ul }}$ górıò | î: ${ }^{\text {L }}$ gò̀:rò | ${ }^{\text {L+HL }}$ gŏ:rò |
|  | bàrměy | 'corn' | $u^{\text {¢L }}$ bármèy | î: ${ }^{\text {L }}$ bàrmèy | ${ }^{\text {L+HL }}$ bărmèy |
|  |  | 'house' | $u^{\text {ut }}$ Húrò | ̂̂: ${ }^{\text {L }}$ ùrò | ${ }^{\mathrm{L}+\mathrm{HL}}$ urrò |
|  | kàrá | 'mat' | $u^{\text {HL }}$ kárà | i: ${ }^{\text {L }}$ kàrà | ${ }^{\text {L+HL }}$ kǎrà |
|  | béré | 'stick' | $u^{\text {HL }}$ bérè | $\hat{1}$ : ${ }^{\text {L }}$ bèrè | ${ }^{\text {L+HL }}$ běrè |
|  | غ̀měy ${ }^{n}$ | 'sorghum' | $u^{\text {HL }}$ Émغ̀̀ ${ }^{\text {n }}$ | î: ${ }^{\text {L }}$ ¢̀mè ${ }^{\text {n }}$ | ${ }^{\mathrm{L}+\mathrm{HL}}$ émè $^{\text {a }}{ }^{\text {a }}$ |
|  | dùrú | 'long pole' | $u^{\mathrm{HL}}$ dúrù | 1: ${ }^{\text {L }}$ dùrù | ${ }^{\text {L+HL }}$ dǔrù |
|  | mòbîl | 'vehicle' | $u^{\text {HL }}$ móbil | $\hat{\text { î: }}{ }^{\text {L }}$ mòbil | ${ }^{\text {L+HL }}$ mǒbìl |
| d. |  |  | $u^{\mathrm{HL}}$ túngù̀rùm | $\hat{1}_{\text {it }}$ L tùngùrùm | ${ }^{\text {L+HL }}$ tǔngùrùm |
|  | màngórò | 'mango' | $\text { ú }^{\mathrm{HL}} \text { mángòrò }$ | $\hat{i}$ : ${ }^{\text {L }}$ màngòrò | ${ }^{\mathrm{L}+\mathrm{HL}}$ mǎngòrò |
| e. | bànàkû: | 'cassava' | $u^{\text {HL }}$ bánàkù: | î: ${ }^{\text {L }}$ bànàkù: | ${ }^{\text {L+HL }}$ bănàkù: |
|  | gì-gàsâ: | 'pioche' | $u^{\text {HL }}$ gí-gàsà: | î: ${ }^{\text {L }}$ İ-gàsà: | L+HL gǐ-gàsà: |
|  | kànár ${ }^{\text {ày }}{ }^{n}$ | 'melon' | $u^{\text {HL }}$ kánàr ${ }^{\text {nà }}{ }^{\text {n }}$ | î: ${ }^{\text {L }}$ Lànàr ${ }^{\text {này }}{ }^{n}$ | ${ }^{\text {L+HL }}$ kǎnàr ${ }^{\text {a }}$ a ${ }^{\text {n }}$ |
|  | òsò-kórò | 'throat' | $u^{\text {HL }}$ ósj̀-kòr̀̀ |  |  |
|  | kù-kùyó | 'hair' | ú $^{\mathrm{HL}}$ kú-kùyò | î: ${ }^{\text {L }}$ kù-kùyò | ${ }_{\text {L+HL }}$ kŭ-kùyò |
|  | bìyà:kú | 'guava' | $u^{\text {HL }}$ bíyà:kù | î: ${ }^{\text {L }}$ bìyà:kù | ${ }^{\text {L+HL }}$ bǐyà:kù |

In the 1 Sg possessor forms, we observe the following:
a. a monosyllabic stem has $<$ LHL $>$ tone (97a).
b. in bisyllabic and longer stems: the initial syllable has <LH>-tone and the rest of the word is L-toned

Phonetically, when the initial syllable is monomoraic ( $C v$ ), the H -tone component is pushed to the right by the L-tone of the 1 Sg possessor morpheme, and the H -tone may spill over into the onset of the second syllable. This is understandable, since it is difficult to clearly articulate both the L and H components of a rising tone on a nonfinal $C_{v}$ syllable. Possibly in connection with this, I have noticed occasional pronunciations of the 1 Sg possessor form where an initial voiced consonant, especially $\{b \mathrm{~m}\}$, is slightly prolonged and allows an earlier phonetic expression of the 1 Sg possessor's L-tone, so that e.g. ${ }^{\text {L+HL }}$ běrè 'my stick' approaches phonetic [ə̀b:érè].

For human and other animate nouns, the tone overlays apply to the entire input noun including singular -m (99a) and the regular plural form (99b).


### 6.2.3 Domain of possessor-controlled tone overlay

The domain of the possessor-controlled overlay normally extends to the end of the core NP, i.e. includes any modifying adjectives (100a-b). This is indicated by placing the overlay diacritic, e.g. ${ }^{\mathrm{HL}}$, at the left edge of the bracketed string that functions as the targeted domain. All but one of the examples in (100) are of the type [Poss $\left.{ }^{(H) L}[\mathrm{~N} \operatorname{Adj}(\operatorname{Adj})]\right]$, where the overlay, either $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$, extends to the final adjective. The exception is that the controller pecking order is optionally reversed in the specific case of inalienable [Poss [ N Adj]] when the possessor is a monomoraic $(C)_{v}$ pronominal ( 2 Sg ú, $3 \mathrm{Refl} / \operatorname{LogoSg}$ á). This sequence can therefore appear either as [Poss ${ }^{\mathrm{HL}}$ [ N Adj]] or as [[Poss N$]^{\mathrm{L}}$ Adj], as shown by the two options in $(100 \mathrm{c})$. In the variant [ù lèsù ${ }^{\mathrm{L}}$ mòsû-m, the (phonologically light) 2 Sg pronoun $u$ is tonedropped along with the following noun, while the adjective surfaces with its lexical tones. This option is not available with alienable possession (100e), or even in inalienable possession when the possessor is phonologically heavy (100d) or is integrated segmentally into the possessed noun, i.e. in the 1 Sg possessor form (100f).
a. ú
[úrò dìynà-wn]
2SgPoss ${ }^{\mathrm{HL}}$ [house big-Inan]
'your-Sg big house' (< úrò, díy ${ }^{n}$ à- $W^{\prime \prime}$ )
b.
ú ${ }^{\mathrm{HL}}$ [lésù mòsù-m]
2 SgPoss ${ }^{\text {HL }}$ [uncle bad-AnSg]
‘your bad (nasty) uncle' (<lèsú, mòsû-m)

| c. | ú | ${ }^{\text {HL }}$ [lésù | mòsù- $m]$ |
| ---: | :--- | :---: | :--- |
| or: | $[$ ù | lèsù ${ }^{\mathrm{L}}$ | mòsû- $m$ |
|  | 2SgPoss | uncle | bad-AnSg |
|  | 'your-Sg bad (nasty) uncle' |  |  |

```
    d. ú \({ }^{\text {HL }}\) [lésù mòsù-m]
not: \#[ù lèsù \(]^{\text {L }}\) mòsû-m
\#2SgPoss uncle bad-AnSg
'your bad (nasty) uncle'
    e. ú \({ }^{H L}[i ́ n j e ̀ ~ m o ̀ s u ̀-m] ~\)
not: \#[ù ìnjè \(]^{\mathrm{L}} \quad m o ̀ s u \hat{u}-m\)
    \#2SgPoss dog bad-AnSg
    'your bad (nasty) dog'
f. \(\quad{ }^{\mathrm{L}+\mathrm{HL}}[\) Ǐnjè \(\quad\) mòsù \(-m]\)
    \({ }^{\mathrm{L}+\mathrm{HL}}[1 \mathrm{Sg}-\mathrm{dog}\) bad-AnSg]
    'my bad (nasty) dog'
\(\begin{array}{llll}\text { g. } & \text { ú } & { }^{\mathrm{HL}} \text { [úrò } & \text { dìy }^{n} \grave{a}-W^{n} \\ & \text { 2SgPoss } & \left.{ }^{\text {HL }}{ }^{n} \text { nà } \text { [house } W^{n}\right] \\ & \text { big-Inan } & \text { red-Inan] }\end{array}\)
    'your-Sg big red (=brown) house' (<úrò, díy \({ }^{n}\) à- \(W^{n}\), bár \(\left.{ }^{n} a ̀-W^{n}\right]\) )
```

With alienable possession, a numeral ' 2 ' or greater is also included in the scope of the possessor-controlled overlay. The schema here is [Poss ${ }^{(H) L}[\mathrm{~N}$ Num]] (101a). Inalienables sometimes follow the same [Poss ${ }^{(\mathrm{H}) \mathrm{L}}[\mathrm{N}$ Num]] pattern. More often, an inalienable possessor treats the numeral as external to the overlay, resulting in [Poss ${ }^{(H) L} N$ Num] where $\{(\mathrm{H}) \mathrm{L}\}$ is applied only to the noun. The observable difference is whether the numeral is tone-dropped (101b). In the external-number type, plural particle bè may follow the noun, further suggesting the peripherality of the following numeral. I suspect that the variant that follows the alienable pattern was biased by elicitation context (where alienable and inalienable examples were elicited together).
a. ú
2SgPoss ${ }^{\text {HL [úrò }}$ [house
pèrù]
(kù)
ten]
'your-Sg ten houses'


The wide-domain alienable overlay is unaffected by Adj-Num Inversion (§6.4.2). (102) below shows the same wide domain of the $\{\mathrm{HL}\}$ overlay in both uninverted (102a) and inverted (102b) versions, which are schematized respectively as [Poss ${ }^{(\mathrm{H}) \mathrm{L}}$ [ N Adj Num]] and [Poss ${ }^{(H) L}$ [ N Num Adj]]. As one might expect from the externality of the numeral in the previous inalienable examples, Adj-Num Inversion is more problematic for inalienables. One speaker, whose outputs follow a logical pattern, produced the uninverted version (102c) as [[[Poss N] $]^{\mathrm{L}}$ Adj] Num], with the final numeral tonosyntactically external as expected. His inverted version was (102d), schematically [[Poss N Num] ${ }^{\mathrm{L}}$ Adj]. Here, shifting the adjective to the end allowed it to control a broadened domain that now includes the numeral. Another speaker broke the inverted version up into three parts (102e), namely a) [ú ${ }^{\mathrm{HL}}$ lésù̀ 'your uncle', b)
pérú 'ten' (note the lexical /H/ melody), and c) mòsí-yè 'bad-AnPl', whose normal tone overlay is nowhere to be seen. (102e) may be unrepresentative, but it does make some sense insofar as it takes the tonosyntactic externality of the numeral to an extreme.
a. ú

| $u ́$ | ${ }^{\text {HL }}$ [úrò | dìy ${ }^{n}$ à- $W^{n}$ | pèrù $]$ |
| :--- | :--- | :--- | :--- |
| 2SgPoss | ${ }^{\text {HL }}$ [house | big-Inan | (kù) |
| ten] | (Def) |  |  | 'your-Sg ten big houses'


$\begin{array}{llll}\text { c. } & \begin{array}{ll}{[\text { ù }} & \text { lèsù }]^{\mathrm{L}} \\ {[2 \mathrm{SgPoss}} & \text { uncle }^{\mathrm{L}}\end{array} & \begin{array}{l}\text { mòsí-yè } \\ \text { bad-AnPl }\end{array} & \text { pérú } \\ \text { ten }\end{array}$ 'your-Sg ten bad (nasty) uncles'
d. lù lèsù pèrù $]^{\mathrm{L}} \quad$ mòsí-yè [2SgPoss uncle ten] ${ }^{\mathrm{L}}$ bad-AnPl [ $=(\mathrm{c})$ ]
$\begin{array}{lllll}\text { e. } & {\left[\begin{array}{ll}\text { ú } & \text { HL lésù }]\end{array}\right.} & \text { pérú } & \text { mòsí-yè } & \text { (bû:) } \\ & {[2 \mathrm{SgPoss}} & \left.{ }^{\text {HL }} \text { uncle }\right] & \text { ten } & \text { bad-AnPl }\end{array}$

Late-NP morphemes such as wôy 'all, each' are not included in a possessor-controlled domain under any conditions (104).

| $[$ ú | ${ }^{\mathrm{HL}}$ lésù $/{ }^{\mathrm{HL}}$ úrò | wôy] |
| :--- | :--- | :--- |
| $[2$ SgPoss | ${ }^{\mathrm{HL}}$ uncle $/{ }^{\mathrm{HL}}$ house | each] |

'all/each of your-Sg uncles/houses’

The same is true with definite markers like plural bû:, which occurs optionally in several preceding examples where it has no tonal effect on other words. The discourse-functional particles covered in chapter 19 (e.g. topic kày, kálà 'even', sǎy 'only') likewise have no effect on the form of preceding words in the NP.

For $\left[\subset\right.$ Poss $\left.{ }^{(H) \mathrm{L}} \mathrm{N} \supset \mathrm{Dem}\right]$, where the possessor-noun behaves as a tonosyntactic island, see [[ú ${ }^{\text {HL }}$ lésù] mǔ: bè] 'these uncles of yours' in §6.6.

### 6.2.4 Recursive and embedded possession

Complex possessed NPs of the type [X's Y's Z] are normally bracketed as [[X's Y]'s Z]. Y in [ X 's Y] has either $\{\mathrm{L}\}$ or $\{\mathrm{HL}\}$ overlay depending on what X is, and is $\mathrm{L}+\{\mathrm{HL}\}$ with (segmentally zero) 1 Sg possessor. In any case, [X's Y] ends in an L-tone, and as a possessor it controls $\{\mathrm{L}\}$ on the following possessum Z . Examples are in (104).
a. ${ }^{\mathrm{L}+\mathrm{HL}}$ nǎr ${ }^{n a ̀} \quad{ }^{\mathrm{L}}$ bò:

1SgPoss. ${ }^{\text {HL }}$ mother father
'my mother's father'
b. [ú $\quad{ }^{\mathrm{HL}}$ nár $\left.^{n a ̀}\right] \quad{ }^{\mathrm{L}}$ bò̀:
[2SgPoss ${ }^{\mathrm{HL}}$ mother] ${ }^{\mathrm{L}}$ father
'your mother's father'
c. [á:mádù ${ }^{\mathrm{L}}$ nàr ${ }^{n}$ à] ${ }^{\mathrm{L}}$ bò:
[Amadou ${ }^{\mathrm{L}}$ mother] ${ }^{\mathrm{L}}$ father
'Amadou's mother's father'

### 6.3 Noun plus adjective

### 6.3.1 Noun plus regular adjective

A noun may be followed by one or more modifying adjectives. For this purpose, ordinals ('first', 'second', ...) function as modifying adjectives. The adjectives agree with the noun in nominal features (animate singular and plural, inanimate). In fact, many adjectives overtly distinguish the unsuffixed animate plural from inanimate (suffix $-w$ ). With nouns, animate plural and inanimate both have zero suffix.

Simple examples are in (105). When an adjective is added, it controls $\{\mathrm{L}\}$ on the noun (105b-c). When two adjectives follow the noun, the final adjective controls $\{\mathrm{L}\}$ on the two preceding words (105d).
a. màngórò
'mango'
b. màngòrò ${ }^{\mathrm{L}}$ dùgû-W
'(a) big mango’
c. màngòrò ${ }^{\mathrm{L}}$ bár$r^{n a ̀-~} W^{n}$
'(a) red (= ripe) mango'
d. $\left[\text { màngòrò }{ }^{\mathrm{L}} \text { dùgù-w }\right]^{\mathrm{L}}$ bár ${ }^{n}{ }^{\text {à-W }}$
'(a) big red mango'
When they occur without an adjective, most animate nouns other than kin terms have animate singular suffix $-m$, which is opposed to a suffixless plural. When an adjective follows the noun, the suffix appears only on the adjective, not on the noun.

Different patterns of final vowel length are observed. For monosyllabic animate $C v(:)$, noun stems, the common pattern is (106a), with consistent long vowel. A few nouns with $<\mathrm{HL}>$ or $<\mathrm{LH}>$ tone (106b) are $C v$ - before animate singular $-m$ and (often) when $\{\mathrm{L}\}$ is imposed on them by a controller to the right. However, all of these nouns happen to have contour tones. Without the $\{\mathrm{L}\}$ overlay, or when unsuffixed, these nouns lengthen their vowel to $C v$ : by Contour-Tone Mora-Addition (§3.7.4.1).
gloss $\quad \mathrm{Sg} \quad \mathrm{Pl} \quad$ before adjective
a. underlying $C v$ :, length retained in all positions
'cow' nă:-m nǎ: nà: ${ }^{\text {L }}$ غ̀sú-m 'good ...'
'francolin' sû:-m sû: sù: ${ }^{\mathrm{L}}$ dùĝ̂-m 'big ...'
'monitor liz.' ă: ${ }^{n}-m \quad$ ă: ${ }^{n}$ à: ${ }^{n \mathrm{~L}}$ píĺॄ-m 'white ...'
'honey bee' $\hat{a}:{ }^{n}-m \quad$ â: ${ }^{n} \quad$ à: ${ }^{n \mathrm{~L}}$ mòsû $-m$ 'nasty $\ldots$ '
reduplicated
'grub, worm' sì-sî:-m sì-sî: sì-sì: ${ }^{\text {L }}$ dâ:-m 'small ...'
‘beetle, bug' cì-cê:-m cì-cê:: cì-cè: ${ }^{\mathrm{L}}$ mòsû-m 'beetle sp.'
'hyena' tì-tă:-m tì-tă: tì-tà: ${ }^{\text {L }}$ pílé-m 'white (i.e. striped) hyena'
b. underlying $C \check{v}, C \hat{v}$, lengthened when contour tone audible

$$
\begin{aligned}
& <L H>\text {-toned } \\
& \text { 'person' nǔ-m nǔ: nù̀ }{ }^{L} \text { غ̀sú-m 'good ...' } \\
& \text { 'woman' yǎ-m yǎ: yà }{ }^{\mathrm{L}} \text { ह̀sú-m'good...' } \\
& \text { 'horse' sǒ-m sǒ: sò }{ }^{\mathrm{L}} \text { jéw } W^{n} \text { è-m 'black ...' } \\
& <H L>\text {-toned }
\end{aligned}
$$

$$
\begin{aligned}
& \text { 'hawk' tì-tê-m tì-tê: tì-tè }{ }^{\mathrm{L}} \text { dùgû-m 'big ...' }
\end{aligned}
$$

c. irregular monosyllabic
like (b) but $H$-toned singular
'child' yí-m yî: yì: ${ }^{\text {L }}$ ह̀sú-m 'good ...'
(human 'children' expressed by irregular yì-tě:)

Compounds and possessed forms complicate the situation. 'Hyena' is now usually treated as $C v$ : (106a), but occurs as $C v$ - in two archaic compounds: tà-dùngú-m 'lion' and tà- $-\grave{̀ r} r^{n} \check{0}-m$ 'leopard'. Conversely, 'woman', and 'horse' (106b) have Cv:- forms in some compounds. For those with 'woman' see §5.1.5. For 'horse' as compound initial I have $C$ v̀:- in e.g. sò:-pétù 'horse race' but $C \grave{v}$ - in e.g. sò-nêm 'horse bridle' (I suspect there is inter-speaker variation in the 'horse' compounds, though the 'woman' compounds are fixed).

While 'person', 'woman', 'horse', and 'mouse' are regularly $C \grave{v}$ before adjectives, they have long vowels when plural and preceded by a possessor ending in an L-tone: gánà ${ }^{\mathrm{L}}$ nù: 'people of Ghana', bê:n ${ }^{\text {L }}$ yà: 'women of Beni', bê::n ${ }^{\text {L }}$ Sò: 'the horses of Beni', bê:n ${ }^{\text {L }}$ ò: 'the mice of Beni'. See $\S 6.2$ and $\S 6.2 .1$ for discussion.

For longer animate nouns, the patterns are those in (107). If we take the stem-final vowels to be underlyingly short in (107a-d), but long in (107e), we can account for all the data based on the underlying final tone, in the cases of ( $107 \mathrm{c}-\mathrm{d}$ ) also considering the preceding tone. Contour-Tone Mora-Addition (§3.7.4.1) lengthens the vowels of the unsuffixed plurals in (107b,d). This lengthening is pre-empted in (107c) by Final-Cv<LH>-to-H Reduction (§3.7.4.3), which fails to apply here because of the H -tone in the preceding syllable.
(107) Nonmonosyllabic animate nouns
gloss
Sg
Pl
with $\{\mathrm{L}\}$ overlay
a. final short level H - or L-tone, no lengthening in plural

| 'left-hander' | bàríyà-m | bàríyà | bàrìyà ${ }^{\text {L }}$ 立sú-m 'good .. |
| :---: | :---: | :---: | :---: |
| 'fish' | ísì-m | ísì | ìsì ${ }^{\text {L }}$ jéw ${ }^{n}$ è̀-m 'black |
| 'cricket' | kí-kéré-m | kí-kéré | kìkèrè ${ }^{\mathrm{L}}$ bár${ }^{n}$ à-m 'red |

b. final $\langle\mathrm{HL}\rangle$, lengthened in plural (§3.7.4.1)

c. final short $<\mathrm{LH}>$ after L , flattened to H in plural (§3.7.4.3)
'owner' bòngǒ-m bòngó úrò ${ }^{\text {L }}$ bòngò 'house owner'
'wasp' àrgàlǎ-m àrgàlá àrgàlà ${ }^{\mathrm{L}}$ mòsû-m 'bad ...'
'snake' àwǎ-m àwá àwà ${ }^{\mathrm{L}}$ bár"à-m 'red ..."'
d. final short $<\mathrm{LH}>$ after H , lengthened in plural (§3.7.4.1)
‘blacksmith' jémbě-m jémbě: jèmb ${ }^{\mathrm{L}}$ غ̀sú-m 'good...'
'Fulbe' púlǒ-m púlǒ: pùlò ${ }^{\mathrm{L}}$ èsú-m 'good...'
e. final underlying long vowel (never shortened)

$$
\begin{aligned}
& \text { <LH> } \\
& \text { 'animal' àrsč:-m àrsč: àrsè: }{ }^{\mathrm{L}} \text { ह̀sú-m 'good ...' }
\end{aligned}
$$

Inanimates lack the $-m$ and $-y \varepsilon ̀$ suffixes, but similar issues arise in comparing independent and tone-dropped (e.g. preadjectival or compound-initial) forms. Again we start with monosyllabics. The majority pattern is (108a), where again the final vowel is always long, compare the animates in (106a) above.
(108) Inanimate monosyllabic nouns
gloss independent tone-dropped gloss
a. underlying $C v$ :, length retained in all positions
'hand' nǎ: nà: ${ }^{\text {L }}$ dùgû-W 'big ...'
'water' nî: nì: ${ }^{\text {L }}$ tâm 'cold ...'
'tree sp.' bǐ:n bì: ${ }^{n \mathrm{~L}}$ gâw- $\varnothing \quad$ 'tall ...'
'millet' yû: yù: ${ }^{\text {L }}$ घ̀sû-W 'good ...'
'fire' gô:: gò: ${ }^{\text {L }}$ dùgû-W 'big ...',
'head' kû: kù: ${ }^{\mathrm{L}}$ dâ:-W 'small...'
reduplicated
'sweat' sù-sǒ: sù-sò: ${ }^{\text {L }}$ párù-m 'sour ...'
iterated
'shrub sp.' gù:-gǔ: gù:-gù: ${ }^{\text {L }}$ dùgû-W 'big ...'
b. underlying $C \check{V}, C \hat{v}$, lengthened when contour tone audible [none]

For kû: 'head' (especially as abstraction), tone-dropped kù: ${ }^{\mathrm{L}}$ is productive, as in kù: ${ }^{\mathrm{L}}$-bòr ${ }^{n} \hat{1}:$ 'fontanel' and kù: ${ }^{\mathrm{L}}$ dùgû-w 'big head'. However, (probably archaic) kù ${ }^{\mathrm{L}}$ - occurs in $k u{ }^{\mathrm{L}}$ tógóró 'head', kù ${ }^{\mathrm{L}}$-célغ̀ 'crown of head', kù ${ }^{\mathrm{L}}$-kòsû: 'top and back of head', and kù ${ }^{\mathrm{L}}$-tùyùrî: 'head of bed', cf. also the composite postposition $\left[X^{\mathrm{HL}} k u ́\right]{ }^{\mathrm{L}}$ wò 'on (the head of) $X$ ' (§8.4.4). Similarly, nǎ: 'hand' keeps its long vowel in most combinations, e.g. nà: ${ }^{\text {L }}$ dùgû-w 'big hand', but a short form occurs in the probably archaic nà ${ }^{\mathrm{L}}$ bànǎy ${ }^{n}$ 'left hand' and nà ${ }^{\mathrm{L}}$ nદ̌y ${ }^{n}$ 'right hand', and in old verbal-noun compounds denoting span measures using the arm or hand (nà ${ }^{\mathrm{L}}$-sǔỳ, nà ${ }^{\mathrm{L}}$-tă ${ }^{\prime \prime}$ ). These data further support the view that ${ }^{*} \mathrm{Cv}$ was formerly more widespread.

Nonmonosyllabic inanimates are in (109). The type with final short vowel (109a) is unproblematic and only token examples are given. Of the stems with final long vowel in the independent form, most retain length under tone-dropping before an adjective (109b). However, a few appear with short vowels when tone-dropped before an adjective (109c). I treat them as underlying short vowels, lengthened by Contour-Tone Mora-Addition. The stems in question occur very often with adjectival modifiers or compound finals.
(109) Nonmonosyllabic inanimate nouns

$$
\text { gloss independent with }\{\mathrm{L}\} \text { overlay gloss }
$$

a. consistent final short vowel with level tone (among many)
'eyes' jìré jìrè ${ }^{\mathrm{L}}$ píĺ́ $\quad$ 'white eyes'
'soap' sǎmnà sàmnà ${ }^{\mathrm{L}} j^{j e ́ w} w^{n} \grave{e}-W^{n} \quad$ 'black soap'
b. final underlying long vowel preserved before adjective
$<H L>$-toned final syllable

| 'leaf' |  |  | 'small ...' |
| :---: | :---: | :---: | :---: |
| 'medicine' | àyâ: | àyà: ${ }^{\text {L }}$ Èsû-W | 'good ...' |
| 'village' | ìsê: | ìsè: ${ }^{\text {L }}$ ès $\hat{u}-W$ | 'good ...' |
| 'tea' | átê: | àtè: ${ }^{\text {L }}$ Érù-m | 'sweet ...' |
| 'grass' | sàwâ: | sàwà: ${ }^{\text {L }}$ òrú | 'fresh ..., |
| 'wild grape' | kùrô: | kùrò: ${ }^{\mathrm{L}}$ gâw- $\varnothing$ | 'tall ...' |
| 'leaves' | bìyâ: | bìyà:-[lìy-î:] | 'cooked.. |
| 'children' | yìteč: | yì-tè: ${ }^{\text {L }}$ bì-bànî: | 'newborn babies' |
| 'spear' | sàmbâ: | sàmbà: ${ }^{\text {L }}$ sîm- $\varnothing$ | 'sharp ...' |
| 'waterjar' | sèngû: | sèngù: ${ }^{\text {L }}$ kó:ró- $\varnothing$ | 'worn-out |
| 'tongue' | lèmdê: | lèmdè: ${ }^{\mathrm{L}}$ dâ:-W | 'small ...' |
| 'rifle' | màrpâ: | màrpà: ${ }^{\mathrm{L}}$ dùgû-W | 'big ...' |
| 'waterskin' | òmdô: | òmdò: ${ }^{\mathrm{L}}$ Ésé- $\varnothing$ | 'clean .. |
| 'pick-hoe' | (gì-)gàsâ: | (gì-)gàsà: ${ }^{\text {L }}$ pě:-Ø | 'old ...' |
| 'daba' | dà:mbâ: | dà:mbà: ${ }^{\text {L }}$ غ̀sû-W | 'good ...' |
| 'plow' | sàrî: | sàrì: ${ }^{\mathrm{L}} p \mathrm{c}^{2}-$ - $\varnothing$ | 'old ...' |
| 'grindstone' | tòngô: | tòngò: ${ }^{\text {L }}$ Èsû-W | 'good ...' |
| 'tree sp.' | àsàgùsô: | àsàgùsò: ${ }^{\text {L }}$ gâW- $\varnothing$ | 'tall ...' |
| 'indigo' | gàrâ: | gàrà: ${ }^{\text {L }}$ £ ¢̀s ${ }^{\text {a }}$-W | 'good ...' |

```
    \(<H>\)-toned final syllable
    'tomtom' bàlpó: bàlpò: \({ }^{\text {L }}\) èsû-W 'good...'
c. underlying final short \(<\mathrm{HL}>\) syllable (/kòsû/ etc.)
    'calabash' kòsû: kj̀sù \({ }^{L} p \varepsilon ̌:-\varnothing ~ ' o l d ~ . . . ' ~\)
    'foot' lı̀sô: lòs̀̀ \({ }^{\mathrm{L}}\) घ̀sû-W 'good ...'
    'pottery' sèngû: sèngù̀ \({ }^{\mathrm{L}}\) घ̀sû- \(W\) 'good ...'
```

For ènjî:: 'roselle', tone-dropped ènjì: is productive, as in ènjì:-tèwêy 'stray roselle'. Another compound, ènjí-kǒ:rò 'roselle cultivars with large calices', shows a short-voweled variant of ènjî:: with final H-tone.

### 6.3.2 Adjective-like partitioning quantifier gàmbú 'certain'

An NP containing this partitioning quantifier denotes a strict subset of a set, or a portion of a whole. The pronunciation varies from gàmbú to gǎm. It is treated syntactically like a cardinal numeral, so both gàmbú and the preceding NP keep their usual tones.
a. nǔ: gàmbú ló:-r-à:,
person certain go-Pfv1a-3PlSbj
nǔ: gàmbú wásá:-r-à:
person certain remain-Pfv1a-3PlSbj
'Some people went away, some (=others) stayed.'

| b. yû: | bélé | gàmbú | $n \varepsilon ́=n ́$, |
| :--- | :--- | :--- | :--- |
| millet | part | certain | eat=and, |
| bélé | gàmbú | dùwò-y.: |  |
| part | certain | leave.Pfv-1P1Sbj |  |

'We ate some of the millet and left some (=the rest).'
c. [[órǹ̀ gàmbú] wó] ló-Ẁ dè
[[place certain] in] go.Pfv- 2 SgSbj if
'if you-Sg go to certain spots' [2005.1a.10]

Further examples of paired gàmbú ~ gǎm clauses are in B’s turns in (659) and (665) in the sample text.

### 6.3.3 Expansions of adjective

### 6.3.3.1 Adjectival intensifiers

Like all Dogon languages and others in the zone, BenT is rich in interjection-like or stemiterated intensifiers for adjectival and some other senses. The closest English equivalents are those seen in phrases like brand new and dead drunk, but the BenT intensifiers are more distinctive phonologically (by virtue of intonational prolongation, or some form of iteration or reduplication), and generally do not also occur as ordinary nouns or other stems. There is no
sharp distinction between these intensifiers, which may co-occur with a semantically more ordinary adjective (or other stem) with the same general sense, and expressive adverbials, which are more autonomous.

The first and largest batch of examples are full-stem iterations, mostly H-toned (111a-c). The pattern $C \hat{v} C \hat{v}-C \hat{v} C v ́$ is found when $C_{2}=C_{4}$ is an obstruent, versus $C \hat{v} C-C \hat{v} C$ when $C_{2}=$ $C_{4}$ is a sonorant. Minor patterns are listed in (111d-f). In most cases the stem is a "nonsense" syllable not found elsewhere in the lexicon.
form gloss associated stem
a. $C v C v C-C v C v C, \mathrm{H}$-toned
pár ${ }^{n}$ áy-pár ${ }^{n}$ áy 'shiny new' kálà 'new'
kálán-káláy 'very dry’ mǎ: ‘dry/hard’
b. $C v C v-C v C v$, final $C=$ obstruent, H-toned bédú-bédú 'very fine (powder)' bédú-bédú 'very supple (hide)' bódú-bódú 'very soft' cétú-cétú 'very short' gô:w- 'short', cété 'runty' cítí-cítú 'nauseating' (2nd /i/ influenced by the preceding kátú-kátú 'very bitter' gárìm 'bitter' kúsú-kúsú 'glare at' kúsú-kúsú 'very black' jéwnè̀- 'black' légé-légé 'sharply pointed’ sîm 'pointed' púlá-púlá 'very hot’ $\hat{\omega}$ 'hot' túká-túká 'very dusty, lots of dust’ kù-kòrǒy ‘dust’ tégú-tégú 'very dusty, lots of dust' kù-kòrǒy 'dust' párú-párú 'very white' pílé 'white'
c. $C v C-C v C$, final $C=$ sonorant, H-tone
bóm-bóm 'very thick (linear object)
búy ${ }^{n}$-búy ${ }^{n}$ 'very red’ bár ${ }^{n}$ à- 'red’
céw-céw 'very lightweight' nèr ${ }^{n}$ ú 'lightweight'
dím-dím 'very straight' dém $\Rightarrow$ 'straight' (adverb)
dém-dém 'very straight' dém $\Rightarrow$ 'straight' (adverb)
dón-dón 'furious, seething’ célè bàrná 'be angry’
dúy-dúy 'very rotten' òmbú 'rotten'
gáy ${ }^{n}$-gáy ${ }^{n} \quad$ 'very full (sated)' bá '(meal) sate (sb)'
gá ${ }^{n}$-gá $y^{n} \quad$ 'very tight (rope)' $\quad \check{\varepsilon} W$ 'tight (rope)'
gén-gé $\quad$ 'very tight (tomtom)' $\tilde{\varepsilon} W$ 'tight (rope)'
káy ${ }^{n}$-káy ${ }^{n} \quad$ 'very crowded’ ${ }^{n} \neq g i ́ ~ '(m a r k e t)$ be crowded'
ká ${ }^{n}$-káy ${ }^{n} \quad$ 'very hard’ $m\left({ }^{b}\right)$ ầ 'hard'
kéy-kéy 'very tight (tomtom)' $\quad \tilde{\varepsilon} W$ 'tight (rope)'
kéy-kéy 'very hard' mǎ: 'dry'
kúy-kúy 'very stocky’
péy-péy 'very unripe (fruit)' cèsú 'unripe'
pém-pém 'very tight (garment)' $\check{\varepsilon} W$ 'tight (rope)'

| pál-pál | 'very hot' | $\hat{o} W^{\prime}$ 'hot' |
| :---: | :---: | :---: |
| péw-péw | 'completely used up' | dù ${ }^{n}$ '́ 'be finished' |
| púl-púl | 'brand new' | kálà 'new' |
| sél-sél | 'very tall' | gùrô- 'long, tall' |
| Sćl-sćl | 'very long and thin' |  |
| sćl-sćl | 'very long and thin' |  |
| sól-sól | 'very long' | gùrô- 'long, tall' |
| táw-táw | 'very hot (sun)' | ôW- 'hot' |
| táw-táw | 'very fast' | ôW- 'fast' |
| tém-tém | 'fully inflated' | píté 'be inflated' |
| $\grave{\varepsilon} s \grave{\Sigma}$-[téw-téw] | 'very unfertilized (fi | ÉsÉ 'be unfertilized' |
| $\grave{\varepsilon} s \grave{\varepsilon}-\left[t \varepsilon ́ W-t \varepsilon{ }^{\prime} W\right]$ | 'very bland (meal)' | $\varepsilon$ ह́s 'be unfertilized' |

d. $C v C-C v C$, final $C=$ sonorant, rising tones
tǎy ${ }^{n}$-tǎy ${ }^{n} \quad$ 'very sweet' Érìm 'sweet'
e. $C v C v-C v C v$, final $C=$ sonorant, L.H-L.H toned lòró-lòró 'clean-shaven (head)' lèré-lèré 'cleaned up completely' $n \grave{\varepsilon} W^{n} \dot{\varepsilon}-n \varepsilon ̀ W^{n} \dot{\varepsilon} \quad$ 'very smooth/sleek' órù-m 'smooth, sleek' cìr ${ }^{n} \dot{\varepsilon}$-cìr ${ }^{n} \dot{\varepsilon} \quad$ 'very thin' mènjé- 'thin'
f. $C v C v C v-C v C v C v$, L.L.H-L.L.H toned cèr ${ }^{n} \grave{y}{ }^{n} \tilde{\varepsilon}$-cèr ${ }^{n} \grave{y} y^{n} \dot{\varepsilon} \quad$ 'brand new' kálà 'new'

A more modest number of intensifiers show more unusual, partially reduplicated forms (112). Some of these clearly share phonological material with the semantically related ordinary term ('very sour', 'very heavy', 'foul, stinking', and 'very sweet', and perhaps ásásá 'very bright' if related to the word-family including noun $\varepsilon$ śs̀ 'light'). Others are unrelated to any ordinary lexical item.
form gloss associated stem
a. type $\bar{V}_{1} C_{x} \bar{V}_{2} C_{x} \bar{V}_{2}$
ísásá 'well-branched' jà ${ }^{n} y^{n} 1$ Í- 'ramify'
óyóyó 'very bright (light)' Ésè 'light' (noun)
ásásá 'very bright (light)' $\varepsilon$ ésè 'light' (noun)
b. type $C \grave{V} C_{x} \dot{V} C_{x} \dot{V} C_{x}$ ह́ (with $r^{n} / n$ and $r / l$ alternations)
dùsúsúsú 'very heavy’ dùsú 'heavy’
cèr"énéné 'very cold’ tâm 'cold’
pòrólóló 'foul, stinking' pórùm 'strong (odor)'
pàrálálá 'very sour’ párìm 'sour', pálé-ré- 'be sour'
c. type $\grave{V} C_{x} \grave{V} C_{x} \bar{V} C_{x} \bar{V} C_{x} \bar{V}$ (with $r / l$ alternation)
èlèrélélé 'very sweet' Érìm 'sweet', élé-ré- 'be sweet'

The isolated examples in (113) are not iterative or reduplicative, but have some prosodic similarity to the quadrisyllabic examples in (112b), above. The first part of lèrè̀-gèděw may be related to lèré-lèré in (111e), above.

```
    form gloss associated stem
    a. lèrè-gèděW 'absolutely everything' náyánà: or dàn-wôy 'all'
    b. kánárnáná '(running) very fast' \̂W 'fast'
```

The remaining examples have no reduplicative features. Those in (114a) are of shape CóC(ù), including several with final unvoiced stop (not allowed as final consonant in ordinary stems) and one with $f$, a supposedly "non-Dogon" consonant. Those in (114b-c) have built-in "intonational" prolongation of the final consonant (symbol $\rightarrow$ ). Aside from pútúm $\rightarrow$, which is attested with two distinct senses (114b), these are of the shape $C \dot{v} C \rightarrow$ with a final sonorant. None of the intensifiers in (114a-c) is phonologically related to the corresponding semantically related stem.

$$
\begin{equation*}
\text { form } \quad \text { gloss } \quad \text { associated stem } \tag{114}
\end{equation*}
$$

a. interjection-like

| jófù | 'very wet' | òrú 'wet' |
| :--- | :--- | :--- |
| cék | 'completely, every bit' |  |
| lók, lón | 'sole, lone' | tùwn ${ }^{n}$ 'one' |
| pép | 'very full (container)' | bá 'be full' |

b. prolongation, final sonorant, bisyllabic ( $C \hat{v} C \hat{v} C \rightarrow$ )
pútúm $\rightarrow \quad$ 'with many flowers' pùr nǔy 'flower'
pútúm $\rightarrow$ 'very foggy’ náyá ‘mist, fog'
c. prolongation, final sonorant, monosyllabic H-toned ( $C$ v́ $C \rightarrow$ )

| póm $\rightarrow$ <br> já $y^{n} \rightarrow$ | 'enormous' | díy'à 'big' |
| :--- | :--- | :--- |
| tá $y^{n} \rightarrow$ |  |  |$\quad$ 'very uncooked (meat)' | cèsú 'raw, uncooked' |
| :--- |
| 'very full (sated)' |

d. prolongation, final sonorant, monosyllabic $<\mathrm{LH}>$-toned $(C \check{v} C \rightarrow$ )
$c \varepsilon ̌ y^{n} \rightarrow \quad$ 'tiny'
kǒy ${ }^{n} \rightarrow \quad$ 'emaciated’ kómbó 'lean’
$k a ̌ y^{n} \rightarrow \quad$ 'oversized (eyes, teeth)' sàlâ:, dâ:, tě:, ìlâ: ‘small'
jìré dǎm $\rightarrow \quad$ 'totally blind' jìmdú 'blind'
(contains jìré ‘eye')

### 6.3.3.2 'Near X', 'far from X'

Adjectives 'near' and 'far, distant' can be expanded by adding an adverbial phrase when used as predicates (115b), but not when used as simple modifying adjectives ('the nearby house', etc.).
a. úrò wǎ:w / sòsú bû:- $\varnothing$ house distant/near be-3SgSbj 'The house is far away/nearby.'
b. úrò [ìsê: ${ }^{\mathrm{L}}$ này ${ }^{n}$ ] wǎ:w/ sòsú bû:- $\varnothing$ house [village with] distant/near be-3 SgSbj 'The house is far from/close to the village.'

### 6.3.3.3 'Good to eat'

'Grasshoppers are good to eat' is phrased as '[grasshoppers' eating-VbIN] is sweet' (116). The verbal noun in this case is L-toned as a possessed noun (following a possessor that ends in an L-tone).

| [kì-kă: | ${ }^{\text {L }} k$ kùw-ì: $]$ | ह́rúm |
| :--- | :---: | :--- |
| [Rdp-grasshopper | ${ }^{\text {L }}$ eat.meat-VblN] | be.sweet |
| 'Eating (of) grasshoppers is sweet.' (kùw-î:) |  |  |

### 6.4 Cardinal numeral

### 6.4.1 Noun (and adjective) plus cardinal numeral

A noun, or more generally a core NP (noun with or without following modifying adjectives), may be followed by a cardinal numeral. Both the core NP and the numeral have the same tones they would have in isolation. In other words, there is no tonal interaction between the core NP and the numeral (they are in a kind of prosodic "apposition"). In (117b), the tonedropping on 'cow' is due to the adjective, not the numeral.
a. nǎ: tà:nú
cow three
'three cows'
b. [nà: ${ }^{\mathrm{L}}$ díynà tà:nú
[cow ${ }^{\text {L }}$ big.Pl] three
'three big cows'

### 6.4.2 Adjective-Numeral Inversion

In bare NPs or in NPs with only a final definite morpheme like kù, the order N-Adj-Num is fixed. However, in the presence of a possessor or a demonstrative, or when the NP is the head of a relative clause, the adjective and the numeral optionally (but often) switch positions. We may think of the possessor, the demonstrative, and the relative clause as licensors of this inversion. These same elements are also reference-restricting elements that can function as tonosyntactic controllers.

In (118), the order is fixed. In (119-21), the numeral and adjective may occur in either order, the inversion having been licensed by the demonstrative (119), the possessor (120), or the relative clause (121). The numeral is bolded in the interlinears.
ùrò ${ }^{\mathrm{L}} \quad$ díy ${ }^{n}{ }^{\text {à- }} W^{n} \quad$ kúròy (kù) house $^{\mathrm{L}}$ big-Inan six (Def)
'six big houses' (inverted \#ǹdò kùròy díynà-w ${ }^{n}$ (kù) was rejected)
a. [ùrò ${ }^{\mathrm{L}}$
dì $y^{n}{ }^{2}-W^{n}$
kùròy] ${ }^{\mathrm{L}}$
j̀gú bè
[house ${ }^{\text {L }}$ big-Inan $\mathbf{s i x}^{\text {L }}$ Prox.Inan Pl
'these six big houses'
b. [ùrò ${ }^{\mathrm{L}}$ kùròy dìy ${ }^{n}$ à- $\left.W^{n}\right]^{\mathrm{L}}$ ìgú bè
[house $^{\mathrm{L}}$ six big-Inan] ${ }^{\mathrm{L}}$ Prox.Inan Pl
[ $=(\mathrm{a})$ ]
(120)
$\begin{array}{lllll}\text { a. ú } & { }^{\mathrm{HL}}[\text { úrò } & \text { dìy }^{n} \text { à- } W^{n} & \text { kùròy] } & \text { kù } \\ & \text { 2SgPoss } & { }^{\mathrm{HL}} \text { [house } & \text { big-Inan } & \text { six] }\end{array}$ 'your-Sg six big houses'
b. ú ${ }^{\text {HL }}$ [úrò kùròy dìy ${ }^{n} \mathrm{à}^{-} W^{n}$ ] kù

2SgPoss ${ }^{H L}$ [house six big-Inan] Def
[=(a)]
a. [ùrò ${ }^{\mathrm{L}}$ dìynà- $W^{n}$ kùròy] ${ }^{\mathrm{L}}$ yàyá-Ẁ kù bè
[house ${ }^{\mathrm{L}}$ big-Inan $\left.\mathbf{s i x}\right]^{\mathrm{L}}$ fall-Partpl.Inan Def Pl
'the six big houses that fell'
b. [ùrò ${ }^{\mathrm{L}}$ kùròy dìy ${ }^{n}$ à- $\left.W^{n}\right]^{\mathrm{L}}$ yàfá-Ẁ kù bè
[house $^{\mathrm{L}}$ six big-Inan] ${ }^{\mathrm{L}}$ fall-Partpl.Inan Def Pl
[=(a)]
It is difficult to determine whether switching from Adj-Num to Num-Adj order allows the adjective to control tone-dropping on the numeral. This is because other controllers are also present (they license the inversion), as we see from the fact that 'six', lexically kúròy as in (118), is tone-dropped to kùròy in all of the (a) as well as (b) examples in (119-21). However, in $\S 6.2 .3$ above I showed that inalienably possessed [Poss $\mathrm{N}^{\mathrm{L}}$ Adj Num] (102c) can be inverted to [[Poss N Num] ${ }^{\mathrm{L}}$ Adj] (102d), which does allow the adjective to control $\{\mathrm{L}\}$ on a target domain to its left that includes the numeral.

### 6.5 Noun (or core NP) plus demonstrative

### 6.5.1 Prenominal kú (pseudo-possessor as strong discourse-definite)

It was pointed out in $\S 4.3 .2$, above, that the inanimate pronoun kú may be used to resume a proposition or other abstraction from preceding discourse. As a (pseudo-)possessor, i.e. in NP-initial position, kú is a strong discourse-definite demonstrative ('that same X we were
talking out'). For example, (122) occurs in a text just after the initial mention of two groups of settlers (who followed different routes). Like true possessors, kú controls a tone overlay on the "possessed" noun and its immediate modifiers.

| $[k u ́$ | ${ }^{\text {HL }}$ [búnùgòy | yèy] | kù], |
| :--- | :--- | :--- | :--- |
| $[$ DiscDef | ${ }^{\text {HL }}$ [group | two] | Def], |
| â: | káwá-Ẁ |  | kù |
| 3ReflP1Sbj | separate.Pfv-Ppl.Inan | Def |  |

'Those two (just-mentioned) groups, (when) they separated.' [2005.2a.08]

The $\{\mathrm{HL}\}$ tone overlaid on the noun búnúgóy 'group' shows that kú behaves tonosyntactically like a possessor. A case might be made for a literal syntactic interpretation along these lines in some passages, but in (122) such a reading would be quite abstract and somewhat forced: 'the two groups of that (discourse/situation)'. In any event, kú basically functions here as a discourse-definite demonstrative, stronger than the simple NP-final definite morpheme kù. Pseudo-possessor kú and the postnominal definite kù (or other determiner) often co-occur, as in (123).

| [kú | ${ }^{\text {HL }}$ nár ${ }^{n}$ ù | kù] | yà: ${ }^{\text {L }}$-jìyé |
| :---: | :---: | :---: | :---: |
| [DiscDef | ${ }^{H L}$ night | Def] | woman ${ }^{\text {L }}$-dance( n ) |
| jìyé | ná-yè = b-à: |  |  |
| dance | spend.night.Ipfv-3P1Sbj=Past-3PlSbj |  |  |

'That night (the night of that same day), they used to dance the women's dance all night.' [2005.1b.01]

### 6.5.2 Postnominal demonstratives

A postnominal demonstrative pronoun controls tone-dropping on a preceding string within an NP, beginning with the noun. (124a) shows $\mathrm{N}^{\mathrm{L}}$ Dem, (124b-c) show [N Adj] ${ }^{\mathrm{L}}$ Dem.
a. ùrò ${ }^{\mathrm{L}}$ ŋ̀gú
house ${ }^{\mathrm{L}}$ Prox.Inan
'this house' (úrò)
b. [ùrò ${ }^{\mathrm{L}} \quad$ bàr $\left.{ }^{n a ̀}-W^{n}\right]^{\mathrm{L}} \quad$ j̀gú
[house ${ }^{\mathrm{L}}$ red-Inan] ${ }^{\mathrm{L}}$ Prox.Inan
'this red house' (ùrò bár ${ }^{n}$ à- $W^{\prime \prime}$ )
c. $\left[y a ̀{ }^{\mathrm{L}} \quad\right.$ bàr ${ }^{n} \mathrm{a}^{\mathrm{L}} \quad$ mǔ:
[woman ${ }^{\text {L }} \quad$ red] ${ }^{\mathrm{L}} \quad$ Prox.An
'this red (=brown-skinned) woman'
Animate singular -m (the only nonzero nominal suffix) is omitted before demonstratives beginning in $m$ (which perhaps result from resegmentation), but is present in near-distant $-m$ kú. See §4.4.1 for discussion.

If a N -Adj combination (core NP ) is followed by a numeral and then a demonstrative pronoun, the demonstrative controls $\{\mathrm{L}\}$ on the entire string to its left. Both 'house' nor 'six'
show lexical tone melodies (125a), but both are tone-dropped before the demonstrative in (125b).
(125)
a. úrò kúròy
house six
'six houses'
b. [ùrò kùròy] ${ }^{\mathrm{L}}$ !̀gú
[house six $]^{\mathrm{L}} \quad$ Prox.Inan
'these six houses'

### 6.6 Free plural (bè)

Postnominal plural particle bè is morphosyntactically quite unlike the regular plural marking for animate nouns, which is zero suffix versus singular $-m$, as in nǎ:-m 'cow' versus nǎ: 'cows' and in yǎ-m 'woman' versus yǎ: 'women'. Free plural bè occurs late in the NP, often well-separated from the noun. It follows demonstrative pronouns: [ $\subset u{ }^{H L}$ lésùゝ mǔ: bè] 'these uncles of yours' [ $\subset 2$ SgPoss ${ }^{\text {HL }}$ uncle $\supset$ this Pl]. It also occurs after the verb-participle in relative clauses.

Free plural bè is optional with inanimate nouns when denoting a nonsingular set. Ordinarily such nouns make no singular/plural distinction, either in the NP or in subject agreement. Thus kúr${ }^{n} \grave{u}$ 'stone' or 'stones', alternatively kúr"ù bè to clearly specify plural 'stones'.
yâ: òmdò: ${ }^{\mathrm{L}}$ íyà-Ẁ bè there tamarind ${ }^{\mathrm{L}}$ stand.Stat-Ppl.Inan $\mathbf{P l}$ 'the tamarind trees that are standing there' [2005.1a.05]
bè is also regularly used with nouns denoting animate beings, if the nouns (for one reason or another) are not capable of marking grammatical number suffixally. This is the case with some kin terms that do not allow singular suffix $-m$ and therefore have no suffixal distinction between singular and plural. For example, 'your-Sg (maternal) uncle' is ú ${ }^{\text {HL }}$ lésù, and its plural 'your-Sg uncles' is $u^{\text {HL }}$ lésù bè.

When accusative clitic $=n \grave{\imath} \sim=\grave{n}$ or locative postposition wo is added to bè, the results are bé: $=n i ̀ ~ \sim ~ b e ́:=\grave{n}$ and bé: wó, respectively, with a long vowel and an H-tone. The lengthening is difficult to analyse.
a. [j̀mô: ínjírí:-rغ̀- $\varnothing ~ d e ̀] ~$
[morning get.up-Pfv1a-3SgSbj if]
[sèytà: ${ }^{\mathrm{L}}$ mǔ: bé:=ǹ] tó:rú-m̀ wà
[seytan ${ }^{\text {L }}$ Prox.An $\left.\mathbf{P l}=\mathbf{A c c}\right] \quad$ instruct.Ipfv-3SgSbj Quot
'(It is said:) if he gets up in the morning, he gives orders to these seytans' [2005.1b.11]
b. [bû: y . [[úlì bé:] wó] b-غ̀: ${ }^{n}$-bò]
[3Pl come [forest $\mathbf{P l}] \quad$ in] be-3PlSbj-3PlSbj]
'They (=dwarves) come and stay in the (dense) forests' [2005.1b.11]

When the 'it is' clitic (also used for focalization) is added to bè, we get $[\ldots b \hat{e}:]=\varnothing$ (§11.2.1.1). An example is in C's second turn in (661) in the sample text.

We also find H-toned (but unlengthened) bé before the dative postposition mâ: (128a) and before wôy 'all' (128b) and optionally in other contexts where the relevant NP is closely grouped prosodically with some following material.
a. [cèrêy jê:]
[money bring]
[[â: bé] mâ:] ní-yè
[[3ReflPlPoss ${ }^{\text {L }}$ father $\left.\left.\mathbf{P l}\right] \quad \mathrm{Dat}\right]$ give.Ipfv-3P1Sbj
'They bring money and give (it) to their fathers.' [2005.1b.06]
b. [[bû: ${ }^{\mathrm{L}}$ tà: bé wôy] nî: yí-yغ̀] wà [[3Pl ${ }^{\mathrm{L}}$ pond $\mathbf{P l}$ all] water see.Ipfv-3PlSbj] Quot '(It is said:) they (=short people) even see water in their (=dwarves') ponds.' [2005.1b.11]

Therefore plural bè, like definite kù, shows signs of being underlyingly (or at least historically) H-toned, though in phrase-final position it is always heard as L-toned.

With animate nouns that already distinguish singular from plural by suffixes, bè is at best marginal. This statement does not apply to conjunctions of the type [[yǎ: bé $\rightarrow$ ] [ár ${ }^{n}$ à bè $\rightarrow$ ]] 'men and women' (§7.1.2).

### 6.7 Definite (kù, bû:)

The definite morpheme is kù for (animate) singular and for inanimates: nǎ:-m kù 'the cow', kúr${ }^{n} \grave{u}$ kù 'the stone'. Inanimates are optionally pluralized by adding plural bè to kù, as in kúr"ù kù bè 'the stones'. (Animate) plural has a special definite form, bû:, as in nǎ: bû: 'the cows', though kù can also be used in this context.

Unlike the demonstrative pronouns, definite kù and bû: do not interact tonally with the preceding words in the NP.

Definite kù does not usually co-occur with demonstrative pronouns ('this', 'that') at the end of a noun-headed NP. However, kù does occasionally follow demonstratives that function as referential-tracking devices, where kù indicates that the referent is the same as one previously introduced; see $\grave{m}^{b}$ á kù 'that (same) other one', with far-distant demonstrative in obviative function, in (660) in the sample text.
kù can also follow a personal pronoun, as in [ $\varepsilon^{n}{ }^{n} \dot{\varepsilon}$ kù] 'he' (reactivating a previously introduced discourse referent) in the second line of (666) in the sample text.
kù may occur before other NP-final discourse particles such as néy (and variants) 'now' and topic kày. In this non-NP-final position, kù may appear as H-toned kú. However, in specific textual passages it can be difficult to distinguish between e.g. [noun kú $X$ ], where X is a discourse particle added to a definite noun, from [noun] [kú $X$ ], where kú is an inanimate pronoun (e.g. resuming an already described situation.

### 6.8 Universal and distributive quantifiers

### 6.8.1 'Each $X$ ' and 'all $X$ ' (wôy, dàn'-wôy, $c \hat{\varepsilon} m \sim c \hat{\varepsilon} W)$

The stylistically unmarked quantifier for 'all' and 'each' is wôy, which is often extended as $d \grave{a}^{n}-w \hat{y} y$ (variants dò-wôy, d $\grave{\varepsilon}^{n}-w \hat{o} y$ ), with no apparent change in meaning. In (129a), it is clearly distributive 'each' and occurs with a noun in singular form with no determiner. In examples like ( $120 \mathrm{~b}-\mathrm{c}$ ), with the universal-quantifier sense 'all', the nouns are marked as plural (if morphologically possible) and allow definite determiners.
a. [ $\left[\right.$ ár ${ }^{n}$ à- $m$ wôy] ${ }^{\mathrm{L}}$ mà:] [ŷ̂: ${ }^{\mathrm{L}}$ sà:gù] [[man-AnSg each] ${ }^{\mathrm{L}}$ Dat] [millet ${ }^{\mathrm{L}}$ sack] tù $W^{n}$ 万́-tù $W^{n}$ 万́ $n i ́-\grave{y}^{n} . \therefore$
one-one give.Ipfv-1PlSbj
'We will give one sack of millet to each man.'
b. [nǎ: bû: dàn-Wôy] sá:té:-r-à: [cow.Pl Def.Pl all] animal.die-Pfv1a-3P1Sbj 'All of the cows died (without being slaughtered).'
 'I will call (= summon) all of my children.'

For wôy as right-edge marker in regular conditional antecedents, see $\S 16.1 .1$ below.
Another 'all' quantifier is $c \hat{\varepsilon} m \sim c \hat{\varepsilon} W$, which may reflect Jamsay influence. It too is used as a kind of right-edge marker, specifically in willy-nilly conditional antecedents (§16.3). In reduplicated or iterated form (cí-céw, céw-céw) it means 'equal(ly)' (§12.2.3).

For the more emphatic sóy 'entirely' and noun nàyàná: 'entirety' (becoming ${ }^{\text {HL }}$ náyànà: when "possessed"), see §8.6.7.5.

### 6.8.2 $[X$ wé $\rightarrow X]$ 'from (one) X to (another) X '

The combination [ $X$ wé $\rightarrow X$ ], where X is a common noun denoting a set of entities, means 'from (one) X to (another) X (in succession)' or 'each X (independently)'. It can function as a stylistically strong way of saying 'each/every X'.
a. àsùw ${ }^{n} \dot{\varepsilon}-y \hat{1}-m \quad w^{-} \rightarrow \quad$ àsù $W^{n} \dot{\varepsilon}-y \hat{1}-m$, tǎ: ló-m̀̀
boy-child- AnSg to boy-child-AnSg, pond go.Ipfv-3SgSbj
'Each boy (=young man) goes to a water source (e.g. pond), (and) he gets water and brings (it).' [2005.1a.11]
b. [démdé wé $\rightarrow$ démdé]
[roofing to roofing]
[bò:-úrò
[father-house
$m o ̀: l i ̀=$ ná $\left.^{n}\right] \quad$ dèmbí-yè
'From (one) roof-building to (another) roof-building (=on each roof-building occasion), the villagers will get together and do the roofing.' [2005.1a.11]

It is possible that wé $\rightarrow$ is a variant of wê:y 'as well as’ (§7.1.3).

### 6.8.3 '(Not) any X' (kâ:")

The stem kâ: ' 'any' modifies the noun, which is singular in form (where morphologically relevant). The animate singular is $k \hat{a}:^{n}-m$. There is no suffix for inanimate singular. This morphology suggests that $k \hat{a}:^{n}$ is structurally a noun rather than an adjective or numeral-like quantifier. Specifically, $k \hat{a^{\prime}}{ }^{n}$ resembles a nominal compound final, see §5.1.1.

The preceding noun has $\{\mathrm{L}\}$ overlay, and animate singular $-m$ (the only nonzero animacy-number suffix that occurs in nouns) is omitted on the noun (nà: ${ }^{\text {L }} k \hat{a}:{ }^{n}-m$ 'any cow', yà ${ }^{\mathrm{L}} k \hat{a}^{n}-m$ 'any woman', à $r^{n a ̀}{ }^{\mathrm{L}} k \mathrm{a}^{\cdot n}-m$ 'any man'). The tonal and morphological facts are consistent with compound-initial status.

The verb (or other predicate) is negated.
a. $\quad\left[y i{ }^{\mathrm{L}}\right.$
kâ: $\left.{ }^{n}-m\right]$
nàr ${ }^{n}$ ú-m̀-dó-ỳ
[child ${ }^{\mathrm{L}}$ any-AnSg] call-Ipfv-Neg-1SgSbj
'I will not call (= summon) any child(ren).'
b. [ùrò ${ }^{\mathrm{L}}$ kâ: $\left.{ }^{n}\right]$ ह́wé-m̀-dó-ỳ
[house ${ }^{\mathrm{L}}$ any.Inan] buy-Ipfv-Neg-1SgSbj
'I will not buy any house.'
c. $\left[k \grave{:^{\prime}}{ }^{\mathrm{L}} \quad k \hat{a}:^{n}\right]=r a ́-\varnothing$
[thing ${ }^{\mathrm{L}} \quad$ any.Inan] $=$ not.be- 3 SgSbj
'It isn't anything.'
$k j::^{\mathrm{L}}$ kâ: ${ }^{n}$ 'nothing, anything', nù ${ }^{\mathrm{L}} k \hat{a}:{ }^{n}-m$ 'nobody, anybody', and $\grave{\partial} r^{n}{ }^{\mathrm{L}}$ kâ: ${ }^{n}$ 'nowhere, anywhere' are common combinations.
$k \hat{a}:{ }^{n}$ may be used in the sense 'any' in a conditional antecedent clause in the absence of negation, like English any (132).
$\left[\left[k \grave{y^{n}}{ }^{\mathrm{L}} \quad k \hat{a^{n}}{ }^{n}\right] \quad y i ̌-j \varepsilon ́-\grave{W} \quad\right.$ dè $], \ldots$
[[thing ${ }^{\text {L }}$ any] see-RecPf-2SgSbj if], $\ldots$
'if you-Sg see anything, ...'
In several other Dogon languages, cognates of kâ: ${ }^{n}$ (<*kámà) also occur in positive contexts in distributive sense 'each X'. I have not observed this in BenT. For the possible relationship between kâ: ${ }^{n}$ '(not) any' and relative morpheme kà: ${ }^{n}$, see the end of §14.1.10.

## 7 Coordination

### 7.1 NP coordination

A conjoined NP ' X and Y ' of the type $[[X$ ya $\rightarrow$ ] [Y ya $\rightarrow$ ]] or $[[X$ be $\rightarrow$ ] [Y be $\rightarrow$ ]] does not systematically undergo tone-dropping as relative-clause head, though a full study might reveal the existence of variants with at least partial tone-dropping (e.g. of the second coordinand only) as in e.g. Jamsay. See §14.1.3 for discussion.

### 7.1.1 NP conjunction $(X$ ya $\rightarrow, Y$ ya $\rightarrow)$

The common NP conjunction construction is symmetrical, with a particle ya $\rightarrow$ following each conjunct. The individual coordinands may be singular or plural.


The vowel of ya is extended intonationally $(\rightarrow)$ after both conjuncts. The phonological tone is carried over from the final tone of the preceding conjunct, but the parallelistic structure lends itself to sharp intonational modification of the pitch. The pitch on the first ya $\rightarrow$ is typically rather high (symbol ${ }^{\dagger}$ ) even when phonologically L-toned, and the pitch on the second ya $\rightarrow$ is either close to what one would expect from the phonological tone (no symbol) or else has the pitch lowering typical of the final phrase in a series (symbol ${ }^{\wedge}$ ). In careful speech (in elicitation sessions), the intonational differences between the first and the second $y a \rightarrow$ tend to level out.

The same construction is used with two pronouns (134a), or with a pronoun and a nonpronominal NP (134b).
a. $[i$ [1Sg
yá $\rightarrow^{+}$] [ú
yá $\rightarrow$ ]
and]
'I and you-Sg'


### 7.1.1.1 Conjunction with final quantifier

A concluding 'all' quantifier, such as emphatic sóy 'all, every last one' (in context also 'both') may be added at the end of a conjunction. In this case, there is less noticeable intonational variation on the $y a \rightarrow$ conjunction itself.

```
(135)
\(\begin{array}{lllllll}{[\text { árnà }} & \text { yà } \rightarrow \text { ] } & \text { [yă: } & \text { yá } \rightarrow] & \text { [yì-tě: } & \text { yà } \rightarrow] & \text { sóy } \\ {[\text { man.Pl }} & \text { and }] & \text { [woman.Pl } & \text { and] } & \text { [children } & \text { and] } & \text { all }\end{array}\)
\(10 ́-y \grave{\varepsilon}\)
go.Ipfv-3PlSbj
'Men, women, and children are all going.'
```


### 7.1.1.2 Interrogation of one coordinand

In (136), one of the two ' X and Y ' coordinands is the interrogative 'who?'. A literal translation is "[who? and a lion] fought a fight?" No syntactic island here!

| [ $[$ ăm | yá $\rightarrow$ ] | [tà-dùngú-m | yá $\rightarrow$ ]]- | jáy | jàyà-bò |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [[who? | and] | [lion-AnSg | and] | fight(n) | fight.Pfv-3PlSbj |

'Who was it who fought with a lion?' [2005.2b.05]

### 7.1.2 NP conjunction $(X$ bè $\rightarrow, Y$ bè $\rightarrow$ )

The conjunctive particle $y a \rightarrow$ is optionally replaced by bè $\rightarrow$, with the same variable intonational prolongation and the same pitch pattern. This is most common when either a) the coordinands are plural (including inanimates not otherwise overtly marked for plurality), or b) the overall conjunction functions as a list that is, or might have been, extended to more than two coordinands.
a. [ár
$b e ̀ \rightarrow]$
[yă: bé $\rightarrow$ ]
[man. Pl and] [woman. Pl and]
'men and women'
b. [[kórníyóm

| ${ }^{\text {HL }}$ tángày] | ìgú́ |
| :--- | :--- |
| ${ }^{\text {HL }}$ side] | Prox.Inan] |

[ K K
${ }^{\mathrm{HL}}$ side] Prox.Inan]
[î: bè $\rightarrow$ ] [pèrgé $\begin{array}{lll}\text { HL nû: } \quad \text { bè } \rightarrow \text { ] ló-Ẁ dè }\end{array}$
[1Pl and] [ P HL people and] go.Pfv-Ppl.Inan if
'If this Koriyom side (=area) goes (=extends) between us (=Beni) and the people of Pergué (a village)' [2005.1a.06]
c. [[gâw bè $\rightarrow$ ] [kòngòl ${ }^{\mathrm{L}}$-yî: bè $\rightarrow$ ], [nà: ${ }^{\text {L-sùw }} \quad$ bè $\rightarrow$ ],
[[onion and] [doum ${ }^{\mathrm{L}}$-child and], [cow ${ }^{\mathrm{L}}$-excrement and],
nây ${ }^{n}$ úgúró-ỳ:: [hâl cé:lé-m̀]
Inst] give.scent.Ipfv-1PlSbj [until be.good.Ipfv-3SgSbj]
'We give it a smell using onion, and doum-palm nuts, and cow manure, until it's good.' [2005.1a.09]

In (137c), instrumental postposition flây ${ }^{n}$ takes scope over the conjoined sequence, but is set off prosodically. This is typical of such conjoined NPs.

An abbreviated construction $[X$ bè $\rightarrow X$ ], with the same common noun $X$ repeated in singular form, with just one occurrence of bè, is also attested. It means, in effect, 'all X's'.


### 7.1.3 wê:y 'as well as'

A phrase-final morpheme wê:y is recorded in the sense 'as well as, along with' (French ainsi $q u e$ ). The phrasing is [[X wê:y] $Y$ ] ' X , as well as $\mathrm{Y}^{\prime}$ (139). The textual context of the example suggests an emphasis on the accumulated quantity of territory. This particle is also used in 'a fortiori' clauses ( $\S 12.3$ ). It can be intonationally prolonged as wê: $y \rightarrow$, and could perhaps be transcribed wéy $\therefore$ with dying-quail intonation. It may be related to $w e ́ \rightarrow$ in the [ $X$ $w e ́ \rightarrow X]$ 'from X to X ' construction (§6.8.2).

| é:, [tórò | kù | wê:y] | [kú | ${ }^{\text {HL }} 1 \mathrm{I}^{n}{ }^{\text {à }}$ | kù] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| yes, [mountain | Def | as.well.as] | [InanPoss | ${ }^{\text {HL }}$ field | Def] |
| [àyú-Ẁ |  | dè] |  |  |  |
| [take.Pfv-Ppl.Inan |  | if] |  |  |  |
| 'Yes, if it takes ( $=$ | clud | g) the mount | tain along | ith its | ld(s)' |

### 7.1.4 "Conjunction" of verbs or VP's

Verbs are not conjoined using the same mechanisms found with NP or pronominal conjunction. Instead, they may be chained in various ways; see chapter 15.

### 7.2 Disjunction

The 'or' disjunction $m a$ is difficult to separate from the interrogative particle ma in polar (yes/no) interrogatives, which often take the parallelistic form ' X , or not X ?'. Pragmatically, ' X or Y ' suggests doubt as to whether X or Y (or both) are valid, so ' X or Y ' and interrogative ' X ? or Y ?' are closely related. In both cases, ma is clause-final, is obligatory after the first phrase and commonly repeated after the second, gets its phonological tone from the end of the preceding word, and is highly subject to intonational prolongation and pitch modification.

### 7.2.1 'Or' $(\mathrm{ma} \rightarrow)$ with NPs and pronouns

The disjunctive particle is ma, which regularly shows intonational prolongation (symbol $\rightarrow$ ). In (140a-b), a single occurrence of ma $\rightarrow$ occurs, between the two coordinands. There is no clear intonational break either before or after the particle, except when the speaker hesitates (e.g. while searching for a term as right coordinand).
a. ú má $\rightarrow$ [ú ${ }^{\text {HL átìyà }-m]}$

2 Sg and [2SgPoss ${ }^{\mathrm{HL}}$ friend- AnSg ]
'you or your friend'
b. [nàw ${ }^{n} \hat{a}: \quad m a ̀ \rightarrow$ nù $\left.{ }^{n} 1 \hat{1}:\right]$ èsú bû:- $\varnothing$
[meat or cow.peas] good be-3SgSbj
'(Either) meat or cow-peas is fine.'

In either example, a second occurrence of ma $\rightarrow$ after the second coordinand is possible but not required.

### 7.2.2 'Or' $(\mathrm{ma} \rightarrow)$ with adverbs

An example is (141), with temporal adverbs.
(141) [íyé má $\rightarrow$ ] [ $\left.\varepsilon y^{n} \quad m a ́ \rightarrow\right]$ yě-m̀
[today or] [tomorrow of] come-Ipfv. 3 SgSbj
'He/She will come today or tomorrow.'
My assistant also gave a version of this with 'it is' clitic on 'today' and 'yesterday', beginning [íyé $=$ m̀ mà $\rightarrow$ ] ...

### 7.2.3 Clause-level disjunction

It is especially difficult to distinguish the 'or' particle from the interrogative particle in these cases, where two propositions are involved. The elicited examples (142) and (143) were designed to force a disjunctive rather than interrogative reading.

In (142), the two 'if' clauses do not exhaust the set of possibilities, since the "Goldilocks" scenario remains in play (it might rain the just-right amount, not too much or too little). Therefore the context does not lend itself to a 'whether X or Y' interpretation, which would verge on a polar interrogative.
(142)

| [bòlú | $m \grave{2}{ }^{n} \grave{\varepsilon}-r^{n} 1 \underline{1}-\varnothing$ | má ${ }^{+}$+ |
| :---: | :---: | :---: |
| [rain(n) | rain.fall-PfvNeg-3SgSbj |  |
| [mìr ${ }^{n} \dot{\varepsilon}$ | lóq̧́:-rè- $\varnothing$ | mà ${ }^{+} \dagger$ |
| [rain.fall | overflow-Pfv1a-3SgSbj | of] |
| yû: | gô-m-dó- $\varnothing$ |  |
| millet | go.out-Ipfv-Neg-3SgSbj |  |

'If it doesn't rain, or if it rains too much, the millet won't come out.'

In (143), the speaker is making a promise in two alternative versions, and an interrogative reading (in the usual sense) is not possible.
(143) [yž-ỳ
[come-Ipfv.1SgSbj
[nǔ-m
[person-AnSg
'(Either) I will come (myself), or I will send someone.'

## 8 Postpositions and adverbials

### 8.1 Tonal locatives (absent)

No synchronic tonal locatives of the Jamsay type have been observed. It may be of historical interest that úrò 'house' has the falling tone pattern of Jamsay tonal locative úrò 'at home' (based on /H/-toned Jamsay noun úró 'house'). However, in BenT úrò shows the lexical melody.

### 8.2 Accusative $=n i ̀=$ ì

Accusative $=n i ̀ ~($ postvocalically also $=\grave{n})$ which I transcribe as a clitic, could be taken as a suffix (but then it is the only suffix added directly to pronouns), or as a postposition (but it interacts in its segmental phonology with the preceding element in a manner not typical of postpositions). Like postpositions, it occurs a at the end of an already complete NP.

It is optional even in clear direct-object function. For its forms with personal pronouns, including 2 Sg ú=nù and inanimate $k u ́=n u ̀$ where the clitic vowel has assimilated to the pronoun's back rounded vowel, see $\S 4.3 .1$. The clitic is also used (optionally) with other NPs (144), though it is most common with personal names. The clitic is particularly common when the direct object is focalized (§13.1.2).

$$
\begin{array}{ll}
{[b \grave{\imath}:(=n i ̀)]} & y i ̀-\grave{y}  \tag{144}\\
{\left[1 \mathrm{SgPoss}-{ }^{\mathrm{HL}}\right. \text { father(=Acc)] }} & \text { see.Pfv- } 1 \mathrm{SgSbj} \\
\text { 'I saw my father.' } &
\end{array}
$$

The accusative morpheme is occasionally added to other nonsubject NPs that have some focal properties. See, for example, [úsúrí wó] = ǹ '(we come) on (=because of) a request' in (654) in the sample text, and yâ: = ǹ 'there' at the end of B's long turn in (676) in the sample text.

An interesting issue is whether there is an affinity, perhaps even morphemic identity, between accusative $=n i ̀ \sim=n ̀ ̀ ~ a d d e d ~ t o ~ n o u n s ~ a n d ~ p r o n o u n s, ~ a n d ~ d i f f e r e n t-s u b j e c t ~ c h a i n i n g ~$ morpheme $=n i ̀ ~ \sim=\grave{n}$ added to a nonfinal clause in a (loose) clause chain (§15.1.10). Shades of Choctaw?

The accusative occurs optionally on objects of imperatives, as on objects of other inflected verbs. An example is the (culturally unlikely!) (145).

$$
\begin{array}{ll}
{\left[{ }^{\mathrm{L}+\mathrm{HL}} \text { bŏ: }(=\text { nì })\right]} & \text { súyó }  \tag{145}\\
{\left[1 \mathrm{SgPoss}-{ }^{\mathrm{HL}} \text { father }(=\mathrm{Acc})\right]} & \text { hit.Imprt }
\end{array}
$$

'Hit-2Sg my father!'
However, the accusative morpheme does not occur in head NPs in object relatives (§14.3.1).

### 8.3 Dative and instrumental

### 8.3.1 Dative mâ:~ ${ }^{\mathrm{L}}$ mà:

This postposition has a basic form mâ:, becoming L-toned ${ }^{L}$ mà: after a segmentally nonzero NP (possessed or unpossessed) or pronoun that ends in L - or $<\mathrm{HL}>$-tone. The L-toned variant ${ }^{\mathrm{L}}$ mà: is homophonous with the L-toned form of quotative subject (QuotSbj) morpheme má:, which occurs in clause-initial NPs (chiefly subjects, §17.1.1.1). Its relationship to mà: 'before' (§15.2.1.6) is unclear. The 1 Sg dative form is $\langle\mathrm{LHL}\rangle$ toned ${ }^{\mathrm{L}+}$ mă: with no segmentally overt pronominal (146c).
a. [sùmáylà ${ }^{\mathrm{L}}$ mà:] bú:dù ní-tî:- $\varnothing$
[Soumaila ${ }^{\mathrm{L}}$ Dat] money give-Pfv1b-1SgSbj
'I gave the money to Soumaila.'
b. $\grave{\varepsilon} W^{n} r^{n} \dot{\varepsilon} \quad[$ ú $\quad m a ̂:] \quad \grave{-}$ - $1 \dot{\varepsilon} W^{n} r^{n} u ́-\grave{m}$
story [2Sg Dat] Rdp-narrate.Ipfv-3SgSbj
'He/She will tell you-Sg a story.'
c. bú:dù ${ }^{\mathrm{L}+}$ mă:: nì- $\varnothing$
money Dat.1Sg give.Pfv-3SgSbj
'He/She gave me the money.'

[[2SgPoss ${ }^{\text {HL }}$ house-neighboring] ${ }^{\mathrm{L}}$ Dat] give.Ipfv-2SgSbj
'You-Sg will give (honey) to your-Sg neighboring house (=neighbors)' [2005.1a.09]

The dative is used for the indirect object of 'give' and 'say', and in more abstract contexts like (147), which occurs in a text about collecting honey from apiaries.
(147) [[yěy kù] mâ:] àŋây ${ }^{n}$ ká: ${ }^{n}$-rà-Ẁ.:
[[honey Def] Dat] how? do-Prog-2P1Sbj
'What do you-Pl do for (=with) the honey?' [2005.1a.09]
' X call Y " Z ", ( Y discourse referent, Z its name or other designation) is expressed as ' X say Z [Y-Dative]'.

[kú $\quad$ mâ:] $\quad$ tòy-bìsí $\quad$| $g u^{n}-\grave{y}^{n} . \therefore$ |
| :--- |
| [DiscDef |
| Dat] |
| 'We call that (activity) "toy-bisi." |

### 8.3.2 Instrumental nây ${ }^{n}$

Standard instrumental senses ('with/by means of a stick') and more abstract extensions ('by force') are expressed by the postposition $n a \hat{y^{n}}{ }^{n}$. It appears as ${ }^{\mathrm{L}}$ nà $y^{n}$ after an undetermined noun or core NP ending in L - or $\langle\mathrm{HL}\rangle$-tone.
a. [wárà ${ }^{\mathrm{L}}$ jày ${ }^{n}$ ] wárá-ỳ
[daba Inst] farm.Ipfv-1 SgSbj
'I do farming work with a daba (hoe).'
b. [ìsê: kù] [pàngá nây ${ }^{n}$ ] ày-bó
[village Def] [force Inst] take.Pfv-3PlSbj
'They took (control of) the village by force.'
The instrumental is also used in various more or less spatial functions (150a-b) and in expressions denoting points in time (150c). The instrumental therefore competes to a limited extent with locative postpositions.
a. [û: yà] [[ìsê: kù] nây $\left.{ }^{n}\right]$ wǎ:W bú-Ẁ.: [2P1 too] [[village Def] Inst] distant be-2P1Sbj 'you-Pl are far from the village.' [2005.1a.07]
b. [ésé nây $\left.{ }^{n}\right]$ tí-yè
[shoulderbag Inst] pour.out.Ipfv-3PISbj
'They dump (the millet spikes) with (=from) the shoulderbags?' [2005.1a.10]
b. [[midi trente dògùrù ${ }^{\mathrm{L}}$ ŋ̀gú] nây $\left.{ }^{n}\right]$
[[noon thirty time ${ }^{\mathrm{L}}$ Prox.Inan] Inst]
'at 12:30 (PM)'

The high-frequency phrase [kú nây ${ }^{n}$ ] 'with that' can be translated in context 'at that point', 'that being the case', or just 'then'. It essentially resumes a situation just described, as background for the next section of discourse.

### 8.4 Locational postpositions

### 8.4.1 Locative, allative, and ablative functions

As in all languages of the zone, spatial adverbials including locative PPs denote locations only and are neutral as to whether the referent in question is located in, heading toward, arriving at, or departing from the location. This information is expressed in motion verbs, either alone or chained to other verbs. gǒ- 'go out, exit, leave' expresses the ablative ('from') when combined with a preceding locational expression. In its absence, ló- 'go' or other motion verb normally implies allative ('to') when combined with a locational.

### 8.4.2 'In, on, at' (wo)

The most general locative postposition is wo, appearing as wó or wò. The tone is carried over from the preceding tone.

The postposition is used in various temporal (151a) as well as spatial (151b) senses. It competes most directly with the semantically more precise pírè 'inside’ (§8.4.3, below).
a. [jìr $n=\check{\varepsilon} y^{n} \quad{ }^{H L}$ Wó] bíré $\quad$ èsín ${ }^{n}$ bíré-ỳ:
[rainy.season ${ }^{H L}$ in] work(n) very work-Ipfv.1PlSbj
'During the rainy season we work a lot (=work hard).'
b. [[ìsè: ${ }^{\mathrm{L}} \quad$ díy ${ }^{n}$ à- $\left.W^{n}\right]$ (kù) $\left.{ }^{\mathrm{L}} W o ̀\right] ~ k \grave{: ~}{ }^{n}-k a \hat{a}:{ }^{n}$ ŋ̀gó- $\varnothing$
[[village ${ }^{\mathrm{L}}$ big-Inan] (Def) ${ }^{\mathrm{L}}$ in] things not.be-3SgSbj
'There is nothing in the big village (=city).'
c. Séwè [tǒ: ${ }^{\mathrm{HL}}$ Wó] tárá-tí-ỳ
paper [wall $\left.{ }^{H L}{ }_{i n}\right]$ affix-Pfv1b- 1 SgSbj
'I stuck (pasted, pinned) the paper on the wall.'
d. [[ìsê: bè] wò] ná-ỳ.:
[[lvillage $\quad \mathrm{Pl}] \quad \mathrm{in}] \quad$ spend.night-1 PlSbj
'We'll spend the night in (various) villages.'
wo is also part of many of the complex postpositions described below. Since the immediately preceding stem is usually a noun-like element that takes possessed-noun $\{\mathrm{HL}\}$ overlay, wo appears in L-toned form as ${ }^{\mathrm{L}}$ Wò in these combinations.

### 8.4.3 'Inside, within' ( $X^{\mathrm{HL}}$ pírè̀ $)$

This postposition, based on noun pìré: 'interior' but with final short vowel, is sometimes interchangeable with locative wo (see above). However, ${ }^{H L}$ pírè is more concrete, meaning 'inside, within', with reference to a container-like entity (house, sack, etc.) capable of enclosing something. The form is ${ }^{\mathrm{L}}$ pìrè after $\mathrm{L}-$ or $\langle\mathrm{HL}\rangle$-tone.
a. [úrò
${ }^{\text {L }}$ pìrè]
$b-\varepsilon{ }^{\prime}{ }^{n}$
[house ${ }^{\text {Linside] be-3PlSbj }}$
'They are in(side) the house.'
$\begin{array}{llll}\text { b. } & \text { súkórò } & {[j \varepsilon ́ m \varepsilon ́ ~} & \left.{ }^{\text {HL }} \text { pírè }\right]\end{array} \quad \begin{aligned} & \text { gǎy }{ }^{n} \text {-tí-y } \\ & \text { sugar }\end{aligned}$
'I put-Past the sugar in(side) the sack.'

### 8.4.4 'On; on the head of' $\left(\left[X^{\mathrm{HL}} \text { kú }\right]^{\mathrm{L}}\right.$ wò $)$

This composite postposition is historically related to kû: 'head', though it is now phonologically distinct from $k \hat{u}$. ${ }^{\text {L }}$ Wò 'on the head'. For vestiges of short-voweled forms of 'head' see discussion of (108) in §6.3.1. In ( $\left[X^{\mathrm{HL}} k u ́\right]{ }^{\mathrm{L}}$ wò, I assume that monomoraic intermediate /kû/ is realized as [kú] before a tightly phrased L-toned syllable. ([ $\left.X^{\mathrm{HL}} k u ́\right]^{\mathrm{L}}$ Wò is used in contexts where something is (physically or metaphorically) weighing down on the reference object or person. The metaphor is resonant in a society where people, especially women, carry burdens (pails of water, large baskets full of millet or other products) on their heads over long distances.
(153)

| [[kóró:jù | kù] | ${ }^{H L}$ dû: | nànàná:] |
| :---: | :---: | :---: | :---: |
| [[family | Def] | ${ }^{\text {HL }}$ burden | all] |
| [[ú | ${ }^{\mathrm{HL}}$ kú] | ${ }^{\text {L }}$ Wò $]$ | $b u ̀-\varnothing$ |
| [[2SgPoss | ${ }^{\text {HL }}$ head] | $\left.{ }^{\text {L }} \mathrm{in}\right]$ | be-3SgSbj |

'The whole burden of (supporting) the family is on you-Sg.'

### 8.4.5 'On' $\left(\left[X^{\mathrm{HL}} \text { mánì: }\right]^{\mathrm{L}}\right.$ wò $)$

The complex postposition mánì: ${ }^{\mathrm{L}}$ Wò consists of locative wo and a form ${ }^{\mathrm{HL}}$ mánì: that has the $\{\mathrm{HL}\}$ tone pattern of a possessed noun. It is related to the adverb mànî: 'above'. The tonal form mànì: ${ }^{\text {L }}$ wò occurs after an L-tone.

```
nàWná [[tú\etagúrúm }\mp@subsup{}{}{\textrm{HL}}\mathrm{ mánì:] }\mp@subsup{}{}{\textrm{L}}\mp@subsup{}{Wò}{~}] dèyì-ỳ
meat [[stool HL On] }\mp@subsup{}{}{\textrm{L}}\textrm{in}]\quad\mathrm{ put.down.Pfv-1SgSbj
'I put-Past the meat on the stool.'
```

In most cases this postposition specifies location of a smallish object at or near the apex of, or on the upper side, of the reference object. However, it may be extended to a wall, if the focal object gives the impression of being supported by it. This is the case with house geckos, lizards capable of moving or "standing" on walls (155).
(155) ákèlêm [[tǒ: ${ }^{\mathrm{HL}}$ mánì:] ${ }^{\mathrm{HL}}$ Wò] ló-m̀ gecko [[wall ${ }^{H L}$ on] ${ }^{H L}$ in] go.Ipfv-3SgSbj
'The gecko is moving on the wall.'
8.4.6 'Close to, near' ([ $X^{\mathrm{HL}}$ dósù $]^{\mathrm{L}}$ Wò)

This complex postposition is frozen, there being no noun \#dòsú or the like. Nevertheless, ${ }^{\mathrm{HL}}$ dósù has the HL pattern typical of bisyllabic possessed nouns.
a. [ [ú
${ }^{\mathrm{HL}}$ dósù]
${ }^{\text {L }}$ Wò]
$b u ̀-\varnothing$
[[2SgPoss ${ }^{H L}$ beside] ${ }^{\text {Lin }}$ ] be- 3 SgSbj
'He/She/It is near you-Sg'.
$\begin{array}{lll}\text { b. } & {\left[\left[a ́ r r^{n}\right.\right.} & \left.{ }^{\mathrm{L}} \text { dòsù }\right]\end{array} \quad{ }^{\mathrm{L}}$ Wò $]$
[[man.Pl ${ }^{\mathrm{L}}$ beside] ${ }^{\mathrm{L}}$ in]
'near the men'

### 8.4.7 'In front of' $\left(X^{\text {HL }}{ }^{j i ́ r e ̀}\right)$

This postposition has the form ${ }^{\mathrm{HL}}$ jírè, becoming ${ }^{\mathrm{L}}$ jìrè after L - or $<\mathrm{HL}>$-tone.
(157)
a. [tórò
[mountain
${ }^{\text {L }}$ jìrè $]$
bù- $\varnothing$
'He/She/It is in front of (the) mountain.'
b. $t i ̀ W^{n} \varepsilon \check{y^{n}}$
tree
${ }^{\text {HL }}$ jírè
${ }^{H L}$ in.front.of 'in front of (the) tree'
'In front of the house' is generally expressed as 'at the doorway' (158).
(158)
[òrùmó: ${ }^{\mathrm{HL}}$ Wó] yá éw-yé-Ẃ
[doorway ${ }^{H L}$ in] Exist sit-MP.Ipfv-3SgSbj
'He/She is sitting in front of the house.'

### 8.4.8 'Behind, after' ([X ${ }^{\mathrm{HL}}$ túlùlu ${ }^{\mathrm{L}}$ Wò)

The possessed form of the noun tùlú 'rear (area)', cf. tùlù ${ }^{\mathrm{L}}$-kélè 'back (body part)', is the basis for a compound postposition, with locative wo. The regular possessed forms of tùlú are used.
(159)
$\begin{array}{lll}\text { a. } & \text { [úrò } & \left.{ }^{\mathrm{L}} \text { tùlù }\right]\end{array} \quad{ }^{\mathrm{L}}$ Wò
$\begin{array}{lll}\text { b. } & {[\text { ú }} & \left.{ }^{\mathrm{HL}} \text { túlù }\right] \\ & {[2 \mathrm{SgPoss}} & { }^{\mathrm{HL}} \text { rear] }\end{array} \quad \begin{aligned} & { }^{\mathrm{L}} \text { Wò }\end{aligned}$
'behind you-Sg'
c. ${ }^{\mathrm{L}+\mathrm{HL}}$ tǔlù $\quad{ }^{\mathrm{L}}$ Wò

1SgPoss. ${ }^{H L}$ rear ${ }^{\text {L }}$ in
'behind me'
8.4.9 'Beside' ([ $X{ }^{\text {HL }}$ bélè $]^{\mathrm{L}}$ wò $)$

The noun bélé 'side (of object or body)' is the basis for [ $X{ }^{\mathrm{HL}}$ bélè] ${ }^{\mathrm{L}}$ wò 'beside, at the side of'.
(160)

'beside (the) tree'
$\begin{array}{lll}\text { b. } & {[\hat{i ̂:}} & \left.{ }^{\mathrm{L}} \text { bèlè }\right]\end{array} \quad \begin{aligned} & { }^{\mathrm{L}} \text { Wò } \\ & \\ & {[1 \mathrm{Pl} 1}\end{aligned}$
'beside us'

### 8.4.10 'Under' ([X ${ }^{\mathrm{HL}}$ bólò ${ }^{\mathrm{L}}$ wò $)$

The noun bòló 'bottom, lower part' is used in the compound postposition [ $X$ HL bólò ${ }^{\mathrm{L}}$ Wò 'under'. We get ${ }^{\mathrm{L}}$ bòlò ${ }^{\mathrm{L}}$ wò after a L- or $\langle\mathrm{HL}\rangle$-tone.
a. séwè [[jémbé ${ }^{\mathrm{HL}}$ bLólò $] \quad{ }^{\mathrm{L}}$ Wò] yá bú- $\varnothing$ paper [[sack ${ }^{\mathrm{HL}}$ underside] ${ }^{\mathrm{L}}$ in] Exist be- 3 SgSbj 'The paper is under (the) sack.'


The noun $\operatorname{bir}^{n} n^{n}$ ' rear end' is used in the sense 'at the base of', when the reference object is e.g. a tree or a mountain.

| $\left[t i W^{n}{ }^{\text {če }}{ }^{n}\right.$ | ${ }^{\mathrm{HL}}{ }_{\text {bir }}{ }^{\text {ni }}$ ] $]$ |
| :---: | :---: |
| ree | ${ }^{\mathrm{HL}}$ bottom] |

8.4.11 'Between' ([[X Y] ${ }^{\mathrm{HL}}$ gálù $]^{\mathrm{L}}$ wò, $[X Y]{ }^{\mathrm{HL}}$ bérkèlàw)
[ $\left[X Y{ }^{\text {HL }}\right.$ gálù $]$ wò ] is a compound postposition meaning 'between X and Y '. It can also mean 'within (a duration)'.
(163) [[ùsú pérú] ${ }^{\mathrm{HL}}$ gálù] ${ }^{\mathrm{L}}$ wò
[[day ten] ${ }^{H}$ between] ${ }^{{ }^{\mathrm{L}} \text { in }}$
'within ten days' [2005.1a.14]
${ }^{\text {HL }}$ bérkèlàw 'between', based on noun bèr-kélà: 'middle', is used in its literal (spatial) sense (164). If both endpoints are specified, they are conjoined (\$7.1.1).
(164) [bé:nì yà $\rightarrow$ ] [dúwánsán yá $\rightarrow$ ] ${ }^{\mathrm{HL}}$ bérkèlàw
[Beni and] [Douentza and] ${ }^{\text {HL }}$ between
'between Beni and Douentza'
It can be used in literal and figurative senses with human reference objects. Of course a single NP or pronoun denoting the endpoints can be used instead of a conjunction (165).
$\begin{array}{ll}\hat{i}: & { }^{\mathrm{L}} \text { bèrkèlàw } \\ \mathrm{Pl} & { }^{\mathrm{L}} \text { between }\end{array}$
'between us' (literally, or e.g. in confidence between us)

### 8.5 Purposive and causal postpositions

### 8.5.1 Purposive gǐn (and variants) 'for'

This postposition is illustrated in (166). It can have purposive or causal ('because of') sense, but the purposive sense ('for', 'in order for') is most prominent. The variant forms attested are gǐn, gìní, gǔn, and gùní. The postposition is slightly mutated from gùy ${ }^{n}=n i ́$ (variant $\left.g i ̀ y^{n}=n i ̂\right)$, a same-subject clause-linking form of $g u ̌ y^{n} \sim g \check{y}:{ }^{n}$ 'say'. In other words, 'he came for meat' originated as 'saying (=thinking) meat, he came'. This use of a quotative expression in purposive contexts is typical of Dogon languages, and other African languages.

```
a. [nàwnâ: ǧ̌n] yè-y [meat Purp] come.Pfv-1SgSbj 'I came for the meat [focus].'
```

b. [ú gǐn] $y \varepsilon ̀$ - $y$
[2Sg Purp] come.Pfv-1SgSbj
'I came on account of you-Sg.'
For gǐn with a clausal complement (purposive or causal clause), see $\S 17.5 .3$ and $\S 17.5 .2$.2. In the latter section, I point out that native speakers are aware of the relationship between gǐn (with its variants) and the 'say' verb $g$ ̌̌ $y^{n} \sim g \check{~} \check{y}^{n}$ (§11.3.1), which combines with the samesubject clause chaining clitic $=n i ́$ as $g u ̀=n i ́$ or $g i ̀=n i ́ . ~ S o ~ t h e r e ~ i s ~ a ~ c o n n e c t i o n ~ b e t w e e n ~ e . g . ~ ' I ~$ came on account of you' and 'I came saying/thinking "you.",

### 8.5.2 Causal déngèy and gǐn ‘because of’

The postposition ${ }^{\mathrm{HL}}$ déngèy has a $\{\mathrm{HL}\}$ overlay, cf. noun déngěy 'reason, cause'. It can be glossed 'because of', specifying the causal factor that impels an action. gǐn (see preceding section) may also be used in this context, though its core meaning is purposive (futureoriented).

| [bòlú | ${ }^{\text {HL }}$ déngèy] | nù-bó |
| :--- | :--- | :--- |
| $[\mathrm{l}$ | ǧ̆n] | $"$ |
| [rain | because.of] | go.in.Pfv-3PISbj |
| 'They went inside because of the rain.' |  |  |

### 8.5.3 Causal [[ $\left.X^{\text {HL }}{ }_{n i ̂}^{\text {i. }}\right]$ Wò $]$

This is a complex postposition involving a noun-like element ni: and locative wo. Particle ni: is not used in similar sense elsewhere, but I will gloss it as 'cause' in interlinears. The lexical tone of ni: cannot be determined, since X always functions as a possessor and imposes an overlay on $n i$ :, either $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$. The final tone segment of $n i$ : is therefore always L , and this spreads into the locative postposition, which is therefore always L-toned wò.
[ $\left[X{ }^{\mathrm{HL}} n \hat{1}:\right]$ wò $]$ can be translated 'because of X ' or 'on account of X '. There is no sharp semantic distinction between this and other causal constructions, but in the textual examples
[ $\left[X{ }^{\mathrm{HL}}\right.$ nî:] wò $]$ usually expresses a human motivation rather than physical causality. That is, [ $\left[X{ }^{H}{ }_{n i ̂} \mathrm{i}\right]$ wò $]$ describes the background situation within which the following eventuality makes sense.

The most common combinations are [kú ${ }^{\mathrm{HL}}{ }_{\text {nî: }}$ ] wò $]$ 'because of that, for that (aforementioned) reason' and [[ז̀gúu $\left.{ }^{\mathrm{HL}}{ }_{n i ̂}^{i}\right]$ wò] 'because of this/that, for this/that reason'. [kú $\left.{ }^{\mathrm{HL}}{ }_{n i ̂}:\right]$ wò] is always anaphoric, resuming prior discourse and establishing it as the motivational background for the following eventuality (168a). [[ìgúu ${ }^{\mathrm{HL}}$ nî:] wò ] is based on the inanimate proximal deictic demonstrative (ìgú 'this') and may be cataphoric (prospective), when the speaker is about to describe a motivational background, as in (168b) in the context of its text (the speaker went on to give the explanation).
a. tàrá:
[ [kú
${ }^{\mathrm{H}_{n i ̂}^{n}}{ }_{\text {in }}$ ] wò]
collective.hunt [[DiscDef ${ }^{\text {HL }}$ cause] in]
tár-yè = b-à:
hunt.Ipfv-3PISbj=Past-3PiSbj
'They used to do the collective hunt for that purpose.' [2005.1b.01]

1 Pl [children ${ }^{\mathrm{L}}$ benefit] [[Prox.Inan ${ }^{\mathrm{HL}}$ cause] in]
ká: ${ }^{n}$-rà- $-\overline{\text { a }}$ :
do-Ipfv-1P1Sbj
'(As for) us, the benefit of (having) children, because of this [focus] we do (it, i.e. have lots of children).- [2005.1b.07]

The textual context for (169) contrasts two motivations for slaughtering a goat, dùsú 'respectfulness' (i.e. to honor someone), and kálá 'sanction' (i.e. as a penalty), and both nouns occur in the frame [ $\left[X^{\mathrm{HL}}\right.$ nî:] wò̀.
(169)

| $\left.n u ́ w^{n}\right)^{\text {y }}{ }^{n}$ | [[dùsú | ${ }^{\mathrm{HL}}{ }_{n i \text { î:] }}$ | wò] | [ $n$ ǔ: | mâ:] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| W | [[respect(n) | ${ }^{\text {HL }}$ cause] | in] | [people | Dat] |
| $b \grave{\varepsilon} r^{\text {L }}$ | bû: | SÉW ${ }^{n} \dot{\varepsilon}-\bar{m}$ |  |  |  |
| goat ${ }^{\text {L }}$ | 3PISbj | slaughter.Ip | v-Ppl |  |  |

'Now it's due to respectfulness that (there is) a goat that they slaughter for (other) people, ‘ [2005.1b.04]

In (170), $\left[\left[X^{\mathrm{HL}}{ }_{n \hat{1}}\right.\right.$ : $]{ }^{\mathrm{L}}$ wò $]$ is not obviously causal. Instead, it gives a context for the main predication, and can be approximately glossed 'with respect to' or 'in the context of'.

| ènjî: | [ [kj̀š̌y | ${ }^{\mathrm{HL}} \mathrm{nî̀}^{\text {: }}$ ] | ${ }^{\text {L }}$ Wò] |
| :---: | :---: | :---: | :---: |
| roselle | [[harvest | ${ }^{\text {HL }}$ cause] | ${ }^{\text {Lin] }}$ ] |
| [ènjî: | kùyó: | íré-m̀] |  |
| [roselle | first | ripen.I | 3 SgSb |

'Roselle, with respect to the (millet) harvest, roselle ripens first.' [2005.1a.10]

### 8.6 Other adverbials (or equivalents)

### 8.6.1 $\quad$ Similarity $\left(g \hat{a ̂} y^{n} \rightarrow\right.$ 'like')

This high-frequency adverbial most often follows, and has scope over, an NP or adverb.
(171)

| yă-m | gây $^{n} \rightarrow$ |
| :--- | :--- |
| woman-AnSg |  |
| 'like a woman' |  |
|  |  |

Other examples are in (677) and (682) in the sample texts.

### 8.6.2 Extent: $\grave{\varepsilon} i^{n} \rightarrow$, díy ${ }^{n}$ á- $W^{n}$ wó 'a lot' illá, dêm $\rightarrow$, dá:-wó ‘a little'

Adverbial 'a lot, greatly, thoroughly' is usually $\grave{\varepsilon} s i^{n} \rightarrow$. An occasional alternative is díyná- $W^{n}$ wó, cf. adjective díy ${ }^{n a ̀-}$ 'big', noun dìy ${ }^{n}$ ǎ- $W^{n}$ 'size', and locative wo. For 'a lot' in the quantitative sense ('many, much') see bằ ${ }^{n} \rightarrow$ and $j o ́ \rightarrow$ (§4.5.1) See also the intensifiers used with specific adjectival concepts (§6.3.3.1). Adverbial (or nominal) 'a little' is either illá ~ ùllá, dêm $\rightarrow$, or dá:-Wó, cf. adjective dâ:- 'small' and noun dâ:-W'smallness'.
a. $\grave{\varepsilon} s i^{n} \rightarrow \quad n \grave{i}: y^{n} \grave{i}-\varnothing$
a.lot sleep.Pfv-3SgSbj
'He/She slept a lot.'
b. illá nì: $y^{n} \grave{i}-\varnothing$
a.little sleep.Pfv-3SgSbj
'He/She slept a little (=briefly).'
$\begin{array}{ll}\text { c. } \begin{array}{ll}\text { dêm } \rightarrow & \text { nì: } y^{n} \grave{i}-\varnothing \\ & \begin{array}{l}\text { a.little } \\ (=\mathrm{b})\end{array} \\ & \\ \text { sleep.Pfv- } 3 \text { SgSbj }\end{array} \\ & \end{array}$
These adverbs are often superceded by more specific expressions, notably intensifiers §6.4.4.1.

Emphatic 'be/do a lot, excessively, too much' can be expressed by lóyó- 'overflow', see line 5 of (671) in the sample text.

### 8.6.3 Specificity

### 8.6.3.1 'Approximately' $\left(g \hat{a} y^{n} \rightarrow\right)$

Particle gây ${ }^{n} \rightarrow$ 'like' (§8.6.1) may be used to indicate approximate quantity (173b).
a. [úrò pérú] $s$ - : $^{n}$-bó
[house ten] have-3P1Sbj-3P1Sbj
'They have ten houses.'
b. [[úrò pérú] gây ${ }^{n} \rightarrow$ ] $s-$ è: $^{n}-b$ b́
[[house ten] like] have-3PISbj-3PlSbj
'They have like (= approximately) ten houses.'

### 8.6.3.2 'Exactly' (cók)

Particle cók 'exactly' specifies the exactness of a quantity.

| [[úrò | pérú | cók] |
| :--- | :--- | :--- |
| [[house | ten] | exactly] |
| 'They have exactly ten houses.' |  |  |

For exactness of locations, see §4.4.2.2.

### 8.6.3.3 'Specifically' (té $\rightarrow$ )

$t e ́ \rightarrow$ is used in contexts where the speaker emphasizes the precise identity (rather than quantity) of a referent. It can, for example, be used with singular pronouns as well as with other NPs and pronouns.
[ú té $\rightarrow$ ] lùgùró:-rà-y
[2Sg specifically] look.for-Ipfv- 1 SgSbj
'I'm looking specifically for you-Sg.'

### 8.6.4 Evaluation

### 8.6.4.1 'Well' and 'badly'

$\grave{\varepsilon} s i i^{\prime \prime} \rightarrow$ can mean 'well', evaluating the quality of someone's poerformance or knowledge, in addition to its quantitative sense 'a lot, greatly' (§8.6.2).

$$
\begin{array}{lll}
\grave{\varepsilon} s I^{\prime} \rightarrow & \text { bèn }^{\mathrm{L}} \text {-tě̀y } & \text { júwó-m̀ }  \tag{176}\\
\text { well } & \text { Beni }{ }^{\text {-language }} & \text { know-Ipfv. } 3 \mathrm{SgSbj} \\
\text { 'He/She } & \text { knows Beni language well.' }
\end{array}
$$

The verb cé:lé has meanings like 'make, manufacture' (transitive) or 'be made, manufactured' (intransitive), usually with the connotation 'make well' or 'be well-made'. In many contexts the 'well' component becomes dominant, resulting in translations like '(rainy season) turn out well'.

There is no adverb 'badly', so other ways of phrasing the relevant concepts are used. For example, adjective mòsú 'bad' can modify a direct object noun, perhaps a cognate nominal.

| $\left[b \grave{r} \grave{\varepsilon}^{\mathrm{L}}\right.$ | mòsú] | bíré-m̀ |
| :--- | :--- | :--- |
| $\left[\operatorname{work}(\mathrm{n})^{\mathrm{L}}\right.$ | bad] | work-Ipfv. 3 SgSbj |

'He/She works does poor work (= works badly).'

### 8.6.4.2 'Appropriate, right' ( $j \hat{a}: w^{\prime \prime}$ )

A phrase with $j \hat{a}: W^{n}$ 'normal, right, (socially) acceptable' can be used. It behaves syntactically as a predicative adjective. The positive form is $j \hat{a}: W^{n} b \hat{u}:-\varnothing$ 'it is normal, right' or just $j \hat{a}: w^{n}$. The negative is jà: $w^{n}=r a ́ ~ ' i t ~ i s n ' t ~ r i g h t ' . ~ F o r ~ t h e ~ m o r p h o s y n t a c t i c ~ f r a m e s ~ s e e ~ § 11.4 .1 ~$ (positive) and §11.4.4 (negative).

### 8.6.5 Manner

There is no productive morphological mechanism for producing manner adverbials (cf. English -ly). It is very easy to chain verbs together, so most "manner adverbials" are really chained verbs or VPs. Postpositional phrases like pàyá jây ${ }^{n}$ 'by force' are also common.

### 8.6.6 Spatiotemporal adverbials

### 8.6.6.1 Temporal adverbs

Some of the major temporal adverbs are in (178).
a. íyé
'today; nowadays'
íyà
'again'
píníW"ú 'again' (verb 'do again')
yéngù 'yesterday; formerly, in the old days'
íyé ùsú tà:nú 'day before yesterday'
núw ${ }^{n}$ ̀ $^{n}$ 'now'
$n \varepsilon ́: ~($ and variants) 'now' (especially topicalizing)
b. $\varepsilon y^{n}, \varepsilon$ éy $y^{n}$ dé 'tomorrow; in the future'
દ́rénâ: 'day after tomorrow'
èrènà: túng̀̀ 'second day after tomorrow'
túngò tî: 'third day after tomorrow'
lég-tèré 'fourth day after tomorrow'
bà:nǎy 'fifth day after tomorrow'
c. $j \check{\varepsilon} y^{n} \quad$ 'last year'
nàngúrù 'next year'
níy ${ }^{n} \varepsilon ́ W \sim n u ́ y{ }^{n} 0::^{n} \sim n i ́ y n o ́:{ }^{n}$ 'this year'

### 8.6.6.2 'First' (kùyó:)

'First' as adverb, in the sense of chronological sequencing of events, is kùyó:. As in English, this is identical to the ordinal adjective 'first (of a series)'.

| bíré | kùyó: bìré | $j \grave{\varepsilon}=n a ́ y^{n}$, |  |
| :--- | :---: | :---: | :--- |
| work(n) | first | work | $\operatorname{ExpPf}=$ then.SS, |
| ánày | $n \varepsilon \check{y} y^{n}$ | $n \varepsilon ́-\grave{y}^{n} .:$ |  |
| like.that | meal | eat.Ipfv-1PISbj |  |
| 'We'll do the work first, then we'll eat.' |  |  |  |

### 8.6.6.3 Spatial adverbs

Deictic locative adverbs ('here', 'there') are presented in §4.4.2.1. Other locative adverbs are listed in (180).

c. tùlì:-túlì: 'going backward, in reverse'
tùlú wó, tùlú dá: 'in the rear'
jìré: 'forward; in front' cf. jìré 'eye'
Note the morpheme dâ: in several cardinal-direction terms, but dá: in tùlú dá: 'in the rear' (cf. Jamsay dázá).
'Left hand' is nà-bànǎy", 'right hand' is nà-něy ${ }^{n}$ (with nǎ: 'hand'). Nowadays these can be used as directional terms, as in 'turn left'.

### 8.6.7 Expressive adverbials

As in all Dogon languages there are many expressive adverbials. Many of them end in a syllable that is protracted intonationally (symbol $\rightarrow$ ). A few of the most important are given in the following sections. §6.3.3.1 presents adjectival intensifiers, which belong to the larger class of expressive adverbials.

These forms may be used adverbially. They are rather independent, and do not constitute subconstituents of syntactic phrases like NP and PP (181a). However, they can be made predicative by adding an auxiliary verb, either stative quasi-verb bù- 'be' to denote a state (181b), or the regular verb bě- (elsewhere 'remain') in the inchoative sense 'become'. ŋ̀gó'not be' is the negative in the stative sense (181b). The syntax even of predicative forms of expressive adverbials is clearly distinct from that of predicate nouns and predicate adjectives.
a. yí-m bê:n dém $\rightarrow$
yògó
lò- $\varnothing$
child-AnSg Beni straight run go.Pfv- 3 SgSbj
'The child ran straight to Beni.'
b. ósù dém $\rightarrow$ bù- $\varnothing$
road straight be-3SgSbj
'(The) road is straight.'
c. béré dém $\rightarrow$ bě:-rغ̀- $\varnothing$
stick straight become-Pfv1a-3SgSbj
'The stick became straight.'
d. ósù dém $\rightarrow$ ŋ̀gó- $\varnothing$
road straight not.be- 3 SgSbj '(The) road is straight.'

### 8.6.7.1 'Straight' $\left(\right.$ dém $\left.\rightarrow, s \varepsilon^{n} \rightarrow\right)$

'Straight' in the sense of a direct, non-meandering trajectory or path is expressed by the adverbial dém $\rightarrow$. The $m$ is prolonged. Examples are in the immediately preceding section.
'Straight' in the context 'look straight at' is $S \varepsilon^{n} \rightarrow$ or variant $s \varepsilon \rightarrow$.
$i ́=n i ̀ \quad s \varepsilon^{n} \rightarrow \quad$ tìnì-bó
$1 \mathrm{Sg}=$ Acc straight look.Pfv-3PlSbj
'They looked straight at me.'

### 8.6.7.2 'Apart, separate' $\left(\right.$ dé $^{n} \rightarrow$ )

To indicate that two objects, or classes of object, are physically separated or are conceptually distinct, both NPs are followed by adverbial dé $y^{n} \rightarrow$ in a parallelistic construction.
$\left[\begin{array}{ll}\text { ár } \\ n a ̀ a \\ \left.\text { dé } y^{n} \rightarrow\right] & {[y a ̌:} \\ \text { déy }{ }^{n} \rightarrow \text { ] }\end{array}\right.$
[man.Pl apart] [woman.Pl apart]
'Men and women are separate (or: are distinct).'

### 8.6.7.3 'Always' (àsú $\rightarrow$ ), 'never' (àbádá)

'Always, foreover, eternally' is àsú $\rightarrow$, which was perhaps originally a phrase including ùsú 'day'. This adverbial is also found in some other Dogon languages (Nanga, Najamba).
'Never', also an emphatic negative ('in no way', 'not on your life') is the ubiquitous àbádá from Arabic. It is used as an addition to a regular negative clause.

### 8.6.7.4 'All together'

No adverbial meaning 'together' (cf. Jamsay sí-só: ${ }^{n}$ and cognates in other northwestern Dogon languages) was elicitable. Instead, a verb chain beginning with mò:lú 'be/do together' is the only way to express e.g. 'we work together'. See §15.1.6.

### 8.6.7.5 ‘All, entirely’ (sóy, nàyàná:)

Sóy (with interjection-like emphasis) can be used to emphasize that an eventuality applies to the entirety of a set. It is therefore basically an emphatic version of 'all' (the less emphatic form is wôy).
(184)

| [úrò | kù] | Sóy | nà ${ }^{n}$ á:-rè- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| [house | Def] | all.Emph | be.ruined-Pfv1a-3SgSbj |

'All (= every last one of) the houses were ruined.'
nànàná: 'entirety' (of a group or mass) as possessed noun can emphasize that an eventually applies in a complete or extreme fashion to one or more objects. As a possessed noun the surface form is [ $X^{\mathrm{HL}}$ náyànà:] or, if X is an undetermined and unquantified NP ending in an L-tone, [ $X^{\mathrm{L}}$ nànànà:].
a. $\quad \int_{\text {L+HL }}^{\mathrm{L}}$ rò̀
kù] ${ }^{\mathrm{HL}}$ nápànà: nàwná:-rè- $\varnothing$
[1SgPoss- ${ }^{-H L}$ house Def] ${ }^{\text {HL }}$ entirely be.ruined-Pfv1a-3SgSbj 'My house was completely ruined.'
b. [bû: ${ }^{\text {L }}$ nàyànà: $]$ sèllè-r-á
[3PlPoss ${ }^{\text {L all] }}$ be.healthy-PfvNeg-3PISbj
'They are all sick.'
c. [kú ${ }^{\text {HL }}$ náyànà: $]$ dùwñó:-rغ̀- $\varnothing$
[InanPoss ${ }^{H L}$ all] be.finished-Pfv1a-3SgSbj
'It (e.g. sugar) is finished (= depleted).'
For nàyàná: in emphatic pronoun function, see §18.1.4.

### 8.6.8 Iterated adverbials

### 8.6.8.1 Distributive adverbial iteration

Iteration of a numeral is used to indicate distribution over time and space ('two by two', 'two apiece', etc.). In the market, iteration can also indicate the price per unit.

```
a. yěy-yěy yè-bó
two-two come.Pfv-3PISbj
'They came two by two.'
```

b. màngórò pèrí-yěy pèrí-yěy
mango ten-two ten-two
'Mangoes are twenty riyals (= 100 francs CFA) apiece.'
8.6.8.2 'Scattered, here and there' (kálù-kálù, kôl-kôl, ór ${ }^{n} \grave{\jmath}$-ór $r^{n} \grave{\jmath}$ )

Adverb kálù-kálù and variants kâl-kâl and kôl-kôl (cf. Jamsay kân-kân) indicate scattered (not dense) occurrence in several locations not very far apart. I know of no simple (uniterated) form of the stem.
(187)

| yí-m | sùwó | kálù-kálù | sùwò- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| child-AnSg | excrement | here.and.there | defecate.Pfv-3SgSbj |
| 'The child defecated (a little bit) here and there.' |  |  |  |

Another iterated adverbial with similar meaning is $\check{\varsigma r}^{n} \grave{\jmath}$-ór $r^{n} \grave{\jmath}$, iteration of $\check{o ́ r}^{n} \grave{\jmath}$ 'place'.

### 8.6.8.3 Other adverbs with iterated stem

The iterations of adjective stems in (188), with L-toned initial and $\{\mathrm{HL}\}$ toned final, are used as adverbs. The formation is distinct (in form and sense) from distributive iterations.

| (188) | form | gloss | related adjective |
| :---: | :---: | :---: | :---: |
|  | nà: $r^{n a ̀}-n a ́: r^{n a ̀}$ <br> nùm-nûm | 'easily' <br> 'with difficulty' | nà:rná 'easy’ nǔm 'difficult' |

## 9 Verbal derivation

### 9.1 Reversive verbs (-rv́v)

The reversive verb-to-verb derivation is like that with English un- (or dis-, etc.). The basic suffix is $-r r^{\prime}$-. The derived stem preserves the lexical $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ stem-level melody of the input verb, but / $\mathrm{LH} /$ is spread over the entire derived stem. The derivation is most common with (underlying) bisyllabic stems (189a). The inner stem itself shifts its (presuffixal) vowel to a high vowel, here written $i$ except where syncopated. This is a weak metrical position in a trisyllabic verb. However, some other reversives discussed below fail to raise the presuffixal vowel, suggesting that this raising is not fully productive. In (189b), the verbs are pí: $y^{n} 1$ í- and pí:-r $r^{n} 1$, to judge by imperatives pí: $y^{n}$ à 'shut!' and pí:-rnà ‘open!', but the phonology is murky
 in the medial syllable, suggesting that an alternative representation of 'shut' as /píyní/ may also be present. This would then suggest an alternative analysis of 'open' as /píy ${ }^{\mathrm{n}} 1$-r $\mathrm{r}^{\mathrm{n}} 1 \mathrm{l}-/$, and perhaps of pí: $y^{n} 1$ í- as /píy ní-y ${ }^{n} 1$ í- ( 189 c ) shows a dissimilation of $/ \mathrm{r} /$ to $l$ before the suffixal $r$, see $\S 3.5 .4 .5$. In ( 189 d ), the end of the input stem is truncated before the suffix, and suffixal $/ \mathrm{r} /$ shifts to $d$ after $m$ (§3.5.4.7). In (189e), a final -yv́- is lopped off before $-r r^{\prime}$-. In the case of 'caught'/'uncaught', this truncation might be attributed to the unacceptability of a trisyllabic stem before the reversive suffix, and/or to deletion of mediopassive -yv́- before another derivational suffix. The 'lock'/'unlock' case is synchronically messy and isolated (compare Nanga dàgá/dàgí-rì and Bankan Tey dă: ${ }^{n} / d a ̀:^{n}-r^{n} 1$ ). (189f) shows lengthening of $C V$ - stem to $C v:-$ before the derivational suffix (§3.5.3.1).

$$
\begin{equation*}
\text { input gloss } \quad \text { reversive gloss } \tag{189}
\end{equation*}
$$

a. bisyllabic stem as input (predominant type)

| dèwí- | 'cover (object)' | dèW-rí- | 'uncover (object)' |
| :--- | :--- | :--- | :--- |
| mèlí- | 'fold' | mèlìrí- | 'unfold' |
| kólí- | 'hook, hang up' | kólí-rí- | 'unhook, take down (sth hanging)' |
| pégé- | 'nail(v)' | pégí-rí- | 'remove (nail)' |
| pégé- | 'button' | pégí-rí | 'unbutton' |
| páyá- | 'tie' | págí-rí- | 'untie' |

b. phonology problematic (discussed above)
pí:yní- 'shut' pí:-r $r^{n} 1$ í 'open'
c. $/ \mathrm{r} /$ to $l(\S 3.5 .4 .5)$
gòró- 'cover (person)' gòlò-ró- 'uncover (person)'
ìré- 'forget' ilì-rí- 'remember'
tárá- 'paste, affix’ tálí-ríl 'unpaste, detach'
d. syncope (§3.5.3.2), $C C C$ simplification (§3.5.4.8), /r/ to $d(\S 3.5 .4 .7)$
tímbí- 'cover (w lid)' tím-dí- 'uncover (remove lid)'
e. Mediopassive $-y v ́-$ omitted
néngí-yé- 'be caught in tree' néngé-ré- 'become uncaught'
dà: ${ }^{n}-y^{n} 1$ í- 'lock' dà: ${ }^{n}-r^{n} 1 ́-\quad$ 'unlock'
[imperative dán ${ }^{n}$
f. $C v$ - lengthened to $C v$ :- before suffix (§3.5.3.1)

| $t 0^{n}-$ | 'wind' | $t 0^{n}{ }^{n}-r^{n} 1_{1}$ |
| :--- | :--- | :--- |
| wǎ- | 'pull up (pants)' | wà:-rí- |

Some frozen reversives are used only in chained form before gò-ló- 'remove, take away' if transitive (190a), and before gǒ- 'go out, exit' if intransitive (190b).
a. gòngù-rú gò-ló-tî:- $\varnothing$
fence.in-Rev remove-Pfv1b-3SgSbj
'He/She removed the fence (opened up the space).'
b. píré-rí
gǒ:-rદ̀- $\varnothing$
get.bogged-Rev go.out-Pfv1a-3SgSbj
'It (e.g. truck) got unbogged.'

Reversive verbs attested only in this construction (with gò-ló- or gǒ-) are in (191). As in (189f), $C v$-verbs lengthen to $C v:-$

$$
\begin{equation*}
\text { input gloss } \quad \text { reversive gloss } \tag{191}
\end{equation*}
$$

a. transitive with gò-ló-

| gòngí- | 'wall/fence in' | gòngù-rú- | 'remove fence from' |
| :--- | :--- | :--- | :--- |
| níngí- | 'tangle' | níngí-rí- | 'untangle' |
| tó- | 'step on' | tó:-rí- | 'remove foot from' |
| kó- | 'roll up (pants)' | kó:-ró- | 'let (pants) down' |
| kúmjó- | 'crumple' | kúmjó-ró- | 'uncrumple' |

b. intransitive with $g$ ǒ- $^{-}$
píré- 'get bogged’ píré-rí- 'get unbogged'

### 9.2 Deverbal causative verbs

### 9.2.1 Productive causative suffix (-wú-)

The productive derivational suffix for deverbal causatives is -wú-. It readily nasalizes to $-W^{n} u$ - by Nasalization-Spreading. It is often apocopated (or syncopated) to $-W$ - (or $-W^{n}$ - if nasalized) word-finally and before consonants. (For a handful of cases where this suffix is passive rather than causative, see the following section.)

For inputs of more than one mora, the lexical $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ melody is preserved in the -wú- derivative. $C v$ inputs also have their vowels lengthened.
(192)

Causatives with -wú-
input gloss causative gloss
a. $\{\mathrm{H}\}$-toned from $/ \mathrm{H} /$ toned input ( $2+$ syllables or CvC -) pété- 'jump' pété-wú- 'make jump' kúwó- 'eat (meat), kúwó-wú- 'feed (with meat)' áw ${ }^{n} y^{n} 1$ í- 'be swollen’ á ${ }^{n} y^{n} i_{1} W^{n} u ́-\quad$ 'cause to swell' Éré- 'escape’ Éré-wú- 'let escape'
b. $\{\mathrm{LH}\}$-toned from $/ \mathrm{LH} /$ toned input ( $2+$ syllables or CvC -)

| jùwó- | 'know' | jùwò-wú- | 'inform' |
| :---: | :---: | :---: | :---: |
| gǎy ${ }^{\text {n- }}$ | 'put' | gà: ${ }^{n}-W^{n} u$ - | 'cause to put' |
| wàsá- | 'remain' | wàsà-wú- | 'let remain' |
| dìmbì-yí- | 'follow' | dìmbì-yì-wú- | 'make follow' |
| bùró- | 'be reanimated' | bùrò-wú- | 'reanimate, bring back to life (e.g. fire)' |
| dù ${ }^{n}$ ¢́- | 'end' | $d u ̀ W^{n} \grave{o}-W^{n} u$ - | 'cause to end' |
| gòngìrí- | 'spin' | gòngùrù-wú- | 'make spin' |

c. $\{\mathrm{H}\}$-toned from monosyllabic $/ \mathrm{H} /$ input

| $n \varepsilon ́-$ | 'eat (meal)' | né:- $W^{n} u ́-$ | 'give food to' |
| :--- | :--- | :--- | :--- |
| ló- | 'go' | ló:-Wú- | 'allow to go' |
| nú- | 'enter' | nú:- $W^{n} u ́-$ | 'make enter' |

d. $\{\mathrm{LH}\}$-toned from monosyllabic /LH/ input

| bě- | 'remain' | bè:-wú- | 'cause to remain' |
| :--- | :--- | :--- | :--- |
| nǒ- | 'drink' | nò:- $W^{n}$ ú- | 'give drink to' |
| yǒ- | 'weep' | yò:-wú- | 'make weep' |
| gǒ- | 'go out' | gò:-wú- | 'take out' (uncommon) |
| nǔ- | 'hear' | nù:- $W^{n}$ nú- | 'make hear' |

### 9.2.2 Minor causative suffix (-gí-)

The known cases of -gí- are in (193).
Causatives with -gí-

| input | gloss | causative | gloss |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| káwá- | 'separate self' | káw-gí- | 'separate (them)' |
| sáyá- | 'be dispersed' | sáy-gí- | 'disperse (them)' |
| bùró- | 'come back to life' | bùrù-gó- | 'resuscitate' |
| mòló- | 'be punctured' | mòl-gó- | 'puncture' |

Transitive $-r v ́-\sim-l v ́-(\S 9.4$ below) functions much like a causative in some combinations.

### 9.3 Passive (-wú-)

The verbal derivational suffix -wú- is normally causative. It is, however, passive in a very small number of combinations. All known examples are in (194).

Passive -wú-

| input | gloss | passive | gloss |
| :---: | :---: | :---: | :---: |
| témbú- | 'find, encounter' | témbú-wú- | 'exist, be found (findable, regularly present)' |
| bèré- | 'get, obtain' | bèrè-wú- | 'be available, obtainable' |
| pá:mé- | 'understand' | pá:mé- $W^{n}$ ú- | 'be understood' |
| gòr ${ }^{\text {nó- }}$ | 'be stronger than' | $g \grave{\grave{r}}{ }^{n} \grave{-} W^{n} u$ - | 'be mastered, dominated' |
| yǐ- | 'see' | yì:-wú- | 'be visible' |

témbú-wú- and bèrè-wú- are often used in imperfective sentences, positive and negative: bèrè-wú-m̀-dó- $\varnothing$ 'it's not obtainable'. These two passive verbs indicate that the entities in question can be found/obtained, i.e. occur in the relevant zone in reasonable number. On the other hand, the attestation of $g \grave{\grave{r}}{ }^{n} \grave{j}-W^{n} \dot{u}-$ is an impersonal passive (195).

| [íyé | kálà] | bû: | gòr $r^{n} \grave{-}-W^{n} u ́-m ̀-d o ́-~$ |
| :--- | :--- | :--- | :--- |
| (today | even] | 3 Pl | be.stronger.than-Pass-Ipfv-Neg |

'Even today one cannot dominate them (=men of Beni).' [2005.2b.04]
In the perfective positive, the only form used for passive verbs with suffix -wú is a special form -wú-ẁ, as in (with Nasalization-Spreading) pá:mé-wnúbìw 'it has been understood' (a phrase used to acknowledge understanding what an addressee has just said). The ending might be compared with stative $3 \mathrm{Sg}-\grave{W}$ and related forms. Alternatively, but less convincingly it could be transcribed $-w \hat{u}:-\varnothing$ and compared to other falling-toned 3 Sg perfective-system forms ( $\S 3.2 .1 .3$ ) as well as to perfective-1b $-t \hat{i}:-\varnothing$ and recent perfect $-j \hat{\varepsilon}:-\varnothing$. No distinct plural form is used, hence gùrú témbú-wú-ẁ 'thieves were findable'. The negative counterpart, howerver, is the regular perfective negative: pà:mè- $w^{n} \grave{u}-r^{n} 1$ - $\varnothing$ 'it has not been understood'.

### 9.4 Mediopassive $-y v v^{-}$and transitive $-r v ́-\sim-1 v ́-$

There are a small number of verbs that alternate between a mediopassive in $-y v v^{-}$and a causative-like transitive whose usual suffix is $-r^{v}-(196 a)$. Monosyllabic $(C)_{v-i}$ inputs are not lengthened to $(C)_{v:-}$ before either suffix ('bathe', 'lie down'). Two irregular variations on this pattern have been found. In (196b), we appear to get $-l v$ - instead of $-r v-$ in the transitive form. This derivational pair ('go down', 'take down') is also irregular in several other Dogon languages. In (196c), an expected /dìmbì-rí-/ syncopates to /dìm-rí-/, then the tap /r/ (which can only occur intervocalically) hardens to $d$ (see §3.5.4.7).
MP gloss Tr gloss
a. -rv́- replaces $-y v ́-$ to form transitive
í:-yí- 'stand, stop' í:-ríl 'make stop/stand'
ú:-yí- 'fear, be afraid’ ú:-rú- 'scare, frighten'
dì-yé- 'bathe' dìré- 'bathe (sb)'
éw-yé- 'sit' éw-ré- 'seat, cause to sit'
bì-yé- 'lie down' bì-ré- 'cause to lie down'
túngú-yú- 'kneel’ túngú-rú- 'cause to kneel'
b. $-l v ́$ - is added to bisyllabic stem minus mediopassive $-y v ́$ - ending
sí-yé- 'go down' sí-lé- 'take (bring) down'
c. $-d \bar{v}$ - after $m$
dìmbì-yí- 'follow' dìm-dí- 'cause to follow'
Nasalization-Spreading can apply: tór ${ }^{n} 1$ í- $y^{n i ́ 1}$ 'squat', cér ${ }^{n} 1$ í- $y^{n} 11-$ '(lightning) flash’. In témí-yé 'be soaked', the suffix is unnasalized, as often after $m$ from $* \mathrm{mb}$.

There are also a handful of cases where $-l \bar{v}$ - is added directly to an unsuffixed monosyllabic intransitive (197a), with $C v$ - lengthened to $C V$ :- (§3.5.3.1) before the suffix, or where $-r^{\prime}$ - is added directly to an unsuffixed bisyllabic intransitive (197b).
(197) Transitive suffix added to unsuffixed intransitive

MP gloss Tr gloss
a. $-l v ́$-added directly to (monosyllabic) stem
bǎ- 'learn (a trade)' bà:-lí- 'teach (sb, a trade)'
dǒ- 'arrive' dò:-lí- 'deliver'
b. -rv́-added directly to unsuffixed stem
ùró- 'go up' ùlù-rú- 'take up'
For $1 \ldots-r$ instead of expected $r \ldots-r$ in 'take up' in (197b), see $\S 3.5 .4 .5$. For other cases of $-r v v^{-}$ or $-l \bar{v}$ - being added to a stem without $-y v^{\prime}$-, see deadjectival factitives in §9.7.

There are many other verbs ending in $\ldots y v$ - that may be frozen derivatives that originally contained the mediopassive suffix. Examples are ní: $y^{n} 1$ 'sleep' (regular causative ní:yní- $\left.w^{n} u ́ u-\right)$ and tór"íyí 'squat'.

Transitivity alternations of this type are much more common in Najamba, where -yદ́ is clearly identifiable as a mediopassive suffix.

### 9.5 Passive (-yદ́y)

A morpheme that is often heard as [jêj] can be added to an $\{\mathbf{H}\}$-toned form of the unsuffixed verb stem to produce a resultative passive. I take this to be -yદ́y (with H-tone) plus the 'it is'
clitic, which in this phonological context is realized as a final L-tone element (§11.2.1). With (animate) 3 Sg subject we get $-y \varepsilon ́ y=\grave{m}$, where the 'it is' clitic is nonzero. So the form in -yéy is syntactically nominal rather than verbal, and I have some examples in NP function without the 'it is' clitic, e.g. mùn-cèm ${ }^{\mathrm{L}}$ nó:- $W^{n}$-y ýy 'poisoned arrow', with an $\{\mathrm{L}\}$-toned form of mùnjù-cěm 'bow and arrow' followed by the $\{\mathrm{H}\}$-toned passive of nò:-wnú- 'cause X to (=let X ) drink', or in this context 'apply liquid to X '.

The initial $y$ of -yéy is not subject to Nasalization-Spreading from the preceding stem (198a). This raises the possibility that the morpheme is a clitic not subject to word-internal processes. (198d) is a relative clause.
a. [úrò kù] céwnílyêy $=\varnothing$
[house Def] build-Pass=it.is.Inan
'The house was built.'
b. yéngù bǎ: tóngú-yêy $=\varnothing$-bó
yesterday since write-Pass=it.is-3P1Sbj
'They (=letters) have been written since yesterday.'

$1 \mathrm{SgPoss} .{ }^{\mathrm{HL}}$ friend-AnSg kill-Pass $=$ it.is. 3 SgSbj
'My friend has been killed.' (jìyé-)
d. [áクày ${ }^{n}$ tí:-yéy kù] bû: $=m$
[like.that sell-Pass Def] $3 \mathrm{Pl}=$ it.is
'The ones who were sold like that were them.' [2005.2b.02]
[contraction of tíyé-yéy]
First and second person subjects are expressed with the corresponding conjugated forms of the 'it is' enclitic. The singular forms are added to (animate) singular suffix -m. -yદ́y- has Htone in these combinations.

b. î: jíyé-yéy $=m-1 ̂ y . \therefore \quad$ dè

1PlSbj kill-Pass=it.is-1P1Sbj if
'if we are killed, ...'
In at least one combination, the form with -yéy functions as a modifying adjective. This is غ̀lèy wá:mbú-yéy 'roasted peanuts’ (local French cacahuètes), where $\varepsilon$ ع́léy 'peanut' is \{L\}toned (as it should be before a modifying adjective). This term for 'roasted peanuts' competes with $\begin{array}{ll}\text { lèy tìgà-lâm-lâm (partially borrowed from Fulfulde). I did not record -yéy in other such }\end{array}$ expressions; 'roast meat' (local French viande grillée) is nàwnà: sìmbú (cf. verb símbé- 'roast').

The construction is negated by adding stative negative clitic = rá after -yદ́y, which again takes the falling-toned form -yêy-suggesting the presence of the 'it is' clitic (§11.2.1.4).

| $\left[\begin{array}{ll}\text { úrò } & k u ̀]\end{array}\right.$ | $c \varepsilon w^{n} 1 ́-y \hat{\varepsilon} y=\varnothing=$ rá $-\varnothing$ |  |
| :--- | :--- | :--- |
| [house | Def] | build-Pass $=$ it.is $=$ StatNeg- $3 S g S b j$ |

'The house wasn't built.'

### 9.6 Ambi-valent verbs without suffixal derivation

Some verbs have no change in stem shape when shifting between intransitive and transitive functions. An example is mò:lú-, which can be intransitive 'come together' or transitive 'bring together, assemble'.

### 9.7 Deadjectival inchoative and factitive verbs

For an adjective $A$, the inchoative means ' $(X)$ become $A$ ', and the factitive (logically a causative of the inchoative) means '(Y) make (X) A'. Examples: pé- 'become (=get) old', $p \varepsilon ́:-w u ́-~ ' m a k e ~(s b, ~ s t h) ~ o l d, ~ a g e ~(s t h) ' . ~$

In (201), the inchoative has no derivational suffix. It is cognate to the adjective, without there being any regular morphological relationship or clear derivational directionality. The factitive is the regular causative in -wú- of the inchoative.

| gloss | adj | inchoative | factitive |
| :---: | :---: | :---: | :---: |
| 'old' | $p \varepsilon$ : | $p \varepsilon$ - | pé:-wú- |
| 'ripe' | ìrěy | íré- | íré-wú- |
| 'half-ripe' | bòlòrǒy | bòlòró- | bòlorò-wú- |
| 'plump' | âm | áw ${ }^{n}$ á- | áw ${ }^{n}{ }^{\text {a }}$ - $W^{n} u^{-}$ |
| 'red' | bár ${ }^{n}$ à- | bàr ${ }^{\text {ná- }}$ | $b a ̀ r n a ̀-W^{n} u$ - |
| 'empty, bare' | kòrǒy | kóró- | kóró-wú- |
| 'weak, diluted' | sèré | séré- | séré-wú- |
| 'crooked' | gòlú | golí́- | gòlù-wú- |
| 'skinny' | kómbó | kómbó- | kómbó-wú- |
| 'easy, cheap' | nà: ráa $^{\text {n }}$ | ná: $\mathrm{r}^{n} 1$ Í- | ná: $r^{n} 1$ í- $W^{n}$ ú- |
| 'rotten' | òmbú | ómbí- | ómbú-wú- |

In the more isolated cases in (202), factitive suffix $-l v v^{-} \sim-r v ́-$ (probably identical to the transitive suffix) is used instead of the usual causative suffix -w
gloss adj inchoative factitive
a. -lí- after monosyllabic

| 'full' | bǎ: | bǎ- | bà:-lí- |
| :--- | :--- | :--- | :--- |
| 'firm, solid' | čW | ह́- | $\varepsilon ́:-l i ́-~$ |

b. -rí-
'tilted’ jèngú jèngí- jèทgì-rí-

In many other cases, the inchoative is derived suffixally, though idiosyncratic segmental differences between it and the adjective are observed in certain cases. The factitive is again the regular causative of the inchoative. The most common type is with $-l v$ - in the inchoative (203a). If the input contains a medial liquid $\{1 r\}$, the inchoative has 1 in the stem, and has $-r v$ - instead of $-l v$ - as suffix (203b). In other words, the only liquid sequence allowed in inchoatives is $l \ldots r$, compare $\S 3.5 .4 .5$. If the input contains medial $r^{n}$, the output has $n$ in the stem and $-r^{n} v^{-}$as the suffix (203c). A medial $y^{n}$ in the stem is associated with suffix $-n v^{-}$in the only relevant example (203d). If the stem ends in $m$, including $m$ from underlying $/ w^{n} /$ after Syncope, the inchoative suffix is $-d v^{-}$(203e). In some but not all cases, suffix allomorphs $-r v^{\prime}$ - and $-d \bar{v}$ - are associated with a stem-wide vowel-harmonic shift from $\varepsilon$ to $e$; note especially 'sweet; sharp' and 'white' in (203b).

| gloss | adj | inchoative | factitive |
| :---: | :---: | :---: | :---: |
| a. Inchoative $-1 \bar{v}-$, stem with no $\{1 r\}$ |  |  |  |
| 'squeezed' | pèngú | péngí-lí- | péngí-lí-wú- |
| 'thin' | mènjé- | mènjì-lí- | mènjì-lì-wú- |
| 'fat' | dùgú- | dùgù-ló- | dùgù-lò-wú- |
| 'coarse' | kúnjù-m | kúnjú-ló- | kúnjú-ló-wú- |
| 'short' | goั:W- | gò:-lí- | gò:-lù-wú- |
| 'good' | غ̀sú- | Ésílíl | Ésí-lú-wú- |
| 'bad, ugly' | mòsú- | mósí-lí- | mósí-lí-wú- |
| 'heavy' | dùsú- | dùsù-ló- | dùsù-lò-wú- |
| 'half-sweet' | ásù-m | ásí-lí- | ásí-lí-wú- |
| b. Inchoative -r $r^{\prime}$ - after stem with $l$ (from $l$ or $r$ ) |  |  |  |
| 'sweet; sharp' | Érù-m | élé-ré- | élé-ré-wú- |
| 'white' | pílé | pílé-ré- | pílé-ré-wú- |
| 'long, tall' | gùrô- | gùlù-rí- | gùlù-rù-wú- |
| 'smooth, sleek' | órù-m | óló-ró- | óló-ró-wú- |
| 'salty, sour' | párù-m | pálé-ré- | pálé-ré-wú- |
| 'soft (skin)' | yòrú | yòlì-rí- | yòlù-rù-wú- |
| 'moisten' | òrú | ślí-rí- | ólú-rú-wú- |
| 'bitter' | gárù-m | gàlè-ré- | gàlè-rè-wú- |
| c. Inchoative $-r^{n} V^{\prime}$ - after stem with $n\left(\right.$ from $r^{n}$ ) |  |  |  |
| 'lightweight' <br> 'deep' | nèr ${ }^{n} u ́-$ $W^{n}$ or $^{n}{ }^{\text {on }}$ | $\begin{aligned} & \text { nènì̀-rní- } \\ & W^{n} \grave{\partial} n i ̀-r^{n} 1 ́- \end{aligned}$ | $\text { nè̀nì-r } r^{n} 1 .-W^{n} u ́-$ <br> $W^{n} \grave{n} n \grave{u}-r^{n} u-W^{n} u ́$ |

d. Inchoative $-n v^{-}$- after stem with $y^{n}$
'big, adult' dìyná- dìy ${ }^{n}$ à-ní- dìynà-nì-wńú-
e. Inchoative $-d v$ - after stem with $m$ (from $w^{n}$ or $m$ )

| 'black' | jéwnè- | jèm-dé- | jèm-dè-wú- |
| :--- | :--- | :--- | :--- |
| 'pointed' | sîm | sím-dé- | sím-dé-wú- |
| 'difficult, costly' nǔm | núm-dó- | núm-dó-wú- |  |

A few adjectives containing a labial (including $w$ ) have an inchoative in $-y v^{\prime}-(204)$.

| gloss | adj | inchoative | factitive |
| :---: | :---: | :---: | :---: |
| 'dry' | mǎ: | mà-y ${ }^{n}$ á- | $m a ̀-y^{n}{ }^{\text {a }}$ - $W^{n} \underline{u}^{-}$ |
| 'cold' | tâm | tá ${ }^{n}{ }^{n}-y^{n} 1$ - | tá $w^{n}-y^{n} 1$ í $w^{n}{ }^{n}-$ |
| 'hot, fast' | $\widehat{\text { ¢ }}$ W | ów-yí- | ów-yú-wú- |

Various idiosyncratic cases are lumped together in (205).

| gloss | adj | inchoative | factitive |
| :--- | :--- | :--- | :--- |
| 'spacious' | káwà-W | kám-dí- | kám-dí- |
| 'distant' | Wǎ:W | Wàn-gí- | Wàn-gù-Wú- |
| 'dirty' | lórò | lóg-gí- | lóg-gú- |
| 'clean' | Ésè | Ésś- | Ésílíl-wú- |

For 'spacious', the inchoative fits pattern (203e), above, but the factitive lacks an additional derivational suffix. For wǎ: (<*wàgá) 'distant', inchoative wà-ŋgí- 'go far away' is now quite opaque morphologically, but the $g$ was originally transposed (metathesized) from the $* g$ of the stem; compare Jamsay wàzá 'distant', wànà- $\eta$ á- 'go far away'. lóg-gí- 'become dirty' is the other case I know of with $g$ in the suffix; compare Jamsay lóyó-jó- 'become dirty' (and lóỳ̀ 'filth'). One could argue for a denominal rather than deadjectival inchoative here (see the following section). The factitive is lóg-gú-, irregularly contracted from *lóg-gú-wú-. For 'clean', the factitive is morphologically the causative of a putative inchoative with suffix -lv́-, but the inchoative in common use is unsuffixed $\varepsilon$ śś-.

Adjectives with no corresponding derived verbs, or that have a suppletive inchoative and/or factitive, are in (206).

Adjectives
gloss adj inchoative factitive
a. suppletive
'small’ dâ:- sálírí- sálírú-wú-
b. no verb attested

| 'young' | jókkólè- | - | - |
| :--- | :--- | :--- | :--- |
| 'unripe, raw' | cèsú | - | - |
| 'other' | lǎw | - | - |
| 'new' | kálà | - | - |

### 9.8 Denominal verbs

A few scattered cases of verbs apparently derived from nouns (rather than adjectives) are in (207a-c). lóyò 'filth' (207d) can also be an adjective 'dirty', so lóg-gí- may really be deadjectival rather than denominal. The cases in (207e) exemplify noun-verb pairs with no
clear derivational directionality, perhaps best analysed synchronically as involving cognate nominals (§11.1.5.1), but in some cases the verb may be historically denominal.
(207) noun gloss verb gloss
a. suffix -rर́dû: 'load' dù:-rú- 'load (e.g. cart)'
b. suffix -lv́pǒ: (greeting) pó:-lí- 'greet'
c. suffix $-g$ v́-
úlì 'forest' úlú-gó- '(zone) become densely vegetated (e.g.after rains)'
lóyò 'filth; dirty’ lóg-gí- 'get dirty'
d. bármè 'injury' bármé- 'injure, wound'
ùrùyǐ: 'pain' ùrùyó- 'be in pain'
kèrìyêy '(a) share' kéríyé- 'share, divide up'
tìrâ: 'family name' tírí- '(griot) chant the ancestry of (sb)'

### 9.9 Obscure verb-verb relationships

Minor patterns are listed without comment in (208).
(208) verb gloss related verb gloss
ná- 'spend night' ná:-W ${ }^{n} 1$ í- 'greet in morning'
nàwná- 'malfunction' jà̀gì-rí- 'do harm to, ruin'

## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

Verbs have a lexically basic bare stem that occurs in nonfinal position in verb chains, and in most aspect-negation inflections. The only categories whose vocalism is not based on that of the bare stem are the imperative and the (derived) stative, both of which change the final vowel if the bare stem is nonmonosyllabic and ends in a high vowel. For most other verbs the stem-vocalism is invariable.

The bare stem as used in chains also preserves the lexical tone melody. This melody also surfaces in some aspect-negation inflections, but others impose a tone overlay.

Because of its wide distribution, the bare stem is used here as the citation form. In many cases it is clearly unsegmentable. However, nonmonosyllabic verbs seem to be divisible into two classes, one of which has a final $i ́$ that may have originally been a suffix (or final-vowel mutation).

### 10.1.1 Suffixes or chained verb stems?

There is a general issue as to whether nonzero AN (aspect-negation) morphemes following verbs are suffixes or chained verbs. I transcribe them as suffixes, since some of the AN morphemes show clear phonological interactions with the stem (tone-dropping and/or consonantal interactions involving sonorants). However, several positive perfective-system AN morphemes (-tî-, $-s \hat{o}-,-t \hat{a}-,-j \hat{\varepsilon}-)$ do not induce tone-dropping, do not contain sonorants, and themselves have contour tones. These could be taken as separate verbs, chained with a preceding (uninflected) verb stem.

The best evidence for autonomous word status is the fact that these perfective-system "suffixes" can be separated from the main verb by preparticipial subject pronouns in relative clauses; see $\S 14.1 .7$. For resultative sô-, experiential perfect tâ-, and recent perfect $j \hat{\varepsilon}-$ preceded by subject pronouns, see (441a-c). For perfective-1b tî- preceded by a subject pronoun, see (497). However, perfective-1a -:rè- and progressive -:rà- cannot be separated from the preceding verb in this way and are therefore clearly always suffixes.

### 10.1.2 Overview of categories

The indicative categories primarily mark aspect and negation, though there are also some perfect categories (here treated as subcategories of the perfective aspect). It is useful to think of the aspect-negation (AN) system as the product of an intersection between a binary perfective/imperfective opposition and polarity (positive/negative).
perfective positive
imperfective positive
perfective negative
imperfective negative

Most inflected verb forms are of the type STEM-AN-Pron, i.e. a verb stem followed by an AN (aspect-negation) suffix then a pronominal-subject suffix. There are also some categories in both the perfective positive and imperfective positive systems with zero AN suffix, so their structure is just STEM-Pron (or STEM- $\varnothing$-Pron). These unsuffixed AN categories occur in both reduplicated and unreduplicated forms. The reduplication is initial $C \grave{i}-$ or $C \grave{v}_{1^{-}}$(choice depends on speaker) in all three reduplicated categories: reduplicated perfective, reduplicated stative, and reduplicated imperfective. The unsuffixed AN categories, both reduplicated and unreduplicated, are distinguished from each other by tone overlays, by third person subject suffix allomorphs, and (in the case of the stative) by a change in stem-final vowel quality for some verbs.

The full set of categories is (209).
a. perfective positive system unsuffixed perfective
regular type with tone-dropped bare stem (§10.2.1.1)
type with lexical melody, $3 \mathrm{Sg}-\grave{W}, 3 \mathrm{Pl}$-mà (§10.2.1.2)
other variants for $3 \mathrm{Sg} / 3 \mathrm{Pl}$ only ( $\S 10.2 .1 .10$ )
reduplicated (unsuffixed) perfective (bare stem with $\{\mathrm{HL}\}$ tone)
stative
unreduplicated, final nonhigh vowel, $3 \mathrm{Sg}-\mathrm{W}^{\prime},\{\mathrm{H}\}$ tone (§10.2.1.10)
reduplicated, $\{\mathrm{HL}\}$ tone on stem (§10.2.1.11)
perfective-1a :-rغे-after bare stem (motion verbs, intransitives) (§10.2.1.5)
perfective-1b -tî- after bare stem (mostly transitive/active verbs) (§10.2.1.5)
resultative -sô- after bare stem (§10.2.1.6)
experiential perfect -tâ- after bare stem (§10.2.1.7)
recent perfect $-j \hat{\varepsilon}$ - after bare stem (§10.2.1.8)
b. perfective negative system (§10.2.3.2)
perfective negative -rí- after $\{\mathrm{L}\}$-toned bare stem experiential perfect negative -tà-lí- after $\{\mathrm{L}\}$-toned bare stem recent perfect negative $-j \grave{\varepsilon}-r^{\prime} 1$ - after $\{\mathrm{L}\}$-toned bare stem stative negative (§10.2.3.4)
c. imperfective positive system
unsuffixed imperfective (bare stem, bisyllabic /LH/ shifted to $\{\mathrm{H}\}, 3 \mathrm{Sg}-\grave{m}$ ) (§10.2.2.1)
reduplicated (unsuffixed) imperfective (same stem as unsuffixed imperfective) (§10.2.2.2)
progressive (also habitual) :-rà- after bare stem (§10.2.2.3)
d. imperfective negative system (§10.2.3.4)
imperfective negative -ı̀-dó- after bare stem, bisyllabic /LH/ shifted to $\{\mathrm{H}\}$
e. deontic modal categories
imperative
imperative (positive) (§10.5.-4)
singular addressee: imperative stem, no suffix
plural addressee: -ǹ $\sim$-nì added to imperative stem
prohibitive (imperative negative) (§10.5.5)
singular addressee: -ré after bare stem plural addressee: -ré-ǹ ~ -ré-nì after bare stem
hortative (§10.5.6)
hortative (positive)
singular addressee: -ń́ after $\{\mathrm{L}\}$-toned stem
plural addressee: -mây ${ }^{n}$ after $\{\mathrm{L}\}$-toned stem
hortative negative
singular addressee: -rغ̀-ḿ after bare stem
plural addressee: -rغ̀-mây ${ }^{n}$ after bare stem
quoted imperative (QuotImprt) (§10.5.7-8)
quoted imperative (positive)
singular subject: $-\bar{y}$ or $-\bar{y}$
plural subject: -bś added to 3 Sg form
quoted imperative negative
singular subject: $3 \mathrm{Sg}:-r \varepsilon ́-\bar{y}$ after bare stem
plural subject: -r£́- $\bar{y}$-bó after bare stem
quoted hortative ( $\$ 10.5 .9$ ), based on regular hortative forms
The indicative (non-deontic) AN categories in (209a-d) are all based on the moment of speaking or some narrative "present" as deictic center. The deictic center can be shifted into the past by adding a conjugated past clitic. For details see $\S 10.4$.

### 10.1.3 Verb-stem shapes

### 10.1.3.1 Generalizations about verb-stem shapes

Verb stems not clearly containing a derivational suffix may be monosyllabic, bisyllabic, or trisyllabic. A causative suffix can be added to increase the stem-syllable count by one. Monosyllabic verbs are mostly short-voweled (monomoraic) $C v$-. All stems of more than one syllable end in a short vowel (which, if a high vowel, is subject to Syncope and Apocope in some syllabic positions).

Lexical stem tone melodies are all-high /H/ and rising /LH/. The tone split in the /LH/ verbs is at the right edge, as seen in trisyllabic $C \hat{V} C \dot{C} C \dot{v}$ (as in e.g. Jamsay, but unlike e.g. Bankan Tey or Nanga where the tone shift occurs after the first mora, hence trisyllabic CV̀Ć́Cŋी). As explained and exemplified in §3.7.1.2 above, except for a few loanwords stems with initial voiced obstruent $\{b d j g\}$ have $/ \mathrm{LH} /$ melody, and those with initial voiceless obstruent $\{p t c k s\}$ have $/ \mathrm{H} /$ melody. This leaves stems with initial sonorant or with no initial consonant, which have a lexical choice between /H/ and /LH/.

There is one irregular <LHL> monosyllabic stem: $j \hat{\varepsilon}$ : 'bring'.
A few examples of verb stems are in (210), given in the bare stem (which is used in nonfinal position in chains and before several suffixes).

| (210) | stem | gloss |
| :--- | :--- | :--- |
|  | nǒ | 'drink' |
| tí | 'send' |  |
| káyá | 'shave' |  |
| tíwé | 'die' |  |
| bì-yé | 'lie down' |  |
| jàngí | 'knock together' |  |
| dùsùró | 'poke' |  |

### 10.1.3.2 Monosyllabic verbs

A full list of $C V$ - verb stems known to me is (211). Within each set, the verbs are sorted with high vowels at the top. The initial $C$ slot may be vacant, though I can cite only the two $\dot{\varepsilon}$ verbs as lacking the $C$. All oral vowel qualities are represented, though $C i ́$ and $C e ́-$ are relatively uncommon. Three stems with nasalized vowels are known; they are included in the list. Only regular inflectable verbs are included (see below for quasi-verbs and inflectional suffixes). If the verb is normally used with a cognate nominal or other fixed nominal, the relevant phrase is given in parentheses after the gloss.

For a discussion of the underlying high versus low lexical tone of the various $C \hat{v}$ - verbs, see $\S 10.1 .3 .5$, below.
form gloss
a. /H/-toned $C$ v́- after voiceless obstruent
$c \varepsilon ́ \quad$ 'take (handful of food)'
cé '(grasshopper) bite off (grain)'
kó 'eat (crushed millet)'
kó 'yawn' (mò:-kô: kó)
kó '(snake) slough (skin)' (kô: kó)
pá 'get a mate for'
$p \varepsilon ́ \quad$ 'break off (protrusion)'
$p \varepsilon ́ \quad$ 'get old'
$p \varepsilon ́ \quad$ 'spend the first half of the day' (うेmう̀y-p $\hat{\varepsilon}: p \hat{\varepsilon}$ )
pó 'skin and butcher (animal)'
pó 'heap up (firewood)' (tìrì̀-pǒ: pó)
pó 'whistle' (pǒ: pó)
sá 'reply' (mǒ: sá)
sá 'strain off water from'
sá 'uproot (large plant) with daba'
$s \varepsilon ́ \quad$ 'trim (hair, shrub)'
só 'scoop'; 'shovel up'
só 'dip briefly’
$s u^{n} \quad$ 'breathe' (sǔ: ${ }^{n}$ sún $)$
tá 'avoid (taboo)' (tă: tá)
tá '(ripening fruit) begin to turn color'
tá 'shoot'

| tá | '(trap) be sprung'; '(bone) be fractured' |
| :--- | :--- |
| té | '(muddied water) become clear' |
| té | 'be worried' (tê: té) |
| tí | 'send' |
| tó | 'build (wall)' (tǒ: tó) |
| tó | 'sow (by slashing earth)' (tǒy tô) |
| tó | 'step on' |
| tó | '(millet) grow a stem' |
| $t o ́ n$ | 'coil up' |

b. /JH/-toned $C \hat{v}$-after sonorant or with zero initial consonant

| $\varepsilon ́$ | 'become tight' |
| :--- | :--- |
| $\varepsilon ́$ | '(woman) marry (man)' |
| ló | 'go' |
| nє́ | 'eat (meal)' (něy n $n$ é |
| lá | 'choose, reserve' |
| ná | 'spend night' |
| ní | 'give' |
| nú | 'go in' |

c. /LH/-toned $C$ v̌- after voiced obstruent
bǎ 'learn'
bǎ '(container) be full'; '(person) be sated'
bě- 'remain'
bǒ 'unsheathe'
bǒ 'sip'
dǎ 'endure'
dǎn $\quad$ 'lock' (also dà: $y^{n} 1$ )
$d \check{\varepsilon} \quad$ 'be tired'
ď̌ 'arrive, reach'
ď̌ 'roast, burn'
dǔ 'carry (on head)'
gǎ 'cut (grass, rice) with sickle’
gǒ 'go out'
ǧ̌ 'jab’
jǒ 'pick (out)'
$j \varepsilon ̌ \quad$ 'take out (hot coals)'
$j \check{~} \quad$ '(man) marry (woman)'
d. /LH/-toned $C$ v̌- after sonorant or with zero initial consonant
mǎ 'shape (pottery)'
nǔ 'hear'
nǒ 'drink’
yǐ 'see'
yદ̌ 'come'
yǒ 'weep' (yǒ: yŏ)
wǒ 'catch'

```
b. <LHL> toned C\tilde{v}
    jě: 'bring'
```

Except for the irregular verbs 'come' and 'bring' (discussed below), the quality of the vowel of these monosyllabic vowel-final verbs is stable across inflections, including the imperative.

Quasi-verbs bù- 'be (somewhere)' and só- 'have' may also be mentioned. I treat perfective-1b -t̂̂, resultative -sô-, experiential perfect -tâ-, and recent perfect $-j \hat{\varepsilon}-$, as inflectional suffixes, but they could alternatively be analysed as chained auxiliary verbs as mentioned above.

### 10.1.3.3 'Come' (yघ̌)

Representative inflected forms of this verb are in (212).
form category comment
a. regular
$y \varepsilon ̌ \quad$ bare stem (in chains)
yè-rí- perfective negative
b. irregular
yá imperative vowel shift
$y$ y̌:-rغ̀- perfective-1a rising stem-tone
yì-yé-m̀ reduplicated imperfective $/ \varepsilon / \rightarrow e$
Although this is a monosyllabic $C v$ - verb in BenT, it may have originated as a bisyllabic stem with rising tone (cf. Jamsay yèré). The shift of the (final) vowel to $a$ in the imperative stem is typical of nonmonosyllabic stems. Paradigmatic alternation of $\varepsilon$ with $e$ is also found with the 'come' verb in Jamsay, though the details differ.

There is no morphological causative or other suffixal derivative, as $j \check{\varepsilon}$ : 'bring' is the functional equivalent of a causative.

### 10.1.3.4 'Bring' $(j \varepsilon ̌:)$

This verb is unique in having /LHL/ tone melody. It is therefore the only verb stem whose melody ends in an L-tone. The full bell-shaped <LHL> tone is heard in the unsuffixed forms (bare stem and imperative), and before several suffixes. Of particular interest is the fact that suffixes and clitics that force tone-dropping on other verb stems fail to drop the H-tone of 'bring'. Suffix/clitic-controlled tone-dropping affects verbs with /H/ and /LH/ lexical melodies, but has no effect on the only /LHL/ verb. In other words, suffix/clitic-controlled tone-dropping applies only to stem-final H -tone autosegments (those adjacent to the suffix or clitic). The unsuffixed perfective, which for other verbs has $\{\mathrm{L}\}$ stem tone, likewise retains the full lexical <LHL> tone for this verb: ... $j \check{\varepsilon}:-\varnothing$ 'he/she brought ...'.

When the <LHL>-toned form $j \check{\varepsilon}$ :- is followed by suffix or clitic with H-, but not <HL>, tone, tone sandhi applies. If the stem is followed by an H -toned suffix/clitic syllable, the verb simplifies to <LH>, but its original final L-tone is audible in the form of downstep (partial
pitch lowering) on the following H-toned syllable. One might expect this to apply when the suffix/clitic is $<\mathrm{HL}>$-toned, but my assistant pronounces the full $<\mathrm{LHL}>$ tone on the verb in this case, which allows clear articulation of the falling tone on the suffix/clitic.

The imperfective (and therefore the imperfective negative which is built on it) has the form expected of a simple $C \hat{v}$ - verb, and shifts the stem vowel quality from $\varepsilon$ to $e$.

| form | category | comment |
| :---: | :---: | :---: |
| a. unsuffixed (no audible AN suffix) |  |  |
| $j \varepsilon ̌:$ | bare stem | <LHL> |
| jă: | imperative | " |
| $j \check{\text { e:- }}$ | unsuffixed perfective | " |
| b. imperfective jé- |  |  |
| jìjé-ı̀ | reduplicated imperfective | $\varepsilon \rightarrow e$ |
| jé-ı̀̀-dó- | imperfective negative | " |
| jé-m | inanimate imperfective participle | " |
| c. suffix- or clitic-controlled tone-dropping resisted |  |  |
| $<L H L>$ |  |  |
| jě:-rí-y | 1Sg perfective negative | <LHL $><\mathrm{HL}>$ |
| $<L H>$ plus downstepped $H$ |  |  |
| jě:- ${ }_{\text {ríl }}$ ¢ | 3 Sg perfective negative | $<\mathrm{LH}><{ }^{\downarrow} \mathrm{H}>$ |
| $j \varepsilon ̌:-{ }^{\text {n }}$ ª́y ${ }^{n}$ | same-subject | " |
| d. non-tone-dropping suffixes and clitics |  |  |
| $<L H L>$ before < $H L>$ |  |  |
| $j \underline{\text { en:-tî- }}$ | perfective-1b | <LHL>< $>$ L $>$ |
| $<L H L>$ before $<L>$ |  |  |
| jě:--rà- | progressive | <LH $><$ L $>$ |
| jě-ma | plural perfective participle | " |
| $j \varepsilon ̌:-\grave{y}$ | 1 Sg unsuffixed perfective | <LHL> |
| " | 3Sg quoted imperative | " |
| $j \varepsilon$ č- ${ }_{\text {l }}$ | inanimate perfective participle | " |
| jě-m̀ | singular perfective participle | " |
| $<L H>$ plus downstepped $H$ |  |  |
| jě:- ${ }^{+} n i ́$ | same-subject | $<\mathrm{LH}><$ L $>$ |

The causative is $j \grave{\varepsilon}:-w u ́$ (less often $j \check{\varepsilon}:-w u ́-)$ 'cause to bring'. The more common variant treats the stem as $<\mathrm{LH}>$ rather than as $<\mathrm{LHL}>$.

Like $y \varepsilon ̌$ है- 'come', jě:- 'bring' may have descended directly from a bisyllabic stem (cf. Jamsay $j \grave{z}: r \hat{\varepsilon}$ ). In Toro Tegu, several paradigmatic forms are based on a tonally irregular $<\mathrm{HL}>\mathrm{H}$ toned stem zê:rú-. At an earlier time, all of these 'bring' forms derive from a twoverb combination 'take, pick up' plus 'come'. The 'take' verb survives in BenT in specialized senses: $j \varepsilon \check{y}$ 'take out (hot coals)' or '(man) marry (woman)'. There was also a complementary two-verb combination with 'take, pick up' plus 'go', meaning 'deliver, convey, take (something, somewhere)'. The original two-part 'bring' and 'convey' construction is best preserved in Donno So.

### 10.1.3.5 Lexical tone distinctions in $C V$ verbs

$C V$ verbs (i.e. those with a single mora) distinguish $/ \mathrm{H} /$ from $/ \mathrm{LH} /$ melodies as do nonmonosyllabic verbs. However, the difference is difficult to hear in $C_{V}$ verbs. It is easier to hear the difference in certain suffixal forms that provide one or more additional moras and that do not override the lexical melody. An example is the quoted imperative, which is $C \grave{v}-\dot{y}$ for some $C v$-verbs and $C v ́-y ́$ for others. See $\S 10.5 .7$ for lists.

The distinction betwen $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ monosyllables is also respected in suffixal derivatives from these $C v$ stems (214). The stem vowel is lengthened before such a suffix (214).
(214) stem gloss derivative gloss
a. reversive from $/ \mathrm{H} /$ input
tó 'step on' tó:-rí- 'remove foot from'
b. causative from $/ \mathrm{H} /$ input
nع́- 'eat (meal)' $\quad n \varepsilon$ :- $W^{n} u ́-\quad$ 'give food to'
ló- 'go’ ló:-wú- 'allow to go'
nú- 'enter' nú:- $W^{n} u ́-\quad$ 'make enter'
sá- 'reply' sá:-wú- 'make reply'
c. causative from / $\mathrm{LH} /$ input

| bě- | 'remain' | bè:-wú- | 'cause to remain' |
| :---: | :---: | :---: | :---: |
| пวั- | 'drink' | nò:-W ${ }^{n}$ ú- | 'give drink to' |
| yǒ- | 'weep' | yò:-wú- | 'make weep' |
| nǔ- | 'hear' | nù:-W ${ }^{n}$ ú- | 'make hear' |
| yǐ- | 'see' | yì:-wú- | 'cause to see' |
| bǎ- | 'learn' | bà:-lí- | 'teach (sb, a trade)' |
| dǒ- | 'arrive' | dò:-lí- | 'deliver' |

The perfective-1a with suffix :-rغ̀- and the progressive with suffix :-rà- also make a distinction between $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ verbs. The perfective-1a suffix is used with a subset of verbs, and is therefore not as useful as the fully productive progressive suffix. Relevant forms of CV - verb stems are in (215). Those in (215a) have H-tone on the stem, those in (215b) have LH-tone.

| gloss | stem | perfecti | progressive |
| :---: | :---: | :---: | :---: |
| a. 'go' | ló- | ló:-rè- | ló:-rà- |
| 'spend night' | ná- | ná:-rı̀- | ná:-rà- |
| 'go in' | nú- | nú:-rè- | nú:-rà- |
| 'become tight' | $\varepsilon$ ¢- | દ́:-rغ̀- | દ́:-rà- |
| 'send' | tí- | - | tí:-rà- |
| 'shoot' | tá- | - | tá:-rà- |
| 'reply' | sá- | - | sá:-rà- |
| 'eat (meal)' | л $\varepsilon$ - | - | né:-rà- |



### 10.1.3.6 $C v y^{n}$ verbs

Usually a verb heard as e.g. $C v(:) y(v=$ vowel) with a final semivowel reflects optional (but very common) syncope or apocope from bisyllabic forms like $/ \mathrm{Cv}(:) y i /$. The fuller inflectional paradigm brings out the underlying bisyllabic quality. In particular, the imperative changes the final $i$ to $a$. Several suffixal inflections also bring out the bisyllabic quality.

| (216) | gloss | bare stem | imperative | imperfective |
| :---: | :---: | :---: | :---: | :---: |
|  | 'shut' | pí: $y^{n} \sim$ pí: $y^{n i}$ | pí: $y^{n}$ à | pí: $y^{n} 1$ í-m̀- |
|  | 'fart' | gǐ: $y^{n} \sim$ gì: $y^{n}{ }_{1}$ | $g i ̌: y^{n}{ }^{\text {a }}$ | gì: $y^{n} 1$-ım- |
|  | 'take' | ǎy ~ àyí | áyâ | àyí-m- |
|  | 'hold' | wǎy ~ wàyí | wáyâ | wàyí-m̀- |

There are, however, three very common verbs with true $C v y^{n}$ shape. All happen to have nasalized $y^{n}(217)$. The imperative retains the $C v y^{n}$ shape rather than ending in a secondsyllable $a$. The $y^{n}$ disappears in the imperfective (and other inflections based on it), which is of the form (Cì-)Cá-m̀, arguably from /Cán ${ }^{\text {n }}$ m/ with nasalized vowel.

| gloss | bare stem | imperative | imperfective |
| :---: | :---: | :---: | :---: |
| 'put' | gǎy ${ }^{\text {n }}$ | gǎy ${ }^{\text {n }}$ | gì-gá-m̀ |
| 'do, make' | káy ${ }^{\text {n }}$ | káy ${ }^{\text {n }}$ | kì-ká-m̀ |
| 'say' | $g u y^{n}$ | gǔy ${ }^{\text {n }}$ | gù-gú-m̀ |

The final $y^{n}$ is also absent in the perfective negative: gà-ní-, kà-ní-, gù-ní-. The -ní- allomorph of the suffix is unique to these verbs (other verbs have -rí-, or -rníl due to NasalizationSpreading).
káy ${ }^{n}$ has a causative ká: ${ }^{n}-W^{n} u ́-$ 'have (someone) do/make’. káy ${ }^{n}$ and $g a ̌ y^{n}$ have agentive forms (with the complement in compound-initial form) with plural -kǎ: ${ }^{n}$ and $-g a \check{ }:^{n}$ and singular $-k \check{a n}^{n}-m$ and $-g a^{n}-m$.

### 10.1.3.7 Bisyllabic verbs

Bisyllabic verbs may be of the segmental shape $C v C v, C v C C v$, or $C v: C v$. The final vowel is always short. The initial $C$ position may be vacant $(v C v)$, etc. The lexical tone is $/ \mathrm{H} / \mathrm{or} / \mathrm{LH} /$. In the case of $/ \mathrm{LH} /$, the normal tone break is at the syllabic boundary, hence $C \grave{v} C \hat{v}, C \grave{v} C C \dot{v}$, $C \dot{v}: C \bar{v}$. However, in $C \grave{v} C \hat{v}$ and $C \hat{v}: C \bar{v}$ verbs, when the final vowel is high $\{i u\}$, it may be lost by Syncope or Apocope, and in this case the first syllable (always a long syllable in this situation) has rising tone.

Except for the imperative, where final high vowels and final $\varepsilon$ shift to $a$. bisyllabic verbs have stable vowel qualities including the final vowel. That is, the bare stem, used in chains and with various inflectional suffixes, has constant vowel qualities (disregarding low-level deletion of high vowels in certain positions).
chains presuffixal imperative gloss
a. vowels identical except $\varepsilon$ : $\mathrm{CaCa}, \mathrm{CóCo}, \mathrm{CoCo}, \mathrm{CeCe}$
táwá táwá- táwá 'touch'

pótó pótó- pótó 'toss'
dòmbó dòmbó- dómbó 'roll on turban'
tégé tégé- tégé 'speak'
cé:lé cé:lé- cé:lè 'do or make well'
éw-yé éw-yé- éw-yè 'sit down'
b. identical $\varepsilon$ vowels: $C \varepsilon C \varepsilon$ (shift to final a in imperative)
ह́Wé ह́wé- Éwá 'buy'
c. $\{i u\}$ plus harmonic mid-height vowel except $\varepsilon$ : $\mathrm{CiCe}, \mathrm{CuCo}, \mathrm{CuCo}$
sí-yé sí-yé- sí-yé 'go down'
gìyé gìyé- gíyé 'dance’
kúwó kúwó- kúwó 'bite’
nùwnó nùwnó- núw ${ }^{n}$ ó 'sing'
súsó súsó- súsó 'be cured’
dùyó dùyó- dúyó 'insult'
d. $i$ plus harmonic $\varepsilon$ : $C i C \varepsilon$ (shift to final a in imperative)
$\begin{array}{llll}\text { jìyé jìyé- jíyá } & \text { 'kill' }\end{array}$
bìré biré- bírá 'work’
e. final high vowel (various preceding vowels)

| làrí | làrí- | lǎrà | 'chase' |
| :--- | :--- | :--- | :--- |
| dà:yí | dà:yí- | dà:yí | 'encounter' |


| káwrú | káwrú- | káwrà | 'split (nut)' |
| :--- | :--- | :--- | :--- |
| dèyí | déyí- | děyà | 'put down' |
| ómjí | ómjí- | ómjà | 'urinate' |
| jòngí | jòngí- | jóngà | 'cure' |
| tíní | tíní- | tínà | 'look' |
| túmdí | túmdí- | túmdà | 'begin' |
| témbí | témbí- | témbà | 'find, inherit' |

Although I have included $C v C C v$ - and $C v: C v$ - stems along with $C v C v$ - in this section, the phonologically most relevant division of nonmonosyllabic verbs is into prosodically light $C v C v$ and prosodically heavy $C v C C v-, C v: C v-$, and trisyllabic. This division is relevant to tone overlays in the imperative stem. Therefore nothing much is at stake in the issue whether e.g. káwrú 'split (nut)' is bisyllabic or, via Syncope of a medial high vowel, trisyllabic (/káwúrú/).

### 10.1.3.8 Triisyllabic verbs

Verbs with three syllables may be derived or underived (some of the synchronically underived stems may have originated as derivatives). These verbs have fairly complex interactions between the vowels of the three syllables.

The first type to be considered ends in e or $\boldsymbol{o}$ (219). This ending is obligatory when the first vowel is likewise e or $o$, and it is possible when the first vowel is high $\{i u\}$. The medial syllable has a high vowel (e...i...e, i...i...e, o...u...o, u...u...o).
(219) chains presuffixal imperative gloss

| e...i...e yègìsé | yègìsé- | yègísè | 'cut up' |
| :---: | :---: | :---: | :---: |
| i...i...e |  |  |  |
| síríyé | síríyé- | síríyè | 'cut into strips' |
| bìlìré | bìlìré- | billírè | 'roll over' |
| jìgìré | jìgìré- | jìgírè | 'sway' |
| o...u...o |  |  |  |
| kógúsó | kógúsó- | kógúsò | 'cough' |
| u...u...o |  |  |  |
| dùlùró | dùlùró- | dùlúrò | 'roll on ground' |

Patterns e...e...e and o...o..o, which differ from those in (219) by not raising the medial vowel to $\{i u\}$, occur occasionally in underived stems. For e...e...e, I have recorded bèlèré- 'smooth (e.g. a soap ball) by rubbing in one's palm', mèngèré- (with variant mèngìré-) 'rub into balls (in one's hands)', and bègèré- 'belch' (used with cognate nominal as bégérè bègèré- 'belch, emits belches'). For $o \ldots o \ldots o$, I can cite dólóró- 'shape into balls'.

Additional stem-vowel sequences occur in suffixal derivatives of e.g. $\mathrm{CvCV}-\mathrm{Cv}$ - shape when a final non-high vowel of the input $C v C v$ - stem is not shifted to a high vowel in the
derivative. Examples are e...e...e in reversive pémbé-ré- 'ungird, remove (woman's) wrap)' and néngé-ré- 'become uncaught (from tree)', and u...o...o in reversive kúmjó-ró- ‘uncrumple’.

The other general class of trisyllabic verbs ends in a high vowel, which may be either $i$ or $u$ depending on the surrounding vowels (and semivowels). The medial vowel is also a high vowel. There is a fair amount of fluctuation in pronunciation of these high vowels, but I think $i$ is usually more basic, since phonetic [u] is most often heard in the presence of another rounded segment in the stem, i.e. from the set $\left\{\begin{array}{l}\text { u o } \\ \circ\end{array}\right.$

The general pattern with a final high vowel is obligatory when the vowel of the first syllable is from the set $\{a \varepsilon \rho\}$, and is possible when the first vowel is high $\{i u\}$. In the imperative, the final high vowel is replaced by $a$, and if the first vowel of the stem is from the set $\{a 0\}$, the vowel of the second syllable assimilates totally to this initial vowel (220).

| chains | presuffixal | imperative | gloss |
| :---: | :---: | :---: | :---: |
| ع...i...i |  |  |  |
| nèr ${ }^{\text {nìyí }}$ | nèr ${ }^{\text {nìyí- }}$ | nèr ${ }^{n}$ íyà | 'winnow (in wind)' |
| pédígí | pédígí- | pédígà | 'winnow (by shaking)' |
| sésírí | sésírí- | sésírà | 'filter (liquid)' |
| i...i/u...i/u |  |  |  |
| wìjì̀wú | wìnjìwú- | wìnjíwà | 'spin' |
| píníw ${ }^{\text {níli }}$ | píníw ${ }^{\text {nil}}$ | píníwnà | 'go back' |
| dìmbì-yí | dìmbì-yí- | dìmbí-yà | 'follow' |
| u...i/u...i/u |  |  |  |
| nùnùr"ú | nùpùr ${ }^{\prime \prime}$ | nùnúrnà | 'quiver, move (while stationary)' |
| a...i...i |  |  |  |
| dàngìrí | dàngìrí- | dà̀gárà | 'break in half' |
| bàngìrí | bàngìrí- | bàngárà | 'hide (something)' |
| っ...i...i |  |  |  |
| gòngìrí | gòngìrí- | gòngórà | 'go around' |

In suffixally derived verbs, we can also cite patterns that do not occur with underived stems. These are cases where the middle vowel is non-high, in vocalic environments that require a medial high vowel in an underived stem. Examples: a...a...u in causative wàsà-wú- 'let remain', $\varepsilon \ldots \varepsilon \ldots u$ in causative $\varepsilon$ éré-wú- ‘let escape’, e...e...u in causative éw-yé-wú- ‘cause to sit', i...e...i in reversive píré-rí- 'get unbogged', $u \ldots . . . . u$ in causative bùrò-wú- 'reanimate', and $u \ldots . . . . u$ in causative jùwj̀-wú- ‘inform' (cause to know).

### 10.2 Positive indicative AN categories

10.2.1 Perfective positive system (including perfect and stative)

### 10.2.1.1 Unsuffixed perfective with $\{\mathrm{L}\}$ toned stem

The unsuffixed perfective (positive) is used instead of a marked perfective-system form when another constituent is focalized (whether or not it is overly marked with the focus clitic). In other words, the unsuffixed perfective is used when the verb is part of a defocalized clausal residue.

The unsuffixed perfective is characterized by an $\{\mathbf{L}\}$ tone overlay on the stem (tonedropping). The only exception is $j \tilde{\varepsilon}$ :- 'bring' (unsuffixed perfective $j \tilde{\varepsilon}:-$ ), although some monosyllabic verbs also have an alternative perfective with long falling-toned vowel (see below). I use the notation ".Pfv" in interlinears.

```
a. âmm-\varnothing yû: dùyò-\varnothing
    who?=Foc millet pound.Pfv-3SgSbj
    'Who [focus] pounded the millet (ears)?'
```

b. fá:túmà $=m \quad$ yû: dùỳ̀- $\varnothing$
Fatouma=Foc millet pound.Pfv-3SgSbj
'It was Fatouma [focus] who pounded the millet (ears).'
c. $\left[k\right.$ : $^{n \mathrm{~L}}$ ǹjé] dùyò- $\varnothing$
[thing ${ }^{\mathrm{L}}$ what?] pound.Pfv-3SgSbj
'What [focus] did she pound?'
d. án-dá: yû: dùyò- $\varnothing$
where? millet pound.Pfv-3SgSbj
'Where [focus] did she pound the millet (grain spikes)?'

The paradigm is (222), using dùyó- 'pound (grain spikes)' and ló- 'go'. In the 1 Pl and 2 Pl , the dying-quail (in)tonation ( $\therefore$ ) consists of prolongation of the final vowel and superimposition of a [HL] pitch pattern on the final syllable, keeping an initial L-tone in the case of a monosyllabic. For this "tonation" process, phonetically intonation-like but grammaticalized and integrated with tones, see §3.8.3.

Paradigm of unsuffixed perfective (after $\{\mathrm{L}\}$-toned stem)

| category | suffix | 'pound' | 'go |
| :---: | :---: | :---: | :---: |
| 1Sg | -y | dùyò-ỳ | lò-ỳ |
| 2 Sg | -Ẁ | dùyò-Ẁ | lò-Ẁ |
| 1 Pl | - y $^{\text {a }}$ | dùyò-ỳ. ${ }^{\text {[dùj} \hat{\jmath} \rightarrow \mathrm{j}]}$ | lò-ỳ $\therefore$ [ $100 \rightarrow \mathrm{j}]$ |
| 2 Pl | - ${ }_{\text {W }}$ : | dùyò-Ẁ̀ $\therefore$ [dùjô $\rightarrow$ w] | $10 ̀-W ̀ .:[10 ̆ \rightarrow W]$ |


| $3 \mathrm{Sg} /$ Inan | $-\varnothing$ | dùỳ̀- $\varnothing$ | lò- $\varnothing$ |
| :--- | :--- | :--- | :--- |
| 3Pl | $-b o ́ \sim ~-b o ̀ ~$ | dùyò-bó~ dùyò-bò | lò-bó~ lò-bò |

Note the zero 3 Sg , with no lengthening of the final vowel. The 3 Pl suffix is often heard as H-toned -bó in elicitation, and it was heard as such in some textual examples. However, L-toned -bò is also possible, especially when clause-final (pre-pausal). One speaker featured in the texts pronounced the 3 Pl suffix as -bá (-bà) with a-vowel. (Jamsay likewise has this dialectal split, with -bà in the plains villages such as Dianwely and -bò in some montane villages such as Pergué).

The unsuffixed perfective is common (in elicitation), though not obligatory, when a pronominal direct object is present (223), even when this object shows no overt signs of focalization. More generally, the mere presence of a preverbal constituent may suffice to license the unsuffixed perfective.

```
a. í sìy\grave{-}\varnothing
    1SgObj hit.Pfv-3SgSbj
    'He/She hit me.'
```

b. $\varepsilon r^{n} \varepsilon \quad$ sùỳ̀̀-ỳ
3SgObj hit.Pfv-1SgSbj
'I hit-Past him/her.'
10.2.1.2 Unsuffixed perfective with lexical tones, $3 \mathrm{Sg}-\grave{W}, 3 \mathrm{Pl}$-mà

A distinct unsuffixed perfective, this time with lexical tone melody, has the pronominalsubject paradigm (224). The pronominal endings are all L-toned.

Paradigm of alternative unsuffixed perfective (lexical tones)

| category | suffix | 'pound' |
| :---: | :---: | :---: |
| 1 Sg | -y | dùyó-y |
| 2 Sg | -Ẁ | dùyó-ẁ [homophonous with 3 Sg ] |
| 1 Pl | - $\grave{\text { y }}$. | dùyó-ỳ.: |
| 2 Pl | $-{ }_{\text {- }} \therefore$ | dùyó-Ẁ: |
| 3Sg/Inan | -Ẁ | dùyó-Ẁ [homophonous with 2 Sg ] |
| 3 Pl | -mà | dùyó-mà |

This paradigm is unusual. For some verbs, the $1 \mathrm{st} / 2 \mathrm{nd}$ person forms are indistinguishable from the corresponding unsuffixed imperfectives, except that the latter is optionally reduplicated in some contexts.

On the other hand, 3rd person $-\grave{W}(\mathrm{Sg})$ and $-m a ̀(\mathrm{Pl})$ are identical in form to the suffixes used in perfective relative-clause participles, so the difficulty in interpretation is to distinguish these main clauses from relative clauses. When the subject is pronominal, one can observe whether it appears as a preparticipial pronoun. If so, the clause is subordinated
(relative or similar). See $\S 16.1 .2$ for clauses ending in $-W \grave{W}$ kù dè and $-\grave{W}$ dè. However, the distinction between main clause (in a narrative sequence) and a subordinated clause is not very great in BenT discourse.

In addition, $-\grave{W}$ is the stative 3 Sg subject suffix, and -mà also appears in the 3 Pl subject form of the experiential perfect.

A textual example of 3 Pl -mà is ló-mà 'they went' in line 7 of (684) in the sample text. For more 3 Sg and 3 Pl examples see (550a-c) in §17.1.1.2.

The clearest $1 \mathrm{st} / 2$ nd person subject example in the texts is (225). The speaker was offering to add something to what someone else had said in an interview-style text.

| [í | kálà] | [ìgú | kày] | $n u ̌-y^{n}$ | dá:-wó, |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $[1 \mathrm{Sg}$ | too] | [Prox.Inan | Top] | hear.Pfv-1 SgSbj | a.little, |
| [ú | mâ:] | bàr | 交-ḿm |  |  |
| $[2 \mathrm{Sg}$ | Dat] |  | -Hort |  |  |
| 'I too, as for that, I have heard a little. Let me help you-Sg.' [2005.2b.04] |  |  |  |  |  |

Elicitation of parallel forms of other verbs produced e.g. dùwó-ỳ 'I (have) left' and tóró-y 'I (have) pounded'. All such 1 st/2nd person forms can also function as unsuffixed imperfectives. However, the sense of (225) in the text was clearly perfective (or resultative), and my assistant rendered the example above into Jamsay with the perfective-2 (áyá-sà-m 'I heard'). Moreover, the assistant gave the (BenT) 3 Sg subject counterpart to the 1 Sg verb in the example as $n u \check{-}-\grave{W}^{n}$, and the 3 Pl subject equivalent as nǔ-mà.

The greeting phrase jâm dèr ${ }^{n} \dot{\varepsilon}-\grave{W}^{n}$ ('peace' plus 'you-Sg spent day'), see (653) in the sample text, is another probable example.

### 10.2.1.3 Variant third-person perfective $C \hat{v}$ :- with $<\mathrm{HL}>$ tone

Some $C v$ - verbs have a variant third-person perfective with $<\mathrm{HL}>$ tone, which requires lengthening of the vowel by Contour-Tone Mora-Addition (§3.7.4.1). These forms function as alternatives to the regular unsuffixed perfective and suffixally marked perfectives. Attested forms are in (226).

| stem | gloss | $<\mathrm{HL}>$ perfective | comment |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| ní- | 'give' | nî:- |  |
| gǒ- | 'go out' | gô:-- |  |
| $d \check{-}$ | 'arrive' | $d \hat{o}:-$ | (see $\S 15.2 .1 .4)$ |
| $d \check{-}$ | 'be tired' | $d \hat{\varepsilon}:-$ | $[2005.1 \mathrm{~b} .06]$ |

A 3Pl subject form has the usual 3Pl perfective allomorph -bò, as in nî:-b̀̀ 'they gave'. However, an informant rejected all potential 1st/2nd person subject combinations.

It is likely that the various $<\mathrm{HL}>$-toned perfective-system inflectional suffixes, such as perfective-1b $-t \hat{i}:-\varnothing$ and recent perfect $-j \hat{\varepsilon}:-\varnothing$ (shown here in their lengthened 3 Sg forms), originated as similar formations (§10.2.1.5-8).

Textual examples are in (227). (227c) suggests that the $<\mathrm{HL}>$ form (like the regular unsuffixed perfective) may occur in clauses with a focalized constituent.
a. sù:-díyáy [bû: ${ }^{\mathrm{L}}$ mà:]
francolin ${ }^{\mathrm{L}}$-thigh [3P1 ${ }^{\mathrm{L}}$ Dat]
gò-ló $\quad{ }^{\mathrm{HL}}{ }_{n i ̂}^{:}-\varnothing$
go.out-Caus $\quad{ }^{H L}$ give. $\mathrm{Pfv}-3 \mathrm{SgSbj}$
'She took out and gave them the francolin thigh.' [2005.2a.06]
b. $j \check{x}:{ }^{n}-m \quad y \check{~} \quad{ }^{\mathrm{HL}} d \hat{0}:-\varnothing$
hare- AnSg come ${ }^{\mathrm{HL}}$ arrive. $\mathrm{Pfv}-3 \mathrm{SgSbj}$
[yદ̌ á dó-Ẁ kù dè]
[come 3ReflS arrive.Pfv-Ppl.Inan Def if]
'Hare came and arrived. When he had come and arrived, ...' [2005.2a.07]
c. $\grave{\eta} g u ́=\grave{m} \quad\left[\grave{r} r^{n} \grave{\partial}:-[l o ̌-\grave{y}] \quad k u ̀\right] \quad{ }^{\mathrm{HL}}{ }_{j \hat{\varepsilon}}:-\varnothing$

Prox.Inan=Foc [outback ${ }^{\text {L }}$-[go-VblN] Def] ${ }^{\text {HL }}$ bring.Pfv-3SgSbj
'This [focus] is what has brought (about) that going away (for work).' [2005.1b.06]

For \{HL\}-toned nonfinal verbs in chains, attested with verbs of conveyance ('bring', take [convey]'"), see $\S 15.1 .2 .2$. The relationship between the two constructions, historical and synchronic, is unclear.

### 10.2.1.4 Other variant third-person perfectives

There is a perfective form tángì- with a vague sense (here glossed simply as 'do'), combined with a preceding chained VP. The unusual feature here is the $\{\mathbf{H L}\}$ tone pattern, which is reminiscent of the monosyllabic $C \hat{v}$ :- perfectives discussed in the preceding section. In (228b), tángì- is phonetically reduced to tân- in allegro speech.
a. [kú ${ }^{\text {HL }}$ Érìm kù]
[InanPoss ${ }^{H L}$ sweetness Def]
lózó láwá tángì- $\varnothing$
overflow pass do.Pfv- 3 SgSbj
'Its tastiness was extreme.' [2005.2a.07]
b. bày [àyây ${ }^{n} \quad{ }^{\mathrm{L}}$ nà̀ $\left.^{n}\right]$ [bê:n dùwó tí=ń]
well [how? Inst] [B leave Perf=and.SS]
bû: ínjírí yò夕ó tầ-bò
3PlSbj get.up run do.Pfv-3PlSbj
'Well, how was it that they (residents of other villages) got up and fled once and for all, having left Beni (behind)?' [20045.2b.04]

The $\{\mathrm{HL}\}$ pattern in tángì- suggests a connection with Jamsay tápà:, which (in this form) is confined to 'if' clauses ('if it happens that ...'). The BenT verb tángí- can also mean 'cross (e.g. river)', '(fire) be lit', or 'become (something)', and is clearly cognate to Jamsay tápá- with similar meanings. In both languages the $\{\mathrm{HL}\}$-toned perfective form of this verb is unique. Togo Kan táyá yè with L-toned form of yě 'go' corresponds to Jamsay táyà: in conditionals and points to an original verb-chain.

A variant 3 Sg form, apparently perfective, with final short $i$ replacing a lexical midheight vowel is attested in (229), if correctly analysed.

| áywà | [1ı̀sô: | kù] | dùr ${ }^{\text {nì̀- }} \varnothing$ |
| :---: | :---: | :---: | :---: |
| well | [foot | Def] | follow.t |
| 'Well, she went following the tracks.' [2005.2a.07] |  |  |  |

10.2.1.5 Perfective-1a :-rغ̀-, perfective-1b -tî-

The perfective-1 is a suffixally marked perfective. It has two versions, perfective-1a $:-r \grave{\varepsilon}$ - (which lengthens the preceding vowel), and perfective- $1 \mathrm{~b}-t \hat{\imath}-$. Both are added to the bare stem of the verb, with no special tone overlay, so the lexical melodies appear. While the perfective-1a suffix contracts with the stem, the perfective-1b suffix has no phonological interaction with the stem, and could be analysed as a chained auxilary verb following the bare stem of the main verb.

Perfective-1a :-re- is used with motion verbs, stance verbs, and a wide range of basically stative intransitives. The presence of a locational NP, arguably a "direct object," with a motion verb does not affect the choice of perfective allomorph, so (230a) and (230b) have the same verb forms.
a. ló:-rè- $\varnothing$
go-Pfv1a-3SgSbj
'He/She went.' (ló-)
b. bàmàkó ló:-rè- $\varnothing$

Bamako go-Pfv1a-3SgSbj
'He/She went to Bamako.'
c. éw-yé:-r-à:
sit.down-MP-Pfv1a-3P1Sbj
'They sat down.' (éw-yé-)
d. tégé:-rè- $\varnothing$
become.big-Pfv1a-3SgSbj
'He/She has grown up.' (tégé-)

Some other verbs taking :-rè- include ùró- 'go up', gǒ- 'go/come out', yàyá- 'fall (down)', tíwé- 'die', and adjectival inchoatives like jèm-dé- 'become black' and bàr ${ }^{n}$ á- 'become red'.
$C V$ - verbs show their lexical /H/ or /LH/ melody in the perfective-1a. Examples of /H/ are ná:-rè- 'spent night' (ná-) and ló:-rè- 'went' (ló-). Examples of /LH/ are gǒ:-rè- 'went out' ( $g o \check{-}$ ), dǒ:-rè- ‘arrived' (dǒ-), and bě:-rغ̀-- 'remained' (bě-).

A handful of syntactically transitive verbs take :-rè. They are noncanonical, non-impact transitives. An example is 'forget' (231).

```
\varepsilońwá: ìré:-rغ̀-ỳ
market forget-Pfv1a-1SgSbj
```

    'I forgot the market.' (ìré-)
    The paradigm of :-rè- has $3 \mathrm{Pl}:-r-a ̀:$, but is otherwise regular (232).
(232) category form

| 1 Sg | :-rè-ỳ |
| :---: | :---: |
| 2 Sg | :-rè- $\grave{W}$ |
| 1P1 | $\therefore-r \underline{\varepsilon}-\bar{y} . \therefore$ pronounced $[\mathrm{r} \hat{\varepsilon} \rightarrow \mathrm{j}]$ |
| 2 Pl | $\therefore-r \grave{\varepsilon}-\grave{W} . \therefore$ pronounced $[\mathrm{r} \hat{\varepsilon} \rightarrow \mathrm{W}]$ |
| 3Sg/Inan | :-rı̀- $\varnothing$ |
| 3 Pl | :-r-à: |

Perfective-1b -tî- is used with the great majority of transitives, and with several active intransitives, including verbs of speaking and thinking but not verbs of motion or stance. These active "intransitives" are marginally transitive, insofar as they are easily combined with cognate nominals in apparent direct-object function. Examples of such active intransitives are màní- 'laugh', tégé- 'speak', píyé- 'shout', mà:ní- 'think', which are optionally expanded with cognate nominals as mân màní- 'laugh (=give out) a laugh', tềy tégé- 'speak words', pìyê: píyé- 'shout (=give out) a shout', and má:ní: mà:ní- 'think (=have) a thought'. These verbs take $-t \hat{1}-$ whether or not the cognate nominal is overt.
a. yû:
dùyó-tî:- $\varnothing$
millet pound-Pfv1b-3SgSbj
'He/She pounded the millet (spikes).'
b. nà:-[yí-m] páyá-tî:- $\varnothing$
cow-[child-AnSg] tie-Pfv1b-3SgSbj
'He/She tied up the calf.'
c. mánù màní-tí-ỳ.:
laugh(n) laugh-Pfv1b-1PlSbj
'We laughed.'
$\begin{array}{lll}\text { d. } & \text { sǔ: } & \\ & \text { sún } n \text { - } t \hat{i}:-\varnothing \\ & \text { breathing } & \text { breathe-Pfv1b- } 3 S g S b j \\ & \text { 'He/She breathed.' }\end{array}$

VPs regularly expressed by a verb plus a noncognate nominal object also take -tî- (235).

```
nî: dìyé-tú-Ẁ
water bathe-Pfv1b-2SgSbj
'You-Sg bathed.'
```

Among other verbs taking -tî- are ní- 'give', perception verbs like yǐ- 'see', reversives like pí:-r ${ }^{n} 1$ Í- ‘open', and causatives like éw-ré- 'cause to sit'.

The third person forms of $-t \hat{1}-$ are $3 \mathrm{Sg} /$ Inan $-t \hat{i}:-\varnothing$ (homophonous with $1 \mathrm{Sg}-t i ́-\dot{y}$ ), and 3 Pl -tí-yà (one could also segment this as -tíy-à ). The $1 \mathrm{st} / 2$ nd person forms are based on $-t \hat{1}-$, but the vowel assimilates to a following suffixal semivowel. Phonetically, the resulting homorganic vowel-semivowel combination monophthongizes. The paradigm is (235).
(235) category form

| 1 Sg | $-t i ́-y$ | pronounced $[t \hat{1}:]$, homophonous to 3 Sg |
| :--- | :--- | :--- |
| 2 Sg | $-t u ́-\grave{W}$ | pronounced $[t \hat{u}:]$ |
|  |  |  |
| 1 Pl | $-t i ́-y ̀ . \therefore$ | pronounced $[t \hat{1} \rightarrow]$ |
| 2 Pl | $-t u ́-\grave{W}: \therefore$ | pronounced $[t \hat{l} \rightarrow]$ |
|  |  |  |
| $3 \mathrm{Sg} /$ Inan | $-t \hat{1}--\varnothing$ |  |
| 3 Pl | $-t i ́-y a ̀ ~(c o u l d ~ a l s o ~ b e ~ w r i t t e n ~-t i ́ y-a ̀) ~$ |  |

péré- or pété- 'jump' takes :-rè- when formally intransitive, but when a cognate nominal is added it shifts to $-t \hat{1}-$.
a. pété:-rè- $\varnothing$
jump-Pfv1a-3SgSbj
'He/She jumped.'
$\begin{array}{ll}\text { b. à-pétù } & \text { pété-tî:- } \varnothing \\ \text { jump(n) } & \text { jump-Pfv1b-3SgSbj } \\ & \text { 'He/She jumped (=made) a jump.' }\end{array}$

Perfective-1b -tî- (but not perfective-1a :-rغ̀-) could be interpreted morphophonologically as a chained auxiliary verb. An etymological connection with the verb tí- 'send' or 'dump out' is likely ( $t i ́$ 'pour on' is an improbable candidate); Donno So has especially relevant comparative data. In some constructions, a perfective-like tí- is separated from the main verb, or is treated as the final stem in a verb chain; see $\S 15.1 .11$.

Both positive perfective suffixes, $1 \mathrm{~b}-t \hat{1}-$ and $1 \mathrm{a}-: r \varepsilon ̀-$, correspond to $-r^{\prime}-$ in the perfective negative.

### 10.2.1.6 Resultative -sô-

The sense is resultative, i.e., the VP in question describes a state resulting from an action. It can be translated freely, depending on context, as a perfect ('have VP-ed') or with the present tense ('I want'). For example, the event denoted by ùró:-rè- $\varnothing$ 'he/she went up (=mounted)' leads to the resulting state expressed by (237a). An example with a more clearly transitive verb is (237b).

```
            a. Sǒm ùró-só-Wे
            horse go.up-Reslt-3SgSbj
```

    ' \(\mathrm{He} /\) She is mounted on the horse.'
    
'You-Sg have eaten (= spent) your money.'
Resultative -sô- is added to the bare stem of the stem, with no modification to the lexical tone melody. The paradigm is (238). Because the 3 Sg has suffix $-\grave{w}$, it is homophonous with the $\mathbf{2 S g}$. The 3 Pl is irregular.
(238) category form

| 1Sg | -só-ỳ |  |
| :---: | :---: | :---: |
| 2Sg | -só-㐫 | homophonous with 3Sg |
| 1 Pl | -só-ỳ: | pronounced [sô $\rightarrow \mathrm{j}$ ] |
| 2 Pl | -só-ẁ.: | pronounced [sô $\rightarrow \mathrm{w}$ ] |
| 3Sg/Inan | -só- ${ }_{\text {¢ }}$ | homophonous with 2Sg |
| 3 Pl | $-s-\hat{\varepsilon} .^{n}$ |  |

This suffix is undoubtedly related historically to 'have' quasi-verb só-, but the $2 \mathrm{Sg}, 3 \mathrm{Sg}$, and 3 Pl differ tonally in the two paradigms (for 'have' we get $2 \mathrm{Sg} / 3 \mathrm{Sg}$ só- $\dot{w}$ and $3 \mathrm{Pl} s-\varepsilon \varepsilon^{n}$. with H tones). A continuing synchronic connection between the two is suggested by the fact that resultative -sô- is sometimes negated as -sò-ló-, i.e. with the (irregular) negative form of só- 'have' (239).

| (239) | sǒm | ùró-sò-ló- $\varnothing$ |
| :--- | :--- | :--- |
| horse | go.up-Reslt- $3 S g S b j$ |  |

'He/She is not mounted on the horse.'
Resultative -sô- is circumscribed by competition with recent perfect $-j \hat{\varepsilon} \hat{\text { - }}$, which however puts more emphasis on the recent completion of the event ('has already VP-ed'). Perception verbs ('I saw/have seen him', 'I [have] heard it') strongly favor recent perfect $-j \hat{\varepsilon}$ - (unlike the case in Jamsay, where the resultative -sà- is the unmarked positive past-time AN morpheme for these verbs).

### 10.2.1.7 Experiential perfect 'have ever' -tâ-

In positive utterances, the experiential perfect is common in questions ('have you ever ...?'), but it can also be used in indicatives ('I have once ...'). It indicates that the subject has, at any point in the past, performed the action denoted by the VP at least once.
a. bàmàkó ló-tá-ẁ

Bamako go-ExpPf-2SgSbj
'Have you ever gone to Bamako?'
b. tà-dùngú-m yǐ-tá-ỳ
lion-AnSg see-ExpPf-1SgSbj
'I once saw a lion.'
c. ந̀gú nŭ-tá-mà

Prox.Inan hear-ExpPf-3PISbj
'They have heard this (before).'
d. jìyé jìyé-tá-Ẁ
dance(n) dance-ExpPf-3SgSbj
'He/She danced (once).'
The suffix (arguably an auxiliary verb) is added to the bare stem of the verb, with no change in lexical tone melody. The paradigm is (241).
(241) category form

| 1 Sg | -tá- ${ }^{\text {a }}$ |  |
| :---: | :---: | :---: |
| 2Sg | -tá-ẁ | homophonous to 3Sg |
| 1 Pl | -tá-ỳ. | pronounced [tâ $\rightarrow \mathrm{j}$ ] |
| 2 Pl | -tá- ${ }^{\text {a }}$.: | pronounced [ $\mathrm{tâ} \rightarrow \mathrm{w}$ ] |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | -tá-ẁ | homophonous to 2Sg |
| 3 Pl | -tá-mà |  |

Because the 3 Sg is expressed by -ẁ, it is homophonous with the $\mathbf{2 S g}$. 3 Pl -tá-mà has the -mà ending also seen in plural participles (in relative clauses with plural head NP)

### 10.2.1.8 Recent perfect $-j \hat{\varepsilon}-$

This AN suffix can be translated as 'already' plus past tense. It competes with the resultative, since the recent event in question often has a continuing effect, as in (242). However, it emphasizes recent completion.
a. $n \varepsilon ̌ y^{n} \quad n \varepsilon ́-j \varepsilon ́-\bar{y}$
meal eat-RecPf-1 SgSbj
'I have already eaten.' (hence: 'I am not hungry')
b. láwá-jê:- $\varnothing$
pass-RecPf-3SgSbj
'It (e.g. bus) has already gone past.' (hence: 'You'll have to wait')
-ĵ̂- can be used with perception verbs nǔ- 'hear' and yǐ- 'see', which avoid regular perfective -tî- and resultative -sô-. Again, the context involves a recently completed event that results in a state. In (243a), for example, the speaker had been asking where the kettle was, and now indicates that he has located it.
a. sátálà yǐ-jé-ỳ
kettle see-RecPf-1SgSbj
'I have (just) seen the kettle.'
b. cìwérù nǔ-jé-Ẁ.
news hear-RecPf-2P1Sbj
'Have you-Pl heard the news?'

The suffix $-j \hat{\varepsilon}$ - is added to the bare stem of the verb, with no change in the lexical tone melody. The paradigm is (244). The 3 Sg form is not homophonous with the 2 Sg form.
(244) category form

| 1Sg | -jé-y |
| :---: | :---: |
| 2 Sg | -jé-Ẁ |
| 1 Pl | -je-ỳ $\therefore$ pronounced [ $\mathrm{d} \hat{\varepsilon} \rightarrow \mathrm{j}$ ] |
| 2 Pl | $-j \varepsilon-W$. $\therefore$ pronounced [ $[\hat{\varepsilon} \hat{\varepsilon} \rightarrow \mathrm{w}$ ] |
| 3Sg/Inan | $-j \hat{\varepsilon}:-\varnothing$ |
| 3 Pl | -j-â: (-jê:-bó also attested in a text) |

For $-j \grave{\varepsilon} \rightarrow$ in durative clauses in narrative, see $\S 15.2 .1 .4$.

### 10.2.1.9 Reduplicated perfective ( Cli - plus $\{\mathrm{HL}\}, 3 \mathrm{Sg}-\varnothing$ )

In this form, there is an initial reduplication of the form $C_{1} i$ - (with fixed vowel $i$ ) or $C_{1} \grave{v}_{1}$ ( (with a copy of the first stem vowel), depending on the speaker. If the first vowel of the
 begins with a vowel, there is no $C_{1}$ in either the reduplicative segment or the base stem. A glottal stop is heard between the two occurrences of the vowel, as in ù-Rúrò- 'go up' and


The reduplicative segment has L-tone (as do all such reduplicative segments in verbal morphology). The base stem has $\{\mathbf{H L}\}$ tone overlay, erasing the lexical melody. The H-tone component is expressed on the first stem syllable, or on the first mora of a monosyllable. In third person forms only, a $C V$ - monosyllable like wǒ- 'catch' has its short vowel lengthened to permit the $<\mathrm{HL}>$-tone to be expressed; see Contour-Tone Mora-Addition (§3.7.4.1). The tone overlay is illustrated in (245).

| gloss | stem | reduplicated perfective |
| :---: | :---: | :---: |
| 'take' | ǎy- | ì- ${ }^{\text {HL }}$ Pây- |
| 'catch' | Wǒ- | wì- ${ }^{\text {HL }}$ wô:- |
| 'want' | jòró- | jì- $^{\text {HL }}$ jórı̀̀- |
| 'buy' | ع́Wé- | ì- ${ }^{\text {HL }}$ PéWè- |
| 'go up' | ùró- | ù- ${ }^{\text {HL }}$ Qúrò- |
| 'go back' | píníw ${ }^{\text {níl }}$ |  |

The reduplicated perfective is not common in texts. An example is (246).

```
jì- HL \(j\) órò-bó
Rdp- \({ }^{\text {HL }}\) want.Pfv-3P1Sbj
'They wanted.'
```

The paradigm is (247). The suffixes are the same as those of the unsuffixed perfective. Also shown are paradigms for wó- 'catch', illustrating the lengthening of the stem vowel in 3rd person forms for $C v$ - monosyllables, and $\varepsilon$ ह́w'́- 'buy' as a more typical bisyllabic verb.

| category | suffix | 'catch' | 'buy' |
| :---: | :---: | :---: | :---: |
| 1Sg | - ${ }^{\text {y }}$ | Wì- ${ }^{\text {HL }}{ }_{W}$-́óy | $i-{ }^{\text {HL }}$ ? ¢́Wè-y |
| 2Sg | -Ẁ | Wì- ${ }^{\text {HL }}$ Wó- ${ }_{\text {W }}$ | $\grave{i}-{ }^{\text {HL }}$ Péwè-W |
| 1 Pl | -ỳ: | wì- ${ }^{\text {HL }}{ }_{\text {Wól }}$ - ${ }^{\text {a }}$ : |  |
| 2 Pl | -Ẁ $\therefore$ | wì- ${ }^{\text {HL }}$ Wó-Ẁ $. ~: ~$ | $\grave{i-}{ }^{\text {HL }}$ Péwè-\̀ $\therefore \quad[\mathrm{w} \hat{\varepsilon} \rightarrow \mathrm{w}]$ |
| 3Sg | - $\varnothing$ | Wì ${ }^{\text {HL }}{ }_{W}$ Ô:- $\varnothing$ | $\grave{i-~}^{\text {HL }}$ Péw ${ }^{\text {e }}$ - $\varnothing$ |
| 3 Pl | -bó~ -bò | wì ${ }^{\text {HL }}$ Wô:-bó~ -bò | $i{ }^{\text {HL }}$ Péwè-bó~ -bò |

This form is partially homophonous to the reduplicated stative, which is is attested with stance verbs like 'sit' ( $(10.2 .1 .11$, below). The two are distinguishable by suffixal allomorphs in the third person. The reduplicated perfective and reduplicated stative are both distinguished from the reduplicated imperfective by stem tone (the latter ends in an H -tone).

### 10.2.1.10 Stative $\left(\{\mathrm{H}\}, 3 \mathrm{Sg}-W^{\prime}\right)$

An unreduplicated stative form is derived from certain verbs, particularly verbs of stance (position). The verb has the pronominal-subject paradigm (248). Its most distinctive feature is stative $3 \mathrm{Sg}-\underset{W}{ }$, homophonous to $2 \mathrm{Sg}-\underline{W}$ (contrast L-toned $1 \mathrm{Sg}-\dot{y}$ ).
category suffix 'lie down'

| 1Sg | -y | (yá) bíyè-y |  |
| :---: | :---: | :---: | :---: |
| 2Sg | -W | (yá) bíyé-ẃ | [suffix H-toned; homophonous to 3Sg] |
| 1 Pl | - $\grave{\text { a }}$ : | (yá) bíyè-ỳ | [ ${ }_{\text {íjijê }} \rightarrow$ j] |
| 2 Pl | $-\grave{W} .:$ | (yá) bíyé-w | [bíjê $\rightarrow$ w] |
| 3 Sg | -W | (yá) bíyé-ẃ | [suffix H-toned; homophonous to 2Sg] |
| 3 Pl | -W'-bó | (yá) bíyè-w-bó | [suffix H-toned] |

Unless there is a preceding focalized constituent (see below), the verb stem itself is $\mathbf{H}$-toned except for the final syllable of the 1 Sg form. The stem also ends in a non-high vowel. Verbs whose bare stem ends in a high vowel replace it with $a$ in the stative (the details are the same as for the reduplicated stative, see the following section for details). All attested examples
have precisely bisyllabic stems. For this purpose (presumably), mediopassive $-y \bar{v}$ - is omitted if it is the third syllable of the underlying stem: jè̀gì-yí 'come up next to (sth)', yá jéngé-w 'it is up against (sth)'.

The verb is preceded by a locational element, such as presentational ŋ́gòy 'here's ...', a demonstrative adverb ('here', 'there', etc.), or existential yá (which is associated with predications of location). Examples: yá bí-yé-ẃ 'he/she is lying down' (bì-yé-), and yá náyná-ẃ ‘it (e.g. teapot) is up on (e.g. burner)' from náyní 'be put up on’.

From dèyíl 'put down, set', the stative is yá déyá-ẃ with an ATR shift.
In the absence of such a preverbal locational element, the reduplicated stative is normally used, see below. An exception is that in contexts where a preceding constituent is focalized, an L-toned unreduplicated stative form may be used (249).

> [[kú $\left.{ }^{\mathrm{HL}}{ }_{n i ̂}:\right] \quad{ }^{\mathrm{L}}$ wò] [nǎ: kù] dìmbà-Ẁ-bò
> [[DiscDef ${ }^{\text {HL }}$ cause] $\left.{ }^{\mathrm{L}} \mathrm{in}\right] \quad$ [cow $\left.\operatorname{Def}\right]$ follow.Stat-3SgSbj-3P1Sbj
> 'It's for that reason [focus] that they follow (=tend) their cattle.' [2005.1a.15]

### 10.2.1.11 Reduplicated stative ( $C 1$ i- plus $\{\mathrm{HL}\}, 3 \mathrm{Sg}-\grave{W}$ )

A stative reduplication is used with stance verbs ('be sitting', 'be connected', etc.). It belongs to the perfective system, as seen by the use of perfective third person suffix allomorphs, but it has stative sense. The reduplicative segment has the same form as for the reduplicated perfective (just above) and for the reduplicated imperfective (below).

The stem has $\{\mathbf{H L}\}$ tone overlay, again as in the reduplicated perfective. By contrast, the reduplicated imperfective always has a stem ending in an H -tone, and the simple (unreduplicated) stative (preceding section) has H-tones.

The reduplicated (and unreduplicative) stative imposes a bisyllabic shape on the stem proper (trisyllabic including the reduplicative segment), so for mono- and trisyllabic stems there is a clear difference between the reduplicated stative and the reduplicated perfective. Another difference between the two is in the form of third person suffixes. The three-way distinction for stance verbs with 3 Sg subject is illustrated in (250).
a. ì- ${ }^{\mathrm{HL}}$ ?éw-yè-ẁ

Rdp- ${ }^{\mathrm{HL}}$ sit-MP.Stat-3SgSbj
'He/She is sitting (in sitting position)'. [stative]
b. ì- ${ }^{\mathrm{HL}}$ Réw-yè- $\varnothing$

Rdp- ${ }^{\text {HL }}$ sit-MP.Pfv- 3 SgSbj
'He sat down.' [perfective, uncommon]
c. ì-Réw-yé-m̀

Rdp-sit-MP-Ipfv.3SgSbj
'He/She will sit down.' [imperfective]
In the first and second persons, for bisyllabic stance verbs (including 'sit') that do not end in a high vowel there is no audible distinction between the reduplicated stative and the reduplicated perfective (251a-b), but the two of them are (jointly) audibly distinct from the reduplicated imperfective (251c).

```
a. ì \({ }^{\text {HL }}\) Péw-yè-y
Rdp-sit-MP.Stat-1SgSbj
'I am sitting (in sitting position)'. [stative]
b. ì \({ }^{\text {HL }}\) Péw-yè-ỳ
    Rdp- \({ }^{\text {HL }}\) sit-MP.Pfv- 1 SgSbj
    'He sat down.' [perfective, uncommon]
c. ì-Péw-yé-ỳ
Rdp-sit-MP.Ipfv-1SgSbj
'I will sit down.' [imperfective]
```

In the reduplicated stative only, nonmonosyllabic verbs ending in a high vowel shift this vowel to $a$, a mutation that also takes place in the imperative stem. (Final $\varepsilon$ might also shift to a, but I have no example of a stative from such a verb.) For verbs undergoing this shift, the three-way distinction among the reduplications is audibly expressed even for first and second person categories. The 3 Sg and 1 Sg forms for dìyí- 'be connected' bring this out (252).

| 'be connected' | 3 Sg | 1 Sg |
| :---: | :---: | :---: |
| reduplicated stative | dì- ${ }^{\text {HL }}$ díyà-Ẁ | dì- ${ }^{\text {HL }}$ díyà̀- |
| reduplicated perfective | dì- ${ }^{\text {HL }}$ díyì- $\varnothing$ | dì- ${ }^{\text {HL }}$ díyì̀-̀ |
| reduplicated imperfective | dì-díyí-m̀ | dí-díyíly |

I had no difficulty eliciting reduplicated stative forms where they made sense semantically (denoting stances and similar physical positions). Examples are in (253), in 3Sg subject form. For the verbs in (253a), the segmentation of -yí-/-yé- is based on intransitive/causative alternations (í:-rí- 'cause to stand/stop', bì-ré- 'cause to lie down', éw-ré- 'cause to sit', túngú-rú- 'cause to kneel'), though segmentability is semi-opaque. The -yí-/-yé- is retained in the reduplicated stative when the root is monosyllabic. 'Stand, stop' appears to shorten its long $i$ :, though one could alternatively argue that the -yí- suffix of the bare stem has been lopped off and the remaining í:- treated as though /íyí-/ (253a). In any event, there is no general shortening of long vowels in the first stem syllable of the stative, see (253c). The examples in (253b-c) are prosodically straightforward. The trisyllabic verbs in (253d) probably originated as $* \mathrm{Cv}(\mathrm{C}) \mathrm{Cv}-\mathrm{yv}$ - with mediopassive suffix $*-y v-$, but segmentation is now somewhat opaque (for tórníyní- the causative elicited was tór $\left.{ }^{n} 1 y^{n} 11^{-} w^{n} u ́-\right)$. Even if we segment the stems in (253d), there is no basis for claiming that intransitive $-y v$ - is systematically omitted from the reduplicated stative, since the much clearer cases of -yí-/-yé- in (253a) do not drop the suffix. I therefore prefer to analyse the examples in (253d) as involving truncation of a final syllable to satisfy a bisyllabic output constraint.


| b. | 'be tilted' | jèngí- | $j^{\text {iol- }}$ HL ${ }^{\text {jéngà̀-W }}$ |
| :---: | :---: | :---: | :---: |
|  | 'be hanging' | kólí- | kì ${ }^{\text {HL }}$ kólà-W |
|  | '(mat) be laid out' | téyí- | tì- ${ }^{\text {HL }}$ téyà-W |
| c. | 'be right-side up' | tá:rí- | $t i-{ }^{\text {HL }}$ tá:rà-W |
|  | 'be arranged' | té:lí- | $t i{ }^{\text {HL }}$ té:là-W |
| d. | 'squat' | tór ${ }^{\text {n }}$ íy ${ }^{\text {n }}$ í- | $t i ̀{ }^{\text {HL }}$ tór ${ }^{\text {nà }}$-W |
|  | 'sit up' | bè̀ngìyí- | bì- ${ }^{\text {HL }}$ béngà-W |

The reduplicated stative pronominal-suffix paradigm is (254). The 2 Sg and 3 Sg are homophonous. The 3 Pl is built by adding the (perfective) 3Pl suffix -bó (-bj̀) to the 3 Sg suffix - $\grave{W}$. All of the pronominal endings are L-toned, unlike the case with the unreduplicated stative where only $1 \mathrm{Sg}-\dot{y}$ is L-toned.

| category | suffix | 'sit' |
| :---: | :---: | :---: |
| 1Sg | - ${ }^{\text {y }}$ | $i$ i- ${ }^{\text {HL }}$ Réw-yè-y |
| 2 Sg | - $\grave{W}$ | ì ${ }^{\text {HL }}$ Péw-yè-W |
| 1 Pl | - $\grave{\text { ¢ }}$. |  |
| 2 Pl | $-\dot{W} \therefore$ | $i$ i- ${ }^{\text {HL }}$ Péw-yè-w $\therefore$ [ìréwjê $\rightarrow$ w] |
| 3 Sg | $-\grave{W}$ | $i^{\text {HL }}$ Héw-yè-W |
| 3 Pl | -Ẁ-bó~ - ${ }^{\text {- }}$-bò | ì- ${ }^{\text {HL }}$ Réw-yè-w-bó~ -bò |

### 10.2.2 Imperfective positive system

### 10.2.2.1 Unsuffixed imperfective (unreduplicated)

An unreduplicated form with no segmentally characterized AN suffix is used in positive indicative clauses with present or future time reference. The pronominal suffixes are L-toned, so one could analyse the imperfective morpheme as a floating L-tone segment that docks on the pronominal suffix (compare Jamsay). However, I will not transcribe $-\varnothing$ - in imperfective forms.

Historically, it is possible that the ending was *-m- throughout the paradigm (except perhaps 3 Pl ), and that the nasal segment has vanished in the $1 \mathrm{st} / 2 \mathrm{nd}$ person forms.

This is the normal all-purpose imperfective form used after an overtly focalized preverbal constituent, such as a WH-interrogative (255).
án-dá: ló-Ẁ
where? go.Ipfv-2SgSbj
'Where are you-Sg going?' = 'Where will you-Sg go?'
With a preverbal constituent that is not overtly focalized, or with no preverbal constituent, there is a choice between this form and the reduplicated imperfective (see the following
section). In elicitation, my assistant suggested that the reduplicated imperfective tended to have future sense (256).
a. nàwnâ: kúwó-ỳ
meat eat.Ipfv- 1 SgSbj
'I eat meat.'
b. nàwnâ: kù-kúwó-ỳ
meat Rdp-eat.Ipfv- 1 Sg Sbj
'I will eat meat.'
c. nó-m̀
drink-Ipfv. 3 SgSbj
'He/She drinks.'
d. nì-nó-m

Rdp-drink-Ipfv.3SgSbj
'He/She will drink.'
The stem tone, and the third person pronominal suffixes, differ from those of the reduplicated perfective and of the reduplicated stative described in preceding sections. The stem tone of the unsuffixed imperfective, which always ends in an H-tone element, is determined as in (257).
(257) Stem tone of unsuffixed imperfective
a. lexical tone melody $/ \mathrm{H} /$ is preserved (all prosodic weights);
b. $\{\mathrm{H}\}$ overlay erases $/ \mathrm{LH} /$ melody: $C \check{V}$ and $C \check{y} y^{n}$ monosyllabics, prosodically light bisyllabics ( $C \hat{v} C \tilde{r}$ and $C \hat{v} N C \bar{v}$, but not $C \hat{v}: C \hat{v}$ ) ending in a non-high vowel;
c. no change in lexical /LH/ melody: all nonmonosyllabic stems ending in a high vowel; all heavy bisyllabic ( $C \hat{v}: C \hat{v}$ ), trisyllabic and longer stems.

The only audible tonal change vis-à-vis the lexical melody is that /LH/-toned short-voweled bisyllabic stems ending in a non-high vowel, and rising-toned monosyllabic stems, have an $\{\mathbf{H}\} \mathbf{~ o v e r l a y ~ ( ~} 258 \mathrm{c}$ ). This overlay does not apply to the frozen causative gò-ló- 'take out, remove' or to the parallel (and semantically close) jò-ló- 'take away, convey (sth, somewhere)' (258d). The overlay does not apply to any prosodically heavy stem. Minor segmental changes occur in the irregular verbs in (258b), and in three $\mathrm{Cvy}^{n}$ verbs that lose the final semivowel.

$$
\begin{array}{lll}
\text { gloss } & \text { bare stem } \quad \text { unsuffixed imperfective } \tag{258}
\end{array}
$$

a. stem already / $\mathrm{H} /$-toned, no audible change, all prosodic weights

| 'go' | ló- | ló- |
| :--- | :--- | :--- |
| 'tie' | páyá- | páyá- |
| 'take down' | sí-lé- | sí-lé- |
| 'go back' | píníwú- | píníwí- |
| 'cough’ | kógúsó- | kógúsó- |

```
Cv́y}\mp@subsup{}{}{n}\mathrm{ , becoming Cvin-
    'do,make' káyn- kán
```

b. irregular monosyllabics, shift of short or long $/ \varepsilon(:) /$ to $e$

| 'come' | $y \varepsilon ̌-$ | $y e ́-$ |
| :--- | :--- | :--- |
| 'bring' | $j \check{\varepsilon}$.- | jé- |

c. prosodically light /LH/-toned stem, $\{\mathrm{H}\}$ overlay applies

## $C$ V̌

| 'go out' | gǒ- | gó- |
| :--- | :--- | :--- |
| 'drink' | nǒ- | nó- |
| 'hear' | nǔ- | nú- |

$C \check{V} y^{n}$, becoming $C \hat{v}^{n}$ -
'put' gǎy ${ }^{n}$ - gán
'say' gǔy ${ }^{n}$ - gún -
$C \grave{v} C$ v́

| 'pound (spikes)' | dùyó- <br> 'steal' | dúyó- <br> gùró- |
| :--- | :--- | :--- |
| 'dance' | júró- |  |
| 'fall' | yàyá- | jíyé- |
| yáyá- |  |  |

d. exceptional $C \grave{v} C \hat{v}$ verbs that resist $\{\mathrm{H}\}$ overlay transitive/causative -lv́~ -rv́, mediopassive -yé):
'take out'

| gò-ló- | gò-ló- |
| :--- | :--- |
| jò-ló- | jò-ló- |

mediopassive -yé): 'make lie down' bì-ré- bì-ré'bathe' dì-yé- dì-yé-
e. light bisyllabic ending in high vowel, /LH/ preserved $C$ v̀Cv́

| 'receive' | àwú- | àwú- |
| :---: | :---: | :---: |
| 'help | bàrí- | bàrú- |
| 'call' | jàr ${ }^{\text {níl }}$ | nàr ${ }^{\text {nú- }}$ |
| 'cover' | dèwú- | dèwú- |
| 'put down' | dèyí- | dèyí- |
| 'hold' | wàyí- | wàyí- |
| 'laugh' | màní- | mànú- |
| Cv̀NCú |  |  |
| 'uproot' | wòmbú- | wòmbú |


| f. prosodically heavy stems, /LH/ preserved |  |  |
| :--- | :--- | :--- |
| ending in non-high vowel |  |  |
| 'tease' | bè:ré- | bè:ré- |
| 'be moving' | jì:ré- | jì:ré- |
| 'lie in wait' | yò:ró- | yò:ró- |
| 'cut up' | yègìsé- | yègìsé- |
| 'roll on ground' | dùlùró- | dùlùró- |
| 'roll' | bìlìré- | bìlìré- |
| ending in high vowel |  |  |
| 'fill' | bà:lí- | bà:lí- |
| 'think' | mà:ní- | mà:ní- |
| 'dig' | gànjí- | gànjú- |
| 'hide (sth), | bàngìríl | bàngìrí- |
| 'winnow, in wind' | jèrnìníl | nèrnìyní- |
| 'follow' | dìmbì-yí- | dìmbì-yí- |

The pronominal paradigm is exemplified in (259), using ló- 'go', dùyó- 'pound (millet ears)', and páyá- 'tie'. The $1 \mathrm{st} / 2 \mathrm{nd}$ person forms are regular. In the third person, we get 3 Sg /inanimate $-\grave{m}$ and $3 \mathrm{Pl}-y \varepsilon ̀$ (dialectally also $-y a ̀)$.

| (259) | category | 'go' | 'pound' | 'tie' |
| :---: | :---: | :---: | :---: | :---: |
|  | 1Sg | ló-ỳ | dúyó-ỳ | páyá-ỳ |
|  | 2 Sg | ló-Ẁ | dúyó-ẁ | páyá-Ẁ |
|  | 1 Pl | ló-ỳ. | dúyó-ỳ. | páyá-ỳ: $\quad[\gamma \mathrm{a} \rightarrow \mathrm{j}]$ |
|  | 2 Pl | ló-Ẁ.: | dúyó-Ẁ: | páyá-Ẁ: ${ }^{\text {a }}$ [8â $\left.\rightarrow \mathrm{w}\right]$ |
|  | 3Sg/Inan | ló-m̀ | dúyó-m̀ | páyá-m̀ |
|  | 3 Pl | ló-yè | dúyó-yè | páyá-yè |

$3 \mathrm{Pl}-y \varepsilon ̀$ is not subject to Nasalization-Spreading, hence ní-yè 'they (will) give'.
As this paradigm shows, the unsuffixed imperfective has no overt AN suffix. This could, in theory, result in confusion between the unsuffixed imperfective and the unsuffixed perfective. However, the two can always be distinguished. To begin with, the third person suffixes are different in the two paradigms. In addition, while the unsuffixed perfective drops stem tones to $\{\mathrm{L}\}$, the unsuffixed imperfective stem always has at least one H-tone. Lexical $/ \mathrm{H} /$ melody is preserved, and lexical $/ \mathrm{LH} /$ is either preserved or overlaid to $\{\mathrm{H}\}$.

### 10.2.2.2 Reduplicated imperfective (Cì-, $3 \mathrm{Sg}-\grave{m}$ )

In the absence of a preverbal constituent, an unsuffixed imperfective is normally reduplicated. As a result, the reduplicated imperfective is very common in texts, much more so than the reduplicated perfective.

The reduplicative segment has the same form as for the reduplicated perfective (§10.2.1.9, above). However, the reduplicated imperfective has the same stem-tones as in the unreduplicated imperfective. A mono- or bisyllabic stem is entirely H -toned whether
the lexical melody is $/ \mathrm{H} /$ or $/ \mathrm{LH} /$. Heavier stems keep their lexical melody, either $/ \mathrm{H} / \mathrm{or} / \mathrm{LH} /$. There is no lengthening of the short vowel of a $C v$ - monosyllable like wǒ- 'catch'.
a. lì-ló-ỳ

Rdp-go.Ipfv-1SgSbj
'I will go.' (ló-)
b. ù-Rúró-ỳ

Rdp-go.up-1SgSbj
'I will go up.' (ùrô)
c. sù-súyó-ỳ

Rdp-hit.Ipfv-1SgSbj
'I will hit (it).'
d. ì- $2 \varepsilon ́ W \varepsilon ́-\grave{y}$

Rdp-buy.Ipfv-1SgSbj
'I will buy (it).' (ÉWย́-)
e. Wì-Wó-ì

Rdp-catch-Ipfv.3SgSbj
'He/She will catch.' (wǒ-)
f. gù-gùlù-rú-m̀

Rdp-long-Fact-Ipfv.3SgSbj
'He/She will lengthen.' (gùlù-rí-)
That imperfective verbs are often reduplicated in the absence of a preverbal constituent is illustrated in (261), which contains two perfective-imperfective sequences denoting actions performed in a given order in constructing a wooden apiary for honey bees. In the first sequence, the imperfective verb is not reduplicated because it has a preverbal object NP. In the second, there is only an implied object and the imperfective verb is reduplicated.
(261) kám-dí:-rè- $\varnothing ~ d o ́ ~ w o ̂ y, ~$
wide-Inch-Pfv1a-3SgSbj if all,
mò:-tímbí: jóró-ỳ.:,
mouth-covering want.Ipfv-1PlSbj,
tímbí-tí-ỳ.: dè, ù-?úgúró-ỳ.:
cover-Pfv1b-1PlSbj if, Rdp-scent.Ipfv-1PlSbj
'When it (=section of hollowed tree trunk) has become wider, we look for a covering (to close up the opening). When we have covered (the opening), we give it (=apiary) a smell.' [2005.1a.09]

The paradigm is (262). The specifically imperfective suffixes for 3 Sg and 3 Pl are noteworthy.

| category | suffix | 'go' |  |
| :---: | :---: | :---: | :---: |
| 1Sg | - ${ }^{\text {y }}$ | lì-ló-y |  |
| 2Sg | $-\grave{W}$ | lì-ló-ẁ |  |
| 1 Pl | $-\grave{y} .:$ | lìló-ỳ ${ }^{\text {a }}$ | [ $10 \rightarrow \mathrm{j}$ ] |
| 2 Pl | $-\grave{W} \therefore$ | lì-ló-Ẁ $:$ | $[10 \rightarrow \mathrm{w}]$ |
| 3 Sg | -ım | lì-ló-m̀ |  |
| 3 Pl | -yè | lì-ló-yè |  |

The reduplicated imperfective is distinguished from the reduplicated perfective by the tone of the stem. The reduplicated imperfective has H-tones for light stems, and preserves lexical /H/ or $/ \mathrm{LH} /$ for heavy stems. The reduplicated perfective and the reduplicated stative have $\{\mathrm{HL}\}$ tone overlay on the stem. The third person endings also distinguish the reduplicated imperfective from the others.

The 3 Sg form of the reduplicated imperfective (suffix -m ) should not be confused with a temporal adverbial construction with initial H-toned reduplication, $\{\mathrm{HL}\}$ stem overlay, and final $-m$, type í-Ríyà-m 'while standing' (§15.2.1.9).

### 10.2.2.3 Progressive (and habitual) (:-rà-)

A form with suffix :-rà-, lengthening the stem vowel, has progressive and habitual functions. I will label it the progressive. The stem has its lexical tone melody.
a. bíré
bìré:-rà-ỳ.:
work(n) work-Prog-1P1Sbj
'We are working (now).' (bìré-)
b. dànní:-rà-Ẁ
hunt-Prog-3SgSbj
'He/She hunts (regularly).' (dànní-)
c. bérù-m wǒ:-rà-ỳ
goat-AnSg catch-Prog-1 SgSbj
'I am catching the goat.' (wǒ-)
d. ${ }^{\mathrm{L}+\mathrm{HL}} k$ û: $\quad$ í ùrùyó:-rà-W

1SgPoss. ${ }^{\text {HL }}$ head 1 SgObj hurt-Prog-1SgSbj
'My head is/was hurting me' (= 'I have/had a headache')
The paradigm is (264). The 3 Sg is homophonous to the 2 Sg , as in stative inflections. The 3 Pl adds -bò~ -bó to the 3 Sg .
category suffix

| 1 Sg | :-rà-ỳ |  |
| :---: | :---: | :---: |
| 2Sg | :-rà-Ẁ |  |
| 1 Pl | :-rà-ỳ ${ }^{\text {a }}$ | pronounced [ $\mathrm{ra} \rightarrow \mathrm{j}$ ] |
| 2 Pl | $\therefore-r a ̀-\grave{W} . \therefore$ | pronounced [ $[\hat{a} \rightarrow \mathrm{w}$ ] |
| 3 Sg | :-rà-\̀ |  |
| 3 Pl | $\therefore-r a ̀-w$-b | ften heard as :-rà-ẁ-bò) |

$C V$ - verbs reveal their lexical $/ \mathrm{H} /$ or $/ \mathrm{LH} /$ tone in this form. Attestations of $/ \mathrm{LH} /$ tone are: yદ̌:-rà- 'comes' (yと̌-), wǒ:-rà- 'catches' (wǒ-), gǒ:-rà- 'goes out' (gǒ-), nǔ:-rà- 'hears' (nǔ-), gǎ:-rà- 'slashes (rice)' (gǎ-), yǐ:-rà- ‘sees' (yǐ-), yǒ:-rà- ‘weeps' ( yǒ-), dǎ:-rà- 'endures' (dǎ-), bǎ:-rà- 'fills’ (bǎ-), jǒ:-rà- 'abounds' (jǒ-), dě:-rà- 'gets tired’ (dě-), mǎ:-rà- 'gives shape to' (mǎ-), jǒ:-rà- ‘picks' (jǒ-), and nǒ:-rà- ‘drinks' (nǒ-).

Examples of /H/ tone are nú:-rà- 'goes in' (nú-), ló:-rà- 'goes' (ló-), tí:-rà- 'sends' (tí-), tá:-rà- 'shoots' (tá-), sá:-rà- 'replies' (sá-), ná:-rà- 'spends the night' (ná-), and né:-rà- 'eats (meal)' (nદ́-).
/LHL/ toned $j \varepsilon ̌:--\quad$ bring' has $j \check{\varepsilon}:-$-rà- 'brings'.
The progressive verb form is optionally preceded by existential particle yá (§11.2.2.1). For an example see ( 89 a) in $\S 6.1 .3$. This implies an affinity between progressive and stative.

Examples of the progressive in the sample text are in B's first turn in (654), C's second turn in (656), C's first turn in (660), C's first turn in (664), and in (669) and (678).

### 10.2.3 Negation of indicative verbs

### 10.2.3.1 Categories expressed by negative verbs

There is little resemblance in form between positive and negative inflectional categories. Most perfective and perfect positive categories correspond to perfective negative -rí́- Most imperfective positive categories correspond to imperfective negative -m-(n)dò-.

### 10.2.3.2 Perfective negative (-rí-) and related forms

The basic perfective negative is formed with suffix -rí-, before which a stem has $\{\mathrm{L}\}$ overlay.
The $/ \mathrm{r} /$ is subject to Nasalization-Spreading, becoming $r^{n}$ after a nasal, in $n u^{\mathrm{L}}-r^{n}{ }^{n}-\varnothing$ 'he/she did not hear', bàr ${ }^{n} \mathrm{a}^{\mathrm{L}}-r^{n} \bar{I}_{-}$'did not beat (tomtom)', dù $W^{n}{ }^{\mathrm{j}}{ }^{\mathrm{L}}-r^{n} \mathrm{I}_{1}$ ' 'did not finish (was not used up)', and nì: $y^{n}{ }_{i}^{L}-r^{n} 1 ́-\quad$ 'did not sleep'. Nasalization-Spreading does not apply to the 3Pl form $-r$-á, hence $n u ̀{ }^{L}-r$-á 'they did not hear'.

Verbs of the shape $C v y^{n}$ - combine $/ y^{\mathrm{n}} /$ and suffixal /r/ as $n$ : $g \grave{u}^{\mathrm{L}}-n i ́-\operatorname{did}$ not say' $\left(g u \check{y} y^{n}-\right)$, gà ${ }^{\mathrm{L}}-n i ́-‘$ 'did not put' ( $\left.g a \check{y} y^{n}-\right)$, kà ${ }^{\mathrm{L}}-n i ́-‘$ did not do’ (káy $\left.{ }^{n}-\right)$, see §3.5.4.3.
bèré- 'get, obtain' forms bè $l^{\mathrm{L}}$-lí- 'did not get' (showing syncope of the stem-final vowel and $/ \mathrm{rr} /$ replaced by $11, \S 3.5 .4 .5$ ). By contrast, other verbs with final $r$ plus vowel have
 clap'. The verb tálí- 'transform, convert' has tàl ${ }^{\mathrm{L}}-1 i ́-$ as a variant of tàlì ${ }^{\mathrm{L}}$-rí- 'did not
transform', showing that when a short high vowel is syncopated the resulting /lr/ cluster is realized as 11 . One might use this datum to argue that the conversion of $/ \mathrm{r} . . \mathrm{r} /$ to $1 \ldots 1$ in bèl ${ }^{\mathrm{L}}$-lí- (see beginning of this paragraph) has an intermediate (dissimilated) stage $/ 1 \ldots \mathrm{r} /$.
a. $y \grave{\varepsilon}^{\mathrm{L}}-\mathrm{r}_{1}^{\prime}-\varnothing$
come ${ }^{\text {L }}$-PfvNeg-3SgSbj
'He/She didn't come.'
b. ú
$y i^{\mathrm{L}}-r i ́-\grave{y}$
2SgObj $\quad$ see $^{\text {L }}$-PfvNeg-1SgSbj
'I didn't see you-Sg.'
c. bû: pàyà ${ }^{\text {L }-r u ́-W ́ ~}$

3PlObj tie ${ }^{\text {L }}$-PfvNeg-2SgSbj
'You-Sg didn't tie them up.'
d. $l^{\mathrm{L}}-r-a ́$
go ${ }^{\text {L }}$-PfvNeg-3PlSbj
'They didn't go.'
The irregular /LHL/ toned 'bring' (jě:-) is not subject to the $\{\mathrm{L}\}$ overlay on the stem. Its perfective negative is 3 Sg subject $j \check{\varepsilon}$ :- ${ }^{\downarrow} r^{\prime}-\varnothing$ prepausally, with $<\mathrm{LH}>$ tone on the stem and downstepped H-tone on the suffix. It is $j \check{\varepsilon}$ :-rí-, with $<\mathrm{LHL}>$ tone on the stem, before a clausefinal particle or with a nonzero pronominal suffix.

The pronominal-subject paradigm is (266).
(266) Paradigm of perfective negative
category suffix

| 1 Sg | -ríly | pronounced [rî:] |
| :---: | :---: | :---: |
| 2 Sg | -rú-ẃ | pronounced [rú:] |
| Pl | -rílỳ ${ }^{\text {a }}$ | pronounced [ $\mathrm{r} \hat{\mathrm{i}} \rightarrow$ ] |
| 2 Pl | -rú- $\stackrel{\rightharpoonup}{\text { a }}$. | pronounced $[\mathrm{ru} \rightarrow$ ] |
| 3Sg/Inan | -rí- $\varnothing$ |  |
| 3 Pl | -r-á | (not subject to Nasalization-Spreading) |

Note the phonetic monophthongization in the 1 Sg and 2 Sg , and the H -tone of the 2 Sg form. $3 \mathrm{Sg} /$ Inan $-r^{\prime}-\varnothing$ does not lengthen its vowel.

The experiential perfect negative is formed by adding perfective negative allomorph -líto an L-toned form of experiential perfect -tâ-, resulting in -tà ${ }^{\mathrm{L}}$-lí. The preceding stem also has $\{\mathrm{L}\}$ tone overlay, showing that the final suffix controls tones on the entire word. The combination is common, as it is the usual way to express 'have never VPed'. The pronominal endings are the same as for perfective negative -rí-.
a. bàmàkó lò-tà ${ }^{\mathrm{L}}$-lí-ỳ

Bamako go-ExpPf-Neg-1SgSbj
'I have never gone to Bamako.'
b. ŋ̀gú $\quad$ yì-tà ${ }^{\mathrm{L}}-1-a ́$

ProxInan see-ExpPf-PfvNeg-3P1Sbj
'They have never seen this (before).'

The synchronically puzzling shift of $r$ to $l$ is best explained historically, since cognates of -tâ- contain a rhotic (e.g. Jamsay -térè-), and since underlying/rv-r/ sequences in verbal morphology may shift one or both rhotics to $l$ (§3.5.4.4-5).

Perfective negative -rí- may follow recent perfect $-j \hat{\varepsilon}-$, in the sense 'have not finished VP-ing'. In this combination, the main verb stem keeps its lexical tone, but $-j \hat{\varepsilon}$ - drops its tone to $j \grave{\varepsilon}^{\mathrm{L}}$-. In other words, the main verb and $j \hat{\varepsilon}$ - behave tonally like two verbs in a chain. The pronominal endings are the same as for simple -rí-.

```
wóngóró wàrá-j\grave{\varepsilon}}\mp@subsup{}{}{\textrm{L}}-rí-ỳ
farming farm-RecPf-PfvNeg-1SgSbj
'I haven't (yet) finished farming.'
```

An explicit negation of resultative -sô- (cf. quasi-verb só- 'have') is not common in texts, but it is elicitable. The negative paradigm is identical to that of 'have', thus -sò-ló- plus the pronominal-subject suffix. For an example, see (619c) in §18.3.1. Segmentation of the irregular 3Pl form is difficult.
(269) Paradigm of resultative negative

10.2.3.3 Imperfective negative (-m̀-dó-, :-rà = rá-)

The imperfective negative is based on -m̀-dó-, except for an irregular 3 Pl form $-\grave{m}-n-\varepsilon$. In careful speech, -m̀-dó- is heard as [m̀ndó], i.e. the nasalization extends beyond the transition from labial to alveolar place of articulation. Native speakers correct the linguist's pronunciation when the [ n ] is left out.

The -m- is identifiable with the $3 \mathrm{Sg}-\grave{m}$ suffix in the unsuffixed imperfective (positive). Furthermore, the stem of the imperfective negative has the same tones as those of the corresponding unsuffixed imperfective, H or LH depending on the stem. This strongly
suggests that the imperfective negative -m-dó- is directly built on the unsuffixed imperfective (positive), specifically on the 3 Sg form of the latter, merely adding a negative suffix -dó. Thus dùyó- 'pound (millet ears)', unsuffixed imperfective (positive) dúyó- ( 3 Sg form dúyó-m̀̀) with H-toned stem, and imperfective negative dúyó-ì̀-dó- with the same tones. In interlinears I gloss -m- in this combination as "Ipfv" and -dó- as "Neg."

The paradigm is (270). Segmentation of the irregular 3Pl form is again difficult.
(270) Paradigm of imperfective negative

| category | suffix |
| :--- | :--- |
|  |  |
| 1 Sg | $-\grave{m}-d o ́-y$ |
| 2 Sg | $-\grave{m}-d o ́-\grave{W}$ |
|  |  |
| 1 Pl | $-\grave{m}-d o ́-y ̀ . \therefore$ |
| 2 Pl | $-\grave{m}-d o ́-\grave{W} . \therefore$ |
|  |  |
| $3 \mathrm{Sg} /$ Inan | $-\grave{m}-d o ́-\varnothing$ |
| 3Pl | $-\grave{m}-n-\varepsilon$ |

A similar $=\grave{m}=d$ á is the negation of the 'it is' clitic $=\grave{m}(\S 11.2 .1 .4)$.
The HLH tone sequence involving stem plus -m̀-dó- is pronounced with a lower pitch on -dó- than on the H-toned part of the stem. Since this is a predictable phonetic implementation (a kind of downdrift), I do not mark it explicitly and do not consider it to constitute downstep (§3.7.4.4).

Examples are in (271).
a. tê:
nó-m̀-dó- $\varnothing$
tea drink-Ipfv-Neg-3SgSbj
'He/She doesn't drink tea.'


The final H-tone is often heard as low in texts when prepausal. The H-tone is easier to hear before a clause-final particle such as emphatic kòy.

Progressive :-rà-, whose positive conjugation already shows stative features ( $3 \mathrm{Sg}-\grave{W}$ ), is negated by adding conjugated stative negative =rá-, resulting in :-rà= rá-. The verb stem retains the same tones as in the positive.

[^0]b. [Èsù ${ }^{\mathrm{L}}$ bû: $j e ̌:-$ rà--ẁ]
[good ${ }^{\mathrm{L}} \quad 3 \mathrm{PISbj} \quad$ bring-Prog-Pp.Inan]
y̌̌:-rà $=$ rá-y.$:$.
see-Prog=StatNeg-1PlSbj
'We don't see anything good that they bring (back).' [2005.1b.06]
The paradigm is (273). Only the final stative negative clitic is conjugated.
(273) Paradigm of progressive negative
category suffix
$1 \mathrm{Sg} \quad:-r a ̀=r a ́-y ̀$
$2 \mathrm{Sg} \quad:-r a ̀=r a ́-w ́$
$\mathrm{Pl} \quad$ :-rà $=$ rá- $-\overline{\mathrm{y}}: \quad$ pronounced $[\mathrm{râ} \rightarrow \mathrm{j}]$
$2 \mathrm{Pl} \quad:-\mathrm{rà}=r a ́-\overline{\mathrm{W}} . \therefore \quad$ pronounced $[\mathrm{ra} \rightarrow \mathrm{w}]$
$3 \mathrm{Sg} / \mathrm{Inan}$ :-rà $=$ rá- $\varnothing$
3 Pl :-rà = rá-bó

### 10.2.3.4 Stative negative ( $=$ rá- without reduplication)

Compare positive example (274a), from §10.2.1.11 above, with its negative counterpart (274b).
a. ì-?éw-yè-y

Rdp-sit-MP.Stat-1SgSbj
'I am sitting.'
b. èw-yè- $=$ = rááy
sit-MP-Stat=StatNeg-1SgSbj
'I am not sitting.'
In the negative form (274b), the reduplicative segment is gone. The stem drops to L-tone, as it does before the perfective negative suffix $-r^{\prime}$-. Negative clitic $=$ rá- is added to $-\bar{w}$-, which could be identified morphemically with $-\dot{w}$, the 3 Sg subject allomorph used in the stative positive (cf. $\grave{i}$ - ?éw-yè-w 'he/she is sitting'). However, $-\grave{w}=$ rá- is the basis for the entire stative negative paradigm (275), not just the 3 Sg , so I gloss it in this combination as "Stat" in interlinears.
(275) category suffix

| 1 Sg | $-\grave{W}=r a ́-\grave{y}$ |
| :--- | :--- |
| 2 Sg | $-\grave{W}=r a ́-\hat{W}$ |$\quad$ note H-tone


| 1 Pl | $-\grave{W}=$ rá $-\grave{y} . \therefore$ | pronounced [ $[\hat{a} \rightarrow \mathrm{j}$ ] |
| :---: | :---: | :---: |
| 2 Pl | $-\grave{W}=r a ́-\grave{W} . \therefore$ | pronounced [ $[\hat{a} \rightarrow \mathrm{w}$ ] |
| 3Sg/Inan | $-\grave{W}=r a ́-\varnothing$ |  |
| 3 Pl | $-\underset{W}{\text { l }}$ rá-bó |  |

The H-toned 2 Sg suffix has parallels in other negative paradigms (perfective negative, progressive negative).

### 10.3 Pronominal-subject suffixes for indicative verbs

### 10.3.1 Subject pronominal suffixes

To pull together data from the various AN categories given above, the basic forms of first/second person pronominal-subject suffixes on inflected verbs are those in (276).
category suffix
$1 \mathrm{Sg} \quad-\grave{y}$
$2 \mathrm{Sg} \quad-\grave{W}($ sometimes H-toned $-\dot{W})$
$\mathrm{Pl} \quad-y ̀ .:$
$2 \mathrm{Pl}-\underset{\text { W. }}{ }$ :

There is an issue as to whether these suffixes have intrinsic tones or get their tones from the preceding morpheme. Many of the AN categories have suffixes that end in a falling tone in the zero 3 Sg form, and the unsuffixed perfective stem is L-toned. In these forms, the L-tone on a first/second person suffix could be analysed as due to Contour-Tone Stretching (§3.7.4.2). The test is therefore what happens when the first/second person suffix follows an H-tone. This happens in the perfective negative with suffix -rí- and in the stative negative with -rá-, but here the evidence is split. The 1 Sg combination has falling tone in both (-rí-ỳ, -rá- $\dot{y}$ ) suggesting an intrinsic L-tone on $1 \mathrm{Sg}-y$. However, the 2 Sg combinations have H-tone (-rú-w, -rá-Ẃ), implying that the tone has spread from the negative suffix to the 2 Sg suffix. The 1 Pl and 2 Pl suffixes are moot in this respect, because of their dying-quail intonation which overrides final-syllable L- or H-tone.

Segmental irregularities in combinations involving first/second person suffixes are minor and usually have a clear phonological basis. $1 \mathrm{Sg}-\dot{y}$ undergoes monophthongization with a preceding $i$, both in the marked perfective $-t i ́-\dot{y}$ and in the perfective negative $-r^{\prime}-\dot{y}$. The original falling tone of the AN suffix is preserved in the $<\mathrm{HL}>$-toned monophthong. A parallel monophongization with $2 \mathrm{Sg}-w$ occurs in the marked perfective-1b -tú-ì and in the perfective negative -rú-ẃ).

For 3Sg/Inan, the allomorphs are as in (277).

$$
\begin{equation*}
\text { suffix }+3 \mathrm{Sg} / \text { Inan } \tag{277}
\end{equation*}
$$

a. $-\varnothing$

| unsuffixed perfective | $-\varnothing$ |
| :--- | :--- |
| reduplicated perfective | $-\varnothing$ |
| perfective-1a | $--r \grave{\varepsilon}-\varnothing$ |
| perfective negative | $-r i ́-\varnothing$ |
| imperfective negative | $-\grave{m} d o ́-\varnothing$ |
| stative negative | $-\grave{W}-r a ́-\varnothing$ |

b. $-\varnothing$ (long vowel)
perfective-1
$-t \hat{i}:-\varnothing$
recent perfect $-j \hat{\varepsilon}:-\varnothing$
c. $-\grave{W}$

| experiential perfect | $-t a ́-\grave{W}$ |
| :--- | :--- |
| resultative | $-s o ́-\grave{W}$ |
| imperfective | $:-$ rà- $W$ |
| stative | $-\grave{W}$ |
| reduplicated stative | $-\underline{W}$ |

d. $-\grave{m}$
unsuffixed imperfective -m
reduplicated imperfective -ìm
The $-\grave{W}$ in $(277 \mathrm{c})$ suggests a morphological connection with $-W$ as an adjectival suffix (inanimate). In verbal morphology, $3 \mathrm{Sg}-\dot{W}$ entails homophony between $\mathbf{3 S g}$ and 2 Sg . The lengthening of the vowel of the AN suffix in (277b) is necessary to permit the contour tone to be expressed; see Contour-Tone Mora-Addition (§3.7.4.1). In the specific case of perfective $-t \hat{\imath}:-\varnothing$, the lengthening results in (accidental) homophony with the 1 Sg , which monophthongizes from /-tî-y/ to phonetic [tî:].

As with the first/second person suffixes, one can argue whether the nonzero 3 Sg allomorphs, $-\grave{W}$ and $-\grave{m}$, are intrinsically L-toned, or acquire their tones by spreading from the left.

The 3Pl forms are especially irregular (278). In parsing texts, it is particularly worth noting that $3 \mathrm{Pl}:-r$-à: is from perfective-1a $:-r$ r̀- and not from progressive :-rà-.

| 3Pl allomorph AN category |  | AN suffix + 3Pl |
| :---: | :---: | :---: |
| a. -bó (-bゝ̀) | unsuffixed perfective | -bó~ -bò |
|  | progressive | :-rà-w-bó |
|  | reduplicated perfective | -bó |
|  | reduplicated stative | -Ẁ-bó |
|  | stative negative | -ẁ-rá-bó |
| b1. -à (-yà) | perfective-1a | :-r-à: (< :-rc̀-) |
|  | perfective-1b | -tí-yà (<-tî-) |
|  | recent perfect | -j-â: $(<-j \hat{\varepsilon}-a)$ |
|  | perfective negative | -r-á (<-rí) |
| b2. $-y \varepsilon{ }^{\text {c }}$ | unsuffixed imperfective | -yè |
|  | reduplicated imperfective | -yè |


| b3. $-\grave{\varepsilon}$ | imperfective negative | $-\grave{m}-n-\varepsilon ́ \varepsilon(<-\grave{m}-d o ́-)$ |
| :--- | :--- | :--- |
| c. | -mà | experiential perfect |

One could perhaps group (278b1-b3) together into a set $\{-a ̀-\varepsilon$ - $-y a ̀ ~-y \grave{\varepsilon}\}$, but the phonological relationships among the variants are opaque. The quite distinct form -bó (278a) resembles the 3 Pl independent pronoun bû:; while the allomorph -mà (278c) could be identified with the plural perfective participial suffix (in relative clauses).
-bó is basically H-toned. The other 3 Pl allomorphs are heard with L-tone, but in those cases one could argue that the L-tone is spread from the left.

### 10.4 Deictic temporal clitics and particles

### 10.4.1 Past $=b \grave{\varepsilon}-(=b \hat{\varepsilon}-)$ and its conjugated forms

The past clitic $=b \grave{\varepsilon}$ - or $=b \hat{\varepsilon}$ - repositions the deictic center from which an eventuality is observed into a past time frame. The L-toned, always short-voweled form $=b \grave{\varepsilon}$ - is used in certain combinations where it follows an L-toned verb form. The form $=b \hat{\varepsilon}$ - with falling tone, which expands to $=b \hat{\varepsilon}:-\varnothing$ when followed by zero 3 Sg suffix (by Contour-Tone MoraAddition, §3.7.4.1), is used when the preceding verb form ends in an H-tone, and in a few other combinations.

I suspected originally that L-toned $=b \grave{\varepsilon}$ - might really just be a downstepped version of $<\mathrm{HL}>$-toned $=b \hat{\varepsilon}$-, but careful listening indicated that $=b \hat{\varepsilon}$ - is entirely L-toned. The pitch does not rise from the preceding L-tone, and there is no falling tone internal to the syllable $=b \grave{\varepsilon}$ -
$=b \grave{\varepsilon} \sim=b \hat{\varepsilon}$ is conjugated for pronominal subject, in two paradigms that occur in distinct constructions. The regular paradigm including tones is (279). The $1 \mathrm{st} / 2 \mathrm{nd}$ person forms are based on $=b \varepsilon$ - and are regular in form. $3 \mathrm{Sg} /$ Inan $=b \hat{\varepsilon}:-\varnothing$ has a long, $<\mathrm{HL}>$-toned vowel. 3Pl $=b-a ̂:$ can be interpreted as the contraction of $=b \hat{\varepsilon}:-$ (or presurface $/=b \hat{\varepsilon}-/$ ) with $3 \mathrm{Pl}-a$.

The paradigms of the two variant forms of the clitic are in (279).

$$
\begin{equation*}
\text { category }<\mathrm{HL}>\text {-tone form L-tone variant } \tag{279}
\end{equation*}
$$

| 1 Sg | $=b \varepsilon$ - ${ }^{\text {y }}$ | $=b \grave{\varepsilon}-\bar{y}$ |  |
| :---: | :---: | :---: | :---: |
| 2Sg | $=b \varepsilon$ - V $^{\text {d }}$ | $=b \grave{\Sigma}-\stackrel{\grave{W}}{ }$ |  |
| 1 Pl | $=b \varepsilon$ - ${ }^{\text {g }}$ : | $=b \grave{\varepsilon}-\bar{y}$. | both pronounced [b $\hat{\varepsilon} \rightarrow \mathrm{j}$ ] |
| 2 Pl | $=b \varepsilon$ - $\grave{W}$. | $=b \grave{\varepsilon}-\grave{W}$ | both pronounced $[\mathrm{b} \hat{\varepsilon} \rightarrow \mathrm{w}]$ |
| 3Sg/Inan | $=b \hat{\varepsilon}:-\varnothing$ | $=b \grave{\varepsilon}-\varnothing$ |  |
| 3 Pl | $=b$-â: | $=b$-à: |  |

The first and second person forms are unremarkable. In the 3 Sg , the $<\mathrm{HL}>$-tone form has a long vowel as noted above. The 3 Pl forms involve a suffixed $/-\mathrm{a} /$ that contracts with the $/ \varepsilon /$ of the clitic.

There are four major combinations of the past clitic with inflectable verb stems: past unsuffixed imperfective, past progressive, past stative, and past perfect (a better label than
past perfective, as we will see). There are positive and negative versions for each of these. The past perfect marks pronominal subjects both on the verb proper and on the clitic, though the 3 Sg and 3 Pl suffixes on the verb proper appear to be participial. In the other past AN categories, either -m- (imperfective) or $-W$ - (stative) generalizes as the ending of the verb before the past clitic, except that (in most cases) the 3 Pl has double suffixal marking, on the verb proper and again on the past clitic.

The past forms of the unsuffixed positive AN categories are first up here: unsuffixed imperfective, stative, and unsuffixed perfective, in that order, before turning to combinations with nonzero AN suffixes. The corresponding negations will also be given immediately after each positive type.

### 10.4.1.1 Past unsuffixed imperfective (positive and negative)

The past unsuffixed imperfective is rather common ('was working', 'used to work'). The verb form preceding the clitic generalizes the -m suffix that, in the simple inflected paradigm, expresses 3 Sg /inanimate subject, to all subject categories except 3 Pl . So we see $-\grave{m}=b \dot{\varepsilon}$ - for example with 1 Sg (280a), 1 Pl (280b), and 3 Sg subjects (280c). The past clitic is L-toned because it follows the L-toned suffix - $\grave{m}$. Before the past clitic, I gloss - $\grave{m}$ - simply as "Ipfv" in interlinears. In the 3 Pl , the regular 3 Pl imperfective suffix $-y \dot{\varepsilon}$ - appears before the past clitic, so there is double marking of the 3 Pl category $(280 \mathrm{~d})$.
(280) Past unsuffixed imperfective
a. bíré bír $\varepsilon-\mathfrak{m}=b \grave{\varepsilon}-\grave{y}$
work(n) work-Ipfv=Past-1SgSbj
'I was working.'
b. bíré bíré-m̀=bè-ỳ.: 'We were working.'
c. bír $\varepsilon \quad$ bír $\varepsilon$ - $-m=b \dot{\varepsilon}-\varnothing \quad$ ' $\varnothing$ /She was working.'
d. bíré bíré-yè=b-à: 'They were working.'

The morpheme sequence $-m=b$-à: does not belong here; instead, it is a variant of $-m a ̀=b$-à: (3Pl past perfect), §10.4.1.3.

A textual example of $-y \grave{\varepsilon}=b$-à: is (281).

| nànàná: | òngòrò-úrò | $y \varepsilon ̌$ | tángú-m̀, |
| :---: | :---: | :---: | :---: |
| entirely | husband ${ }^{\text {L }}$-house | come | transfer.Ipfv-3SgSbj, |
| ánày ${ }^{\text {n }}$ | $k a^{n}-y \grave{\varepsilon}=b-a ̀:$ |  |  |
| thus | do. $\mathrm{Ipfv}-3 \mathrm{PlSbj}=$ | st-3P1Sbj |  |

'she (=bride) would definitively come and move to the husband's house. They used to do thus.' [2005.1a.14]

The past imperfective negative is based on the conjugated imperfective negative with suffix complex -ŋ̀-dó-. This form of the suffix complex occurs in all subject categories except 3 Pl . The latter adds the 3 Pl form of the past clitic to the already 3 Pl suffix complex $-\grave{m}-n-\varepsilon$ - . Since $-\grave{m}$-dó- and 3Pl -m̀-n- $\varepsilon$ - end in a H-tones, the past clitic takes its falling-tone form.

Past imperfective negative
a. bíré bíré-m̀-dó $=b$ ह́- $̀$
work(n) work-Ipfv-Neg=Past-1SgSbj
'I was not working.'
b. bíré bíré-ì-dó=bé-ỳ.: 'We were not working.'
c. bíré bíré-衣-dó $=b \hat{\varepsilon}:-\varnothing \quad$ 'He/She was not working.'
d. bíré bíré-m̀-n- $=b-a ̂: \quad$ 'They were not working.'

### 10.4.1.2 Past stative

In the past stative (chiefly for stance verbs: 'I am/was sitting/standing'), the verb form preceding the past clitic has the regular stative stem shape segmentally, but it is H-toned. The initial reduplication is optionally present. The stative stem is followed by suffix $-W^{\prime}-$, which has generalized from 3 Sg stative $-\grave{W}$, but here also has H-tone, so the past clitic has its fallingtoned form. The 3 Pl has $-W^{-}$- before the past clitic, as do the other pronominal categories. The $-W^{-}$- suffix before the past clitic is glossed simply as "Stat[ive]" in interlinears. Since statives like 'be sitting' make no perfective/imperfective distinction, the past suffix is especially useful with these verbs. The examples in (283) use the stative form of eẃ-yé- 'sit'.

Past stative
a. (ì-?)éw-yé- ${ }^{W}=b \varepsilon$ - $-\grave{y}$
(Rdp-)sit-MP-Stat=Past-1SgSbj
'I was sitting.'
b. (ì-P)éw-yé-w = bé-ỳ. $\quad$ 'We were sitting.'
c. (ì-P)éw-yé-ẃw =bê:- $\varnothing \quad$ 'He/She was sitting.'
d. (ì-?)éw-yé-ẃ $=b$-â: 'They were sitting.'

Negative counterparts add stative negative clitic = rá- before the past clitic. The stative negative clitic controls $\{\mathrm{L}\}$ overlay on the preceding stem. Thus èw-yè- $w=r a ́=b \varepsilon ́-y$ ' I was not sitting'.

### 10.4.1.3 Past perfect

The third and last positive AN category with no audible AN suffix is the unsuffixed perfective. The (more or less) related form used with the past clitic is somewhat different formally, and the sense is past perfect ('had VP-ed'). It is used, for example, in counterfactual conditional clauses ( $\S 16.5$ ), and I will refer to it as past perfect (instead of past perfective).

Before the past clitic, the verb takes the bare stem (including H-tones, which are suppressed in the regular inflected unsuffixed perfective). The verb, moreover, takes a full set of pronominal-subject suffixes, so the subject is marked both on the verb and on the past clitic. The suffixes for first and second person subject are L-toned, so the past clitic takes its

L-toned form. $C \check{v}$ - verbs like $y \varepsilon ̌$ - 'come' that have /LH/ tones in some similar syllabic positions have H-tone (284).
(284) Past perfect (first/second person)
a. $y \varepsilon ́-\grave{W}=b \grave{\varepsilon}-\grave{W}$
come- $2 \mathrm{SgSbj}=$ Past -2 Sg Sbj
'You-Sg had come.'
b. $y \varepsilon ́-\grave{y} . \therefore=b \grave{\varepsilon}-y . \therefore$
come-1PlSbj=Past-1PlSbj
'We had come.'
c. kú $\quad g o ̀-l o ́-y ̀=b e ̀-\grave{y}$

Inan. Sg go.out-Caus-1 $\mathrm{SgSbj}=$ Past- 1 SgSbj
'I had taken it out.'
In the past perfect, special third person suffixes are used in the verb preceding the clitic: $3 \mathrm{Sg} /$ inanimate $-\grave{W}$ - (285a), and 3Pl -mà- or less often -m̀- (285b). The 3Pl suffix variant -mà- is identical in form to the plural perfective participial suffix -mà. In this light, one might connect the $3 \mathrm{Sg}-\grave{W}$ - suffix to the inanimate perfective participial suffix $-\grave{W}$, though it seems odd that a specifically inanimate morpheme would generalize to animate 3 Sg . The 3 Pl variant $-\grave{m}$ - could cause the uninitiated to misparse a 3 Pl past perfect as a 3 Pl past imperfective. Thus ló-m̀ = b-à: 'they had gone' (text 2005.1a.08) was initially misconstrued by the fieldworker as 'they were going' by analogy to (non-3Pl) past imperfective forms like $3 S g$ ló- $\grave{m}=b \dot{\varepsilon}-\varnothing$ 'he/she was going'. However, the sense 'they were going' is actually expressed by ló-yغ̀ =b-à:.
(285) Past perfect (third person)
a. $y \varepsilon ́-\grave{W}=b \grave{\varepsilon}-\varnothing$
come- $3 \mathrm{SgSbj}=$ Past- 3 Sg Sbj
'He/She had come.'
b. yé-mà $=b$-à:
come-3P1Sbj=Past-3PlSbj
'They had come.'
A version of the past perfect in relative-clause form with suffix - $\grave{W}$ is recorded in a text: $y \varepsilon ́-\grave{W}=b \check{\varepsilon}-\grave{W}$ 'they (locusts) had come (many years earlier)' [2005.1a.08].

The past perfect negative ('had not VP-ed') is built on the perfective negative with -rí-, which (as usual) controls $\{\mathrm{L}\}$ overlay on the preceding verb. The form in $-r_{1}^{\prime}-$ with no further suffix generalizes to all subject categories except 3 Pl , which has its regular perfective negative form $-r$-á before the past clitic (286d).
a. $y \grave{\varepsilon}-r_{1}=b \varepsilon ́-\grave{y}$
come ${ }^{\text {L }}-$ PfvNeg $=$ Past -1 SgSbj
'I had not come.'
b. yè-rí=bé-Ẁ 'You-Sg had not come.'
c. $y \varepsilon ̀-r i ́=b \hat{\varepsilon}:-\varnothing \quad$ 'He/She had not come.'
d. yè-r-á=b-â: 'They had not come.'

### 10.4.1.4 Past of perfective-1a

Though the combination is uncommon, an explicitly perfective-1a form with suffix :-rè- is attested with the past clitic. In (287), the speaker first used this form, then restarted the clause and repeated the same verb without the past clitic, suggesting that he preferred the latter phrasing. My assistant did indicate that the combination with past clitic is grammatical, though not common.

| [kú ${ }^{\text {HL }}$ ár ${ }^{n}$ à-gùsù] | [[pé-nùmǔy ${ }^{n}$ nùmǔy ${ }^{n}$ | sa.] |
| :---: | :---: | :---: |
| [DiscDef ${ }^{\text {HL }}$ year] | [[ten-five five | plus] |
| $d \check{:}$-rغ̀ = bè- $\varnothing]$ | gùy ${ }^{n}-b \grave{-}$ |  |
| arrive-Pfv1a=Past-3SgSbj] | say.Pfv-3PlSbj-, |  |
| dǒ:-rغ̀- $\varnothing$ | gùy ${ }^{n}$-bó |  |
| arrive-Pfv1a | say.Pfv-3P1Sbj |  |

'That year was the 55th year since they (=locusts) had (last) arrived, they said.' [2005.1a.08]

### 10.4.1.5 Past progressive

The past progressive with suffix :-rà- can be followed by the past clitic. In this combination, the form that generalizes throughout the paradigm has suffix $-\grave{W}$ - (as in the past stative) added to the progressive suffix. In the 3 Pl , I recorded a form with -rà- $\grave{W}-b o$ before the clitic.

Past progressive
a. bíré bìré:-rà- $\grave{W}=b \varepsilon$ - $-\grave{~}$
work(n) work-Prog-Stat=Past-1SgSbj
'I was working.'
b. bíré bìré:-rà-Ẁ $=b \hat{\varepsilon}:-\varnothing$
'He/She was working.'
c. bíré bìré:-rà-Ẁ-bó=b-â:
'They were working.'

The past progressive negative adds stative negative = rá- before the past clitic (289).
(289) Past progressive negative
a. bíré $b i ̀ r e ́:-r a ̀=r a ́=b \varepsilon ́-y$
work(n) work-Prog=StatNeg=Past-1SgSbj
'I was not working.'
b. bíré bìré:-rà $=r a ́=b \hat{\varepsilon}:-\varnothing$
'He/She was not working.'
c. bíré bìré:-rà $=$ rá $=b$-â:
'They were not working.'
For $k \hat{a}^{n}-W^{n}=b \grave{\varepsilon} ‘ i t ~ h a p p e n e d ’ ~ a n d ~ i t s ~ n e g a t i o n ~ k a ̀ n-i ́=b e ̂ ;, ~ s e e ~ § 11.1 .6 . ~$
10.4.1.6 Past of 'be' and 'have'

Defective stative quasi-verbs 'be (somewhere)' and 'have', and their negations, can combine with the past clitic. For 'was', the stem itself ends in an H-tone, with or without yá, and the 3 Pl form is doubly conjugated.
(290) Paradigms of 'was' and 'was not'

| category | 'was' | 'was not' |
| :---: | :---: | :---: |
| 1Sg |  | ¢̀gó $=$ bé- ${ }^{\text {y }}$ |
| 2Sg | $b u ́=b \varepsilon$ - $-\grave{W}$ | 门̀gó $=$ bé- ${ }_{\text {¢ }}$ |
| 1 Pl | $b u ́=b \varepsilon$ - -y . | ற̀gó $=$ bé- y . |
| 2 Pl |  |  |
| 3 Sg | $b u ́=b \hat{\varepsilon}:-\varnothing$ | 门̀gó $=b \hat{\varepsilon}:-\varnothing$ |
| 3 Pl | $b-\varepsilon^{n}:=b-\mathrm{a}:$ | ŋ̀gó $=b$ - a : |

$b \hat{\varepsilon}$ - may also replace $b$ ú-, as in yá $b \hat{\varepsilon}:-\varnothing$ 'there used to be $\ldots$ ( 3 Sg )' in text 2005.1b.01.
For 'have', the positive forms (except the doubly-conjugated 3Pl) are based on só-ẃ-, with stative - -w $^{-}$.
(291) Paradigms of 'had' and 'did not have'
category 'had' 'did not have'

| 1Sg | só- $-\hat{W}=b \varepsilon \varepsilon^{-1}$ | sò-ló $=$ bé- ${ }^{\text {g }}$ |
| :---: | :---: | :---: |
| 2 Sg | $s o ́-\bar{W}=b \hat{\varepsilon}-\grave{W}$ | sò-ló $=$ bé- $\grave{W}$ |
| 1 Pl | $s o ́-\bar{W}=b \varepsilon$ - $\grave{y}$. $:$ | sò- 10 = $=$ bé- y . $:$ |
| 2 Pl | $s o ́-\underline{W}=b \dot{\varepsilon}-\dot{W} .:$ | sò-ló $=$ béz- $\hat{W}^{\prime}$. |


| 3 Sg | $s o ́-W^{\prime}=b \hat{\varepsilon}:-\varnothing$ | sò-ló $=b \hat{\varepsilon}:-\varnothing$ |
| :--- | :--- | :--- |
| 3Pl | $s-\varepsilon ́:^{n}=b-\hat{a}:$ | $s \grave{\varepsilon}-n \varepsilon ́=b-\hat{a}:$ |

The resultative verb form, with suffix -só-, is occasionally combined with past clitics, and has the same forms as for 'have'.

| mòsú mà:ní-Só- 价 $=b \varepsilon ́-\grave{-}$ | kálà |  |
| :--- | :--- | :--- |
| bad | think-Reslt-Stat=Past-2SgSbj | even |

'even if you-Sg were to think (something) evil' [2005.1b.07]
10.4.2 'Still', 'up to now', (not) yet'
'Still' is àsú $\rightarrow$ (also 'always'), optionally expandible as àsú $\rightarrow$ dàn $w o ̂ y$.
(293) [àsú $\rightarrow$ dà ${ }^{n}$ Wôy] sèllè-rí- $\varnothing \quad$ má
[still all all] be.healthy-PfvNeg-3SgSbj Q
'Is he/she still sick?'
'Up to now, as of now' can be expressed as dôm kálà or as núwn ${ }^{n} y^{n}$ kálà, with kálà 'even'.
'(Not) yet' is expressed with a negative predicate plus dôm '(up to) now'.
(294) dôm yè-rí- $\varnothing$
up.to.now come-PfvNeg-3SgSbj
'He/She hasn't come yet.'

### 10.5 Imperatives and hortatives

10.5.1 Imperative and prohibitive

A representative paradigm of positive and negative imperatives is in (295), for the verb 'come’ (yध́). The (positive) imperative is based on the imperative stem (§10.5.2, below), which for this verb involves a shift in the final vowel to a. The prohibitive (=negative imperative) forms are based on a dedicated prohibitive suffix -ré-. In both cases, there is no further affixation for 2 Sg addressee, while $\mathbf{2 P l}$ addressee is marked by a suffix -ǹ.
(295)

| form | gloss |
| :--- | :--- |
| yá | 'come!-Sg', |
| yá-ì | 'come!-Pl' |
| yé-ré | 'don't come!-Sg' |
| yé-ré-ì | 'come!-Sg' |

Because basic reflexive-object pronouns (á, plural â:) are limited to third person subjects, they cannot be used to test whether imperatives have a syntactically operative covert second person subject. In (296a), the object is 2 Sg with no reflexive marking, compare (296b) with a disjoint subject. NPs with possessed $k \hat{u}$ : 'head' can occur in imperatives as in other types of
clause, but their status as anaphors is quesitonable (296c). Reciprocal objects are also allowed in plural-subject imperatives (296d). Optional accusative marking of objects, as in (296a), shows that these NPs have the same grammatical status as objects in ordinary clauses.

For some verbs the imperative stem has the same vocalism as the unsuffixed perfective, in which case the distinction between e.g. 2 Sg imperative (296a) and 3 Sg perfective (296e) is made only by tone overlay.

| a. | ú $=n i ̀ ~$ | súyó |
| :--- | :--- | :--- |
|  | $2 \mathrm{Sg}=\mathrm{Acc}$ | hit.Imprt |
|  | 'Hit-2Sg yourself!' |  |

b. ú =nì sùyò-bó
$2 \mathrm{Sg}=$ Acc $\quad$ hit.Pfv-3PlSbj
'They hit-Past you-Sg.'
c. [ú ${ }^{H L}$ kû:] súyó
[2SgPoss ${ }^{\text {HL }}$ head] hit.Imprt
'Hit-2Sg yourself!'
d. tǔ: súyó-ǹ̀

Recip hit,Imprt-Imprt.Pl
'Hit-2Pl each other!'
e. ú=nì sùyò- $\varnothing$
$2 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv-3SgSbj
'He/She hit-Past you-Sg.'

### 10.5.2 Imperative stem

The imperative stem, which is used without further modification as a singular-addressee positive imperative ('come!'), is not always identical to the simple bare stem used in chains and before indicative suffixes.

The imperative stem and the bare stem are identical for H-toned monosyllabics not ending in $\varepsilon$ (297a), for HH-toned bisyllabic $C$ v́Cv́ stems (bimoraic, with light initial syllable) ending in \{a e o 0$\}$, i.e. not ending in a high vowel or in $\varepsilon$ (297b), and for $C v y^{n}$ stems (297c). As always, the stem-initial $C$ position in these schemas may be vacant.
(297) /H/ melody, prosodically light
gloss bare stem imperative
a. monosyllabic

| 'go' | ló | ló |
| :--- | :--- | :--- |
| 'spend night' | ná | ná |
| 'give' | ní | ní |
| 'enter' | nú | nú (homophonous with 'hear') |

b. light bisyllabic, final nonhigh vowel
'jump' pété pété
'speak' tégé tégé
'go down' sí-yé sí-yé
'affix, paste' tárá tárá
'choke’ póró póró
c. $C^{n}{ }^{n}$
'do' káy ${ }^{n}$ káy ${ }^{n}$
'put' gǎy ${ }^{n}$ gǎy ${ }^{n}$
Verb stems with other shapes undergo an audible tonal change to final L-tone, and/or a mutation of the final vowel to $a$. These changes are predictable from the phonological form of the simple bare stem.
/LH/-melody monosyllabic stems, and /LH/-melody bisyllabic stems with light first syllable, i.e. $C \grave{V} C \bar{v}$, have $\{\mathbf{H}\}$ overlay in the imperative. Because of this, all $C_{V}$ and $C_{V} C_{V}$ stems (regardless of lexical tone melody) have H-toned imperatives. Therefore the identity between bare stem and imperative for the lexically $/ \mathrm{H} /$-toned $C v$ and $C v C V$ stems described above is accidental (resulting from a phonetically inaudible $\{\mathrm{H}\}$ tone overlay on an already $/ \mathrm{H} /$ toned verb). (298) shows audible $\{\mathrm{H}\}$ overlay on lexical /LH/ melodies.
(298) /LH/ melody, prosodically light
gloss bare stem imperative
a. monosyllabic
'go/come out'
'drink'
gǒ
gó
nǒ
nó
b. $C v C v$, final nonhigh vowel
'pull' bàsá
'stop up’ mùsó
'sprinkle' mìsé
'kill' jìyé
básá
músó
mísé
jíyá

Trimoraic bisyllabic stems, which have a heavy initial syllable, and all bisyllabic stems regardless of syllable weight that end in a high vowel $\{i u\}$, add a stem-final L-tone formative in the imperative. If the lexical melody is $/ \mathrm{H} /$, the result is an HL tone pattern (299a,c). If the lexical melody is /LH/, the result is an $<\mathrm{LH}>\mathrm{L}$ pattern (299b,d). In the case of bimoraic lexical $C \grave{v} C \bar{v}$ stems (299d), the $<\mathrm{LH}>$ portion of $<\mathrm{LH}>$.L is expressed chiefly on the first syllable even though this syllable is monomoraic. Phonetically, there can be some spillover of the H-tone element into the onset of the second syllable. A similar issue of phonetic realization was seen with 1 Sg possessor forms of $C v C v$ noun stems (§6.2.2).
gloss bare stem imperative
a. prosodically heavy, $/ \mathrm{H} /$ melody, final nonhigh vowel

| 'screw in' | pí:ré | pí:rè |
| :--- | :--- | :--- |
| 'sit' | éw-yé | éw-yè |
| 'do well' | cé:lé | cé:lè |

b. prosodically heavy, /LH/ melody
final high vowel
'think' mà:ní mǎ:nà
'rake up' yàwrú yǎwrà
'finish' dùmdú, dùmdí dǔmdà
final nonhigh vowel
'sneak up on' yò:ró yǒ:rò
c. prosodically light $(C v C v, C v N C v), / \mathrm{H} /$ melody, final high vowel

| 'look' | tíní | tínà |
| :--- | :--- | :--- |
| 'hang up' | kólí- | kólà |
| 'encounter' | témbí | témbà |

d. prosodically light ( $C v C v, C v N C v$ ), /LH/ melody, final high vowel

| 'put down' | dèyí | děyà |
| :--- | :--- | :--- |
| 'chase away' | làrí | lǎrà |
| 'help' | bàrí | bǎrà |
| 'take' | àyí | ǎyà |
| 'dig' | gànjí | gănjà |

Stems of three syllables also shift the final tone to low. An /H/-melody verb shifts from H.H.H to H.H.L (300a). /LH/-melody trisyllabics shift from L.L.H in the bare stem to L.H.L in the imperative; the lexical H -tone element is preserved, but displaced to the medial syllable (300b).
(300) Trisyllabic
gloss bare stem imperative
a. /H/ melody
'get up' ínjírí ínjírà
'cough' kógúsó kógúsò
b. /LH/ melody
'roll on ground' dùlùró dùlúrò
'roll over' bilìré bilírè
'hide’ bàngìrí bàygárà
'go around’ gòngìrí gòngórà
In addition to the tonal changes, the imperative may change the final vowel to a , and if so this may affect the medial vowel (in trisyllabics).

If the stem ends in $\varepsilon$, it shifts to $a$, even in $C \varepsilon$ monosyllabics (301a). If it already ends in a, the imperative also has $a$, and it is moot whether a vowel mutation has occurred (301b). If it ends in $\left\{\begin{array}{llll}\mathrm{e} & 0 & 0\end{array}\right\}$, there is no mutation to $\mathrm{a}(301 \mathrm{c})$. Monosyllabic Ci and Cu verbs also do not mutate (301d). Bi- and trisyllabic stems ending in a high vowel all shift it to a (301e-f). In the case of trisyllabics, the shift to final a induces the medial vowel, elsewhere a high vowel (due to weak metrical position), to harmonize with the initial vowel (301f).
(301) Vocalism of imperative stem
gloss bare stem imperative

| a. final $\varepsilon \rightarrow a$ monosyllabic |  |  |
| :---: | :---: | :---: |
| 'come' | $y \varepsilon ̌-$ | yá |
| 'take (hot coals)' | $j \varepsilon ̌-$ | já |
| 'bring' | $j \varepsilon$ :- | jă: |
| bisyllabic |  |  |
| 'hone' | $n \varepsilon r^{n} \varepsilon^{\prime}-$ | nér ${ }^{\text {ná }}$ |
| 'kill' | jìyé- | jíyá |
| 'swallow' | mìr ${ }^{n}$ ¢- | mír ${ }^{n}$ á |
| b. stem already a-final |  |  |
| 'tie' | páyá | páyá |
| 'bear (child)' | nàr ${ }^{n}$ á | nár ${ }^{n}$ á |
| 'spend night' | ná | ná |
| c. no change in final $\left\{\begin{array}{llll}\text { ela } & 0\end{array}\right\}$ |  |  |
| monosyllabic |  |  |
| 'drink' | nǒ | nó |
| 'catch' | wó | wó |
| bisyllabic |  |  |
| 'take down' | sí-lé- | sí-lè |
| 'do well' | cé:lé | cé:lè |
| 'file' | dì:sé- | dǐ:sè |
| 'eat (meat)' | kúwó | kúwó |
| 'hit' | súyó | súyó |

d. no change in final high vowel in monosyllabics with high vowel

| 'see' | yǐ- | yí |
| :--- | :--- | :--- |
| 'hear' | nǔ- | nú (homophonous with 'enter') |

e. final high vowel $\rightarrow$ à, bisyllabics

| 'fill' | bà:lí- | bǎ:là |
| :--- | :--- | :--- |
| 'push' | dàmbí- | dǎmbà |
| 'tamp down' | dèngí- | děngà |
| 'clean off' | ká:sí- | kǎ:sà |
| 'caress' | pú:rú- | pú:rà |


| 'scare' | ú:rú- | ú:rà |
| :--- | :--- | :--- |
| 'pinch' | Émbí- | Émbà |
| 'push down on' | lésí- | lésà |
| 'put up on' | náyní- | náy ${ }^{n}$ à |

```
f. trisyllabics with medial high vowel
all vowels high
    'twist' únjúwú- únjúwà
final high vowel, initial nonhigh vowel, medial vowel changes
    'hide' bàngìrí- bàngárà
'go around' gòngùrú- gòngórà
```


### 10.5.3 Irregular imperative stems

All verbs including 'come', 'go', and 'take' have regular imperative stems.
Certain greetings are imperative-like in form, and have a plural-addressee form ending in -nì that resembles imperative plural suffix -ǹ, but these greetings are somewhat irregular and difficult to parse; see $\S 19.5$.

### 10.5.4 Imperative plural (positive) -ǹ (-nì)

The (positive) plural-addressee imperative is expressed by adding -nì $\sim-n$ to the imperative stem. An imperative of the tonal type bǎrà 'help!' simplifies to plural-addressee bárá-ǹ, which to my ear is homophonous to the corresponding form of bárá 'gather!' (302b).
gloss bare stem $\quad$ Imprt $\mathrm{Sg} \quad$ Imprt Pl
a. various shapes
'go’ ló ló ló-ǹ
'come' yé y-á yá-ǹ
'twist' únjúwú- únjúw-à únjúwà-n
'tie’ páyá páyá páyá-ǹ
'hide' bàygìrí bàygár-à bàygár-à-ǹ
'think' mà:ní mǎ:n-à mǎ:n-à-ǹ
'finish' dùmdú~dùmdí dǔmd-à dǔmd-à-ǹ
'put down' dèyí déy-â déy-á-ǹ
b. distinct bare stems, homophonous imperatives

| 'gather' | bàrá | bárá | bárá-ǹ |
| :--- | :--- | :--- | :--- |
| 'help' | bàrí | bǎrà | bárá-ì |

10.5.5 Prohibitive -ré~-lé, plural -ré-ǹ~ -ré-nì~ -l 1 -ǹ $\sim-l \varepsilon ́-n i ̀ ~$

The prohibitive stem includes a suffix -ré, which has no phonological interactions with the stem. It is compatible with any stem-vocalism (i.e. its vowel does not harmonize to stem-
vowels e or $o$ ). The rhotic is not subject to Nasalization-Spreading under the influence of a nasal in the stem. The verb occurs in the bare stem, with its lexical tone melody.

| gloss | bare stem | prohibitive |
| :---: | :---: | :---: |
| 'go' | ló | ló-ré |
| 'go in' | nú | nú-ré |
| 'come' | $y \varepsilon ̌$ | yě-ré |
| 'hear' | nǔ | nǔ-rย́ |
| 'drink' | nǒ | nǒ-rย์ |
| 'take out' | gò-ló | gò-ló-ré |
| 'do well' | cé:lé | cé:lé-ré |
| 'hit' | súyó | súyó-ré |
| 'swallow' | mìr ${ }^{n} \dot{\varepsilon}$ | mir ${ }^{n} \hat{\varepsilon}-r \underline{\varepsilon}$ |
| 'hide' | bàngìrí | bàngìrí-ré |
| 'pinch' | émbí- | ع́mbí-ré |
| 'get up' | ínjírí | ínjírí-ré |
| 'twist' | únjúwú- | únjúwú-ré |

The three $C v y^{n}$ stems have prohibitives with $-1 \varepsilon$, whose 1 replaces the $y^{n}$ of the stem, leaving no trace of nasalization. Thus gǎy ${ }^{n}$ 'put', prohibitive $g a ̌-l \varepsilon ́ ~ ' d o n ' t ~ p u t!' . ~ L i k e w i s e ~ k a ́-l \varepsilon ́ ~ ' d o n ' t ~$ do!', gù-lદ́ ‘don't say!'.

The prohibitive stem is used without further modification as the singular-addressee prohibitive ('don't-Sg ...!'). For plural addressee, the suffix -ǹ̀ $\sim$-nì is added, as for the (positive) imperative. Thus nú-ré ‘don't-Sg go in!’, nú-ré-ǹ ‘don’t-Pl go in!’

### 10.5.6 Hortatives (-ḿ, $\left.\mathrm{Pl}-m a ̂ y^{11}\right)$ and their negation (-rè-ḿn $\sim-l \grave{\varepsilon}-m$ )

For a singular addressee, the hortative suffix is $-m$ following the bare stem in $\{\mathrm{L}\}$-toned form. Prototypically, the speaker encourages the addressee(s) to join the speaker in carrying out some action.
a. lò-ḿn
go-Hort
'Let's-2 go!'
b. $n \varepsilon ̌ y^{n} \quad$ ṅ̀- $-m$
meal eat-Hort
'Let's-2 eat (the meal)!'
c. èw-yè-ḿ
sit-MP-Hort
'Let's-2 sit down!'

Further examples of the simple hortative are in (305). Stems ending in a short high vowel pronounce it as $u$ before $-m$, and if there are no other $i$ vowels or palatal consonants the
rounded pronunciation spreads leftward to a noninitial medial syllable, as in 'hide'. The $C v y^{n}$ stems ('say', 'put', 'do') lose the final semivowel.
gloss bare stem hortative
a. final nonhigh vowel
'hit' súyó sùyò-ḿ
b. final high vowel

| 'hide' | bàngìrí | bàngùrù-ḿn |
| :--- | :--- | :--- |
| 'go back' | píníwní | pìnìwn${ }^{n} u ̀-m ́ n$ |
| 'pinch' | Émbí- | Èmbù-ḿ |

c. $C v y^{n}$
‘say' gǔy ${ }^{n} g \grave{n}^{n}-m$ n
'put' gǎy ${ }^{n}$ gàn ${ }^{n}-m$ m
'do' káy ${ }^{n} \quad k a^{n}-m$
The suffix - mây $^{n}$ is added to a verb stem with $\{\mathrm{L}\}$ tone overlay to produce a $3+$-plural hortative, normally used when the speaker is addressing two or more persons, so the implied subject is first person plural (minimally three referents).
a. lò-mây ${ }^{n}$
go-Hort.Pl
'Let's-3+ go!'
b. $n \varepsilon ̌ y^{n} \quad n \grave{\varepsilon}-m a ̂ y^{n}$
meal eat-Hort.Pl
'Let's-3+ eat (the meal)!'
c. èw-yè-mây ${ }^{n}$
sit-MP-Hort.Pl
'Let's-3+ sit down!'

A hortative negative is formed by adding -rè-m or (plural) -rè-mây ${ }^{n}$ to the stem (which has its regular tones). The negative element $-r \dot{\varepsilon}$ - has some similarity to perfective negative $-r_{1}^{\prime}$, but -rغे- does not force tone-dropping on the verb stem, and its $r$ is not subject to NasalizationSpreading triggered by a nasal in the stem. It is therefore to be directly connected to prohibitive -ré-.
a. ló-rè-ḿ
go-Neg-Hort
'Let's-2 not go!'
b. $ク \varepsilon ̌ y^{n} \quad$ né-rè-ḿn
meal eat-Neg-Hort
'Let's-2 not eat (the meal)!'
c. éw-yé-rè-ḿ
sit-MP-Neg-Hort
'Let's-2 not sit down!'
d. ló-rè-mây ${ }^{n}$
go-Neg-Hort.P1
'Let's-3+ not go!'

For nú- ‘enter’ and nǔ- ‘hear’, I recorded nú-rغ̀-ḿ ‘let's-2 not go in!’ and nǔ-rغ̀-ḿ 'let's-2 not hear!'.

The $r$ of - rغ̀- $-m$ combines with the final nasal of $C v y^{n}$ - verb stems as 1 . Thus káy ${ }^{n}$ - 'do, make' has ká-lغ̀-m' 'let's not do!', gǎyn- 'put' has gă-lغ̀-m' 'let's not put!'.

As mentioned before, the prototypical context for a hortative is that the speaker proposes to the addressee(s) that they jointly perform an action. There are textual examples with hortative - $-\dot{m}$ in a clause proposing an action by a third party. For example, near the end of B's turn in (685) in the sample text we see $\varepsilon r^{n} \varepsilon ́$ jìy $\varepsilon$ jùw ${ }^{n} \grave{j}-m$ 'let him (=the linguist) kill (=turn off the recorder)'.

The hortative form in -ḿ can also be used as a $\mathbf{1 S g}$ hortative, where the speaker exhorts the addressee(s) to allow the speaker to do something. This requires an explicit 1 Sg pronoun 1 preceding the verb, and the examples I have of this also involve a syntactic frame including either imperative dùwó 'leave (=let, allow)' or a special invariant form $j \check{\varepsilon}$ : (cf. verb jê.: 'bring') with similar sense, as in (308a). The corresponding plural-subject form has 1 Pl pronoun $\hat{1}$ : and hortative plural -mây ${ }^{n}$, which in this context may denote any number of persons from two up.
a. í:yà, jê: í àyì-ḿ
stand.Imprt, let! 1 SgSbj take-Hort. 1 Sg
'Stand-2Sg (=wait), let me take (=get) it!'
b. í:yà-ǹ, $\quad j \check{\varepsilon}: \quad \hat{1}: \quad$ ày-mây ${ }^{n}$
stand.Imprt-Imprt.Pl, let! 1 SgSbj
'Stand-2Pl (=wait), let us (instead of you-Pl) take (=get) it!'

A quoted form of a clause like (308), with logophoric á instead of 1 Sg í, is attested in a text (2005.2a.07).

In (309), the 1 Sg hortative construction is used to make an offer to help.

'I too, what little I have heard there (=about that), let me add (=help) just a little there.' [2005.2b.04]

See also §17.1.3.2, below, on explicitly embedded hortative clauses.
10.5.7 Quoted imperative ( $-\bar{y} \sim-\dot{y}$ ) and its negation ( - ré- $\bar{y}$ )

A third-person subject form here labeled QuotImprt (in earlier drafts: third-person hortative) occurs in imprecations and wishes of the type 'may/let (e.g. God) him/her/them VP', expressing a wish or imprecation. In this function it may be conjugated for 3 Pl subject. The QuotImprt form is also used in quoted commands (jussives), which use the quotative-subject construction instead of conjugating the verb (§17.1.3.1).

The QuotImprt suffix is $-y$, added directly to the stem. It is subject to NasalizationSpreading. There is no distinct plural-subject form, except in imprecations (which lack the quotative-subject construction).

For $C \boldsymbol{v}$ - monosyllabic stems, the lexical tone melody is preserved (310a-b), so the suffix is H-toned $-\hat{y}$ (or nasalized $-\hat{y}^{\prime \prime}$ ). 'Bring' keeps its lexical $<$ LHL $>$ tones, and the whole word comes out as <LHL> rather than <LHLH> (310c). The three $C_{v y^{n}}$ verbs have QuotImprt forms homophonous to the bare stems (310d).
(310) Monosyllabic
gloss bare stem QuotImprt

| a. /H/ melody |  |  |
| :---: | :---: | :---: |
| 'go' | ló | ló-ý |
| 'eat' | nغ́ | né- $\underline{y}^{n}$ |
| 'give' | ní | $n i ́-y^{n}$ |
| 'go in' | nú | nú-ýn |
| 'sow' | tó | tó-y |
| 'spend night' | ná | ná- y $^{n}$ |
| 'reply' | sá | sá-ý |
| 'shoot' | tá | tá-y |
| '(woman) marry (man)' | $\varepsilon$ | ह-ý |
| 'choose, reserve' | lá | lá-y |

b. /LH/ melody
'come'
'drink'
$y \varepsilon ̌$
$y \grave{\varepsilon}-\dot{y}$
'see'
'go out'
nั
$n \grave{-y}{ }^{n}$
'catch'
gǒ
yi-y
gò-ý
'arrive'
wò-ý
'hear'
$d \grave{j}-\dot{y}$
'learn' bă bà-ý
'(food) sate (sb)' bă bà-ý
'shape (pottery)' mă mà-ýn
c. /LHL/ melody (only example)
'bring' $j \check{\varepsilon}: \quad j \check{z}:-\grave{y}$
d. $C V y^{n}$ (segmentation of QuotImprt ambiguous)
/LH/ melody 'put' $\quad$ gǎy ${ }^{n} \quad g a ̌ y^{n}-\varnothing$ (or: $g a^{n}-y^{n}$ )
'say' gǔy ${ }^{n}$ gǔy ${ }^{n}-\varnothing$ (or: gùn $\left.{ }^{n}-\hat{y}^{n}\right)$
/H/ melody
'do, make' káy ${ }^{n}$ káy ${ }^{n}-\varnothing$ (or: kán ${ }^{n}-y^{n}$ )
Bi- and trisyllabic verbs ending in a non-high vowel are illustrated in (311). When the lexical melody is $/ \mathrm{H} /$, the QuotImprt remains H-toned if bimoraic (311a), but HL-toned with the low on the final syllable prosodically heavy (311b). Frozen causatives gò-ló- 'take out' (cf. gǒ'go out') and sí-lé- 'take/bring down' (cf. sí-yé- 'go/come down'), along with another verb of conveyance jò-ló- 'convey, take (somewhere)', are treated for this purpose as prosodically heavy (311c). For bisyllabic stems $(C v C v, C v C C v)$ with/LH/ melody, the QuotImprt has an L-toned stem followed by an H-toned suffix $-y^{\prime}(311 \mathrm{~d})$. Trisyllabic stems with /LH/ melody have bell-shaped L.H.L tone in the QuotImprt (311e).
(311) Nonmonosyllabic stems with final non-high vowel
gloss bare stem QuotImprt
a. /H/ melody, $C v C v$ (light)

| 'cut' | césé | césé-ý |
| :--- | :--- | :--- |
| 'hit' | súyó | súyó-ý |
| 'tie' | páyá | pá á́-ý |
| 'go down' | sí-yé | sí-ye-ý |

b. /H/ melody, heavy
'do well' cé:lé cé:lè-ỳ
'sit' éw-yé éw-yè-ỳ
'destroy' hálké hálkè-ỳ
'cough’ kógúsó kógúsò-ỳ
c. $C v C v$-, frozen causatives (all relevant examples)
/H/ melody
'take down' sí-lé sílè̀-ỳ
/LH/ melody
'take out' gò-ló gó-lò-ỳ
'convey' jò-ló jó-lò-ỳ
d. /LH/ melody, CvCv - and $\mathrm{Cv}(\mathrm{N}) \mathrm{Cv}$ - (light)

CvCv
'leave' dùwó dùwò-ý
'work' bìré bìrè-ý
'go up' ùró ùrò-ý
CvNCv
'roll turban' dòmbó dòmbò-ý
'stutter' bèmbé bèmbè-ý
e. /LH/ melody, heavy
'poke' dùsùró dùsúrò-ỳ
Bi- and trisyllabic stems ending in a high vowel are in (312). The bisyllabic ones, whether lexically /H/ (312a) or /LH/ (312b), have an HL-toned QuotImprt. In the trisyllabic cases, the first syllable preserves the initial tone of the lexical melody, so we get H.H.L for $/ \mathrm{H} /$ trisyllabics (312c) and L.H.L for /LH/ trisyllabics (312d).
(312) Nonmonosyllabic stems with final high vowel
gloss
bare stem
QuotImprt
a. /H/melody, bisyllabic
'ignite' tálí tálì-ỳ
'look' tíní tínì-̀̀
'encounter' témbí témbì-ỳ
‘begin' túmdí túmdì̀-̀
'split nut' káwrú káwrì-ỳ
b. /LH/ melody, bisyllabic
'help' bàrí
'cover' dèwí déwì-ỳ
'receive' àwú áwì-y
'hold' wàyí wáyì-̀̀
‘dig’ gànjí gánjì-ỳ
‘finish' dùmdú, dùmdí dúmdì-ỳ
'encounter' dà:yí dá:yì-ỳ
c. /H/ melody, trisyllabic
'go back' píníwní píníwnì-ỳ
d. /LH/ melody, trisyllabic
'hide [tr]' bàggì-rí- bàngí-rì-ỳ
'hide [intr]' bàngì-yí- bàngí-yì-ỳ
Examples of the QuotImprt are in (313). For the syntax of jussives and further examples, see §17.1.3.1. Some greeting formulae may contain quoted imperatives ( $\S 19.5$ ).
a. jǐnjè ú hálkè-ỳ
God 2 SgObj destroy-QuotImprt
'May God destroy you-Sg!' (hálké-)
b. jǐnjè ú dùwò-ý

God 2SgObj leave-QuotImprt
'May God leave you-Sg (in peace)!' (dùwó-)
c. $S$ ló-ý

S go-QuotImprt
'May S (person's name) go!' (ló-)
$-y$ undergoes monophthongization with a preceding $i$, resulting in a phonetic long [i:] with the appropriate tone. Thus, the QuotImprt forms in (314a-b) are pronounced [ní:] and [bárì:], respectively.

b. jǐnjè ú bárì-̀̀

God 2SgObj help-QuotImprt
'May God help you-Sg!' (bàrí-)

In such imprecations, which lack the quotative-subject construction, the 3 Pl -subject QuotImprt (positive) adds -bó (i.e. the 3 Pl subject allomorph used with the unsuffixed perfective and a few other inflected verb forms) to the QuotImprt suffix: gò-ý-bó 'may they go out!', gánjì-y-bó ‘may they dig!', páyá-ý-bó 'may they tie!'.

The QuotImprt negative is expressed by - ré- $y^{\prime}$ added to the regular bare stem of the stem: gó-ré-ý 'may he/she not go out!', gànjí-ré-ý 'may he/she not dig!' Without further suffixation this functions as the 3 Sg -subject QuotImprt.

The 3Pl-subject QuotImprt negative adds -bś to the QuotImprt negative suffix complex in imprecations: gó-ré-ý-bó 'may they not go out!’, gànjí-ré-ý-bó 'may they not dig!'

### 10.5.8 Quoted imperative form with 1 Sg subject reference

To verify that an interlocutor or a third party wants the speaker to perform an action, the speaker may use a phrase like those in (315), essentially an implied indirect quotation based on an imperative. Local French equivalents have clause-initial de plus infinitive (d'acheter du lait?, etc.). An overt independent pronoun can be added if necessary ( 315 g ).


```
    milk buy.Ipfv-QuotImprt Q
    `(Did you/they ask/tell/want) me to buy some milk?` (\varepsilońw\varepsiloń-)
b. yû: dúyó-ý má
    millet pound-QuotImprt Q
    `(Did you/they ask/tell/want) me to pound the millet (ears)?' (dùyó-)
c. gò-ý má
    go.out-QuotImprt Q
    `(Did you/they ask/tell/want) me to go out?' (gó-)
```

d. bárì-ỳ mà
help-QuotImprt Q
'(Did you/they ask/tell/want) me to help?' (bàrí-)
e. sátálà jě:-ỳ mà
kettle bring.Ipfv-1SgSbj $\quad$ Q
'(Did you/they ask/tell/want) me to bring the kettle?' ( $j \ddot{\varepsilon}:-)$
f. yè-ý má
come.Ipfv Q
'(Did you/they ask/tell/want) me to come?' (yé-)
g. î: gò-ý má

1Pl go.out-QuotImprt Q
'(Did you/they ask/tell) us to go out?

Here ma is the standard morpheme for polar interrogatives. Since the 1 Sg subject suffix is $-y$ (atonal), one is initially inclined to assume that this suffix is present in the verbs of (316). However, inspection of the forms (especially the tones) shows that the verb here is in the QuotImprt form (see preceding section). All of the examples in (315) can also be read as true jussive sentences: ‘(Did you/they ask/tell) him/her to go out?' and so forth.

In most cases, the question format and the conversational context make it clear that the subject is 1 Sg . It is possible, however, to add an explicit independent pronoun to clarify the pronominal category of the subject. This can be done, for example, to specify 1 Pl (exclusive) instead of 1 Sg subject.

### 10.5.9 Quoted hortative

Quoted hortatives are based on the regular hortative forms $-m$ and $-m a ̂ y^{n}(\S 10.5 .6)$. The two forms can be neutralized in quotations as the simpler form -ḿ (316).

| $[[\hat{1}:$ | sóy $]$ | lǒ-m] | gìy ${ }^{n}$-bŏ |
| :--- | :--- | :--- | :--- |
| $[[1 \mathrm{Pl}$ | all $]$ | go-Hort $]$ | say.Pfv-3P1Sbj |

## 11 VP and predicate structure

### 11.1 Regular verbs and VP structure

### 11.1.1 Verb types (valency)

Verbs are intransitive (no direct object) or transitive. The distinction in transitivity is less important than in e.g. English since some verbs occur with a cognate nominal as a kind of pro-forma object.
ní 'give' takes a dative NP denoting the recipient, and a direct object denoting the entity transferred (317).
a. pèrě-m mă: ní-tî:- $\varnothing$
sheep-AnSg 1Sg.Dat give-Pfv1b-3SgSbj
'He/She gave me a sheep.'
b. [sěydù ${ }^{\mathrm{L}}$ mà: $]$ pèrě̌-m ní-tî:- $\varnothing$
[S ${ }^{\mathrm{L}}$ Dat] sheep-AnSg give-Pfv1b-3SgSbj
'He/She gave a sheep to Seydou.'
c. mầ:
ní-tî:- $\varnothing$
1Sg.Dat give-Pfv1b-3SgSbj
'He/She gave (it) to me.'
$c \varepsilon$ :rí- 'show', however, takes two direct objects.
a. pèrě-m í cé:rí-tî:- $\varnothing$
sheep-AnSg 1 SgObj show-Pfv1b-3SgSbj
'He/She showed me a sheep.'
b. í cé:ríttî:- $\varnothing$

1 SgObj show-Pfv1b-3SgSbj
'He/She showed (it) to me.'

Basic directional motion verbs gǒ- 'go out; leave, depart from', yě- 'come', and ló- 'go' may take simple NPs (not explicitly marked by postpositions as locative) as apparent direct objects. However, one could argue for a covert locative postposition in such cases.
a. [bê:n
$g o ̀=n ́]$
[dúwánsán
$y غ ̀-\varnothing]$
[B leave=and.SS] [D come.Pfv-3SgSbj]
'He/She left Beni and came to Douentza.'
( $=$ ' $\mathrm{He} /$ She came from Beni to Douentza.')
b. ìsê: lò- $\varnothing$
village go.Pfv-3SgSbj
'He/She went to a/the village.'
'Say’ (gǔy ${ }^{n} \sim g \check{\text { İ: }}$ I) takes a dative complement denoting the person addressed.
[kj̀: ${ }^{\mathrm{L}}$ kâ: $\left.{ }^{n}\right]$ mă: gì-ní- $\varnothing$
[thing ${ }^{\mathrm{L}}$ any] 1Sg.Dat say-PfvNeg-3SgSbj
'He/She didn't say anything to me.'

### 11.1.2 Valency of causatives

Most causatives are simple transitive verbs derived from intransitive inputs. However, it is also possible to make causatives from already transitive input verbs. In this case, there are two direct objects, one of which represents the logical subject (agent) of the embedded clause.

```
a. ìsòrò \({ }^{\mathrm{L}}\)-nìngú í \(\quad\) ì̀:- \(W^{n} \grave{\imath}-\varnothing\)
baobab \({ }^{\mathrm{L}}\)-sauce 1 SgObj eat-Caus.Pfv-3SgSbj
'He/She fed (= caused me to eat) millet cakes (with baobab sauce).'
```

b. pèrě̌-m í $\quad$ s̀̀ $W^{n} \dot{\varepsilon}-W^{n} \grave{-}-\varnothing$
sheep-AnSg 1SgObj slaughter-Caus.Pfv-3SgSbj
'He/She had me slaughter the sheep-Sg.'

### 11.1.3 Verb Phrase

The concept of verb phrase (VP), excluding the subject but including direct objects and other arguments, is most useful in the context of the chaining of a VP to another VP (or to a verb), with subjects held constant. See chapter 15.

### 11.1.4 Fixed subject-verb combinations

In the following phrases, the subject precedes the verb stem. The most obvious examples are those involving weather and celestial bodies, along with emotions; a few examples are in (322).

| subject verb | gloss | comment |
| :---: | :---: | :---: |
| a. ùsú túmbó- | 'sun rise' | túmbó- also 'emasculate by crushing (testicles)' and 'hammer with the butt of one's hand' |
| ùsú yàyá- | 'sun set' | yàyá- 'fall' |
| b. bòlú mìr ${ }^{\text {® }}$ | 'rain fall' | mìrn' $\mathcal{E}$ - (water) submerge (sb)', also 'frustrate (sb) by being stingy', 'swallow' |

c. yǎr gǒ- 'cloudy weather go out (= end)' (circa October)
yǎr dǒ- 'cloudy weather approach' (circa May-June)
[~ yàru]
d. X célè bàr"á- 'X get angry' ('X liver get.angry')

In (322a), the other senses of verb túmbó- listed under "comments" might give rise to rather violent, Goya-esque celestial imagery. Jamsay túmó- and Nanga túmbó- have similar semantic ranges. However, Bankan Tey ùsú túmbó 'sun rise' is unrelated to túwó 'hammer with ...', suggesting that the two senses of BenT túmbó- may reflect accidental homophony. Najamba túmbí- means '(sun) rise' and also e.g. '(tree) grow leaves', suggesting a more benign cosmic image.

The ' X get angry' construction may well have originated as '[X's liver] become.red', where célè (or kélè) 'liver (plus heart)' is the seat of the emotions, and the 'get angry' verb originally meant 'become red; become fiery'. However, X (not X's liver) is now the syntactic subject. In (323a), the HL tones of célè are incorrect for a noun possessed by bô: 'my father' (which ends in an L-tone), cf. bô: ${ }^{\text {L }} c \varepsilon$ ह̀lè 'my father's liver' with $\{\mathrm{L}\}$-toned 'liver'. In (323b), célè is separated from the subject by an intervening constituent. The same-subject (SS) subordinator in the first clause in (323c) confirms that 'my father' and not 'liver' is subject of the second clause.
a. ${ }^{\mathrm{L}+\mathrm{HL}} b$ 万̆:
célè
bàr ${ }^{n a ́:-r \varepsilon ̀-\varnothing ~}$
1SgPoss- ${ }^{\text {HL }}$ father liver be.angry-Pfv1a-3SgSbj
'My father got angry.'
b. bô: $\quad{ }^{\mathrm{L}+\mathrm{HL}}$ nầy $^{n} \quad$ célè $\quad$ bàr ${ }^{n}$ á:-rè- $\varnothing$

1 Sg -with
'My father got angry at me.'

'He saw this and got angry.'

Similar constructions where a body-part or other noun functions as a pseudo-subject (really a kind of adverb) are $X$ fàrná gǒ- ' $X$ show(s) off’, $X$ cìn-dúrù gǒ- ' X have a bloody nose (nosebleed)', and X mò:-nî: gǒ- 'X slobber'. Although the blood and the saliva are what 'go out' (gǒ-), the syntactic subject in each case is X, an NP that is not a possessor (there is no possessor-controlled tone overlay on the pseudo-subject).

### 11.1.5 Idiomatic and cognate objects

Some examples of fixed combinations of object noun and verb are in (324). Many more can be found in the lexicon.

[^1]| gá:jè gǎy ${ }^{n}$ | 'tell (crack) a joke' |
| :--- | :--- |
| só:rú gǎy | 'slip a stone (under)'; 'sheathe (knife)' |
| háccílè gǎy | 'pay attention to' |
| kó:r'̀̀ gǎy |  |
| gùrò-gàdǎy gǎy | '(e.g. lion) let out a roar' |
| tòròmbá:sù gǎy ${ }^{n}$ | 'tie hobbles on (quadruped)' |
| 'tie a slipknot' |  |

b. with káy ${ }^{n}$ 'do, make' (complement may be nominal or adverbial)
cérè káy ${ }^{n} \quad$ 'be amazing (to sb )'
dǎwrù káy ${ }^{n}$ 'take actions'
kútíbá káy" '(imam) read fixed part of sermon'
tábsî:r káy ${ }^{n}$ 'give unofficial sermon'
sírdì káy ${ }^{n}$ 'do magic tricks'
c. others (among many)
wóngóró wàrá- 'do (manual) farm work (in field)'
něy ${ }^{n}$ bìré- 'cook a meal'

### 11.1.5.1 Formal relationships between cognate nominal and verb

A representative set of pairs of verb and cognate nominal are given in (325). It is somewhat difficult to sort them into groups, since both the noun and the verb are of variable shape. Since verb shapes are tightly constrained, the bias in organizing the data is toward the shape of nouns. In general, the order proceeds from cases where the noun may derive from a specific suffixal pattern, most likely deverbal (325a-h), to cases where the noun seems autonomous and the verb may be secondary (325i-p). Fulfulde borrowings bring up the rear.

$$
\begin{equation*}
\text { noun } \quad \text { verb } \quad \text { gloss of combination } \tag{325}
\end{equation*}
$$

a. noun in form of verbal noun (§4.2.2)
sèr $r^{n}-\hat{1}: \quad$ sér ${ }^{n}$ '
tòng-î: tóngú- 'write, do some writing'
têy tégé- 'speak'
tàrî: tárá- 'lay egg'
c. $C$ vy noun, $C$ v́- verb (cf. §4.2.3)
with ATR shift
tǒy tó- 'sow (seeds); sow the seedstock'
d. bisyllabic noun with final falling-tone vowel
lèmdê: lémdé- 'request, beg’
sè:njế: sé:njí- 'do the second round of weeding'
pàrâ: párí- 'cook pàrâ: (a dish with cow-peas)'
e. bisyllabic, noun ends in vy diphthong not present in verb (cf. §4.2.3)
final y in noun only
jìmbǎy jìmbí- 'double up, have two'

| kòsǒy | kósú- |
| :---: | :---: |
| final y in noun corresponds to yv in verb (with knife), do the harvest' |  |
| mòngǒy $\quad$ mòngùyó- | '(insects) be one on top of the other' |

f. noun ends in long í: (cf. §4.2.3)
úsúrí: úsúrú- 'ask a question'
jéwí: jèwé- 'curse, utter a curse'
góngírí: gòngùrú- 'make a circuit (trip)'
$t_{i ́ W}{ }^{n} r^{n} 1: \quad t_{i ́} W^{n} r^{n} u ́-\quad$ 'formally counsel'
g. /LH/-toned bisyllabic noun ending in $u$ (possible old VblN )
kòrú
kóró-
'lie, tell a lie'
tìr ${ }^{n} u ́ \quad$ tír ${ }^{n}$ ह́- 'go search for firewood'
h. /HL/-toned bisyllabic noun ending in $u$ not present in verb

| pérù | péré- | 'clap, applaud' |
| :--- | :--- | :--- |
| sálù | sálá- | 'pray, perform the Muslim prayer' |
| dúrù | dùró- | 'let out a groan' |
| mánù | màní- | 'laugh, let out a laugh' |
| bémbù | bèmbé- | 'stutter' |
| dómbù, dôm <br> with ATR shift | dòmbó- | 'roll turban (on head)' |
| yógù <br> jóngù | yòyó- | jòngí- |

i. $C$ v̌: noun, $C$ v́-verb

| yǒ: | yó- | 'weep' |
| :--- | :--- | :--- |
| pǒ: | pó- | 'give out a whistle' |
| tă: | tá- | 'avoid, respect (a taboo)' |

j. bisyllabic, verb and noun end in same non-high vowel

| jìyé | jìyé- | 'dance' |
| :---: | :---: | :---: |
| sùwó | súwó- | 'defecate, take a shit' |
| tìwé | tíwé- | '(a) death occur' |
| bíré | bìré- | 'work, do a job' |
| dùwó | dùwó- | 'perform black magic' |
| gósò | gòsó- | 'divide into parts' |
| gúrò | gùró- | 'vomit' |
| bérè | bèré- | 'gain, make a profit' |
| cèmnદ́ | cémné- | 'have fun, stage festivities' |
| $\grave{\varepsilon} W^{n} r^{n} \dot{\varepsilon}$ | $\varepsilon^{\text {c/ }}{ }^{n} r^{n} u^{-}$ | 'converse, chat' |
| nùw ${ }^{n}$ ¢́ | nùw ${ }^{n}$ 亿- | 'sing, perform a song' |

k. trisyllabic, verb and noun end in same non-high vowel yímírè yìmìré- '(beggar) sing koranic verses'

1. noun Cvy, verb bisyllabic with final non-high vowel
jáy
jàyá-
'fight, engage in a fight'
m . verb and noun end in high vowel or zero

| gíy ${ }^{n}$ | gì: $\mathrm{y}^{n} 1$ Í- | 'fart, let out a fart' |
| :---: | :---: | :---: |
| tă: $y^{n}$ | tá: $y^{n} 1$ í- | 'build a shed (stall)' |
| cěl | célí- | 'dig rainwater channel' |
| dǎwrù | dàwrú- | 'cast a spell' |

n. bisyllabic, noun ends in non-high vowel, verb ends in high vowel

| pòmbó | pómbú- | 'compete, be in a race' |
| :--- | :--- | :--- |
| dănnà | dànní- | 'hunt, go on a hunt' |

o. $C v C v C v$, noun with HHL tone

| gólórò | gòlùrú- | 'snore' |
| :--- | :--- | :--- |
| bégérè | bègèré- | 'belch' |

p. other
ùwǎW ú:-yí- 'be afraid'
q. Fulfulde borrowing, final $\varepsilon$ in noun and verb, noun HL, verb HH
tínè tíné- 'make a profit'
jáyrè jáyré- 'poke fun at'
píllè píllé- 'tell a story'
wá:tè wá:té- 'swear an oath' (<Fulfulde)
r. Fulfulde borrowing, final $\varepsilon$ in noun, verb ends in high vowel
wá:jè wá:jí- 'preach a sermon'
In (326), there is a partial cognate relationship. In (326a), the noun has an initial vocalic formative that is absent in the verb. In (326b), the final syllable of the noun is truncated in the verb. In (326c), the noun is really a frozen noun-adjective sequence (cf. cèsú 'unripe; raw'), with the verb based on the noun only. In (326d), the noun contains a compound initial that is disregarded in the verb.
noun $\quad$ verb gloss of combination
a. initial $a$ - on noun but not on verb (§4.1.6), noun with final $u$
à-pétù pété- 'jump, take a jump'
à- jǎy ${ }^{n} \quad j$ ann $^{n} \quad$ 'sow in a pit with manure'
b. final syllable of noun truncated in verb (noun probably borrowed)
sámbâl sámbí- 'hire (sb) by the day'
c. noun-adjective combination
pìyè cèsú píyé- 'give out a shout'
d. noun has compound initial
àr ${ }^{n a ̀}-t o ̌: \quad$ tó- 'scold'
jìrè-nî: ní:yní- 'sleep’ (jìré ‘eye’)
cèlè-bégù bègé- 'hiccup'
nà:-sìnjěy sínjé- 'draw lines'

### 11.1.5.2 Grammatical status of cognate nominal

The cognate nominal may be modified adjectivally (327b) or quantified over (327c).
$\begin{array}{ll}\text { a. jáy } \quad \text { jàyá-tî:- } \varnothing \\ & \text { fight(n) } \\ & \text { 'He/She fought ( }=\text { got into }) \text { a fight.' }\end{array}$
b. $\left[j a ̀ y^{\mathrm{L}} \quad\right.$ díy ${ }^{n}$ à- $\left.w^{n}\right]$ jàyá-tî:- $\varnothing$
[fight(n) ${ }^{\mathrm{L}}$ big] fight-Pfv1b-3SgSbj
'He/She fought (= got into) a big fight.'
c. [jáy yěy] jàyá-tî:- $\varnothing$
[fight(n) two] fight-Pfv1b-3SgSbj
'He/She fought (= got into) two fights.'
11.1.6 'Do' or 'be done' káy ${ }^{n}$

The verb 'do, make', also used intransitively ('be done'), has bare stem káy ${ }^{n}$, perfective káy ${ }^{n}-t \hat{1}-$, unsuffixed imperfective $k a^{n}-\left(3 S g\right.$ kán-mì), and imperative káy ${ }^{n}$. The perfective negative is kà-ní-, and the imperfective negative is kán-m̀-dó-.

The intransitive forms of káy ${ }^{n}$ can also mean 'happen, take place', with reference to e.g. a celebration or other activity. Only $3 \mathrm{Sg} /$ Inan forms with inanimate subject are attested. In the positive example (328a), the verb is in stative form with stative 3 Sg suffix $-\grave{W}$. (328b) is perfective negative. Both have the past clitic, with (as usual) $=b \grave{\varepsilon}$ after an L-tone and $=b \hat{\varepsilon}$ : after an H-tone.
a. cèmné $\quad k a^{n}-\grave{W}^{n}=b \dot{\varepsilon}-\varnothing$
festivity be.done-Stat $=$ Past-3SgSbj
'The festivities (e.g. dancing) had taken place.'
b. cèmné kà-ní=bê:
festivity be.done-PfvNeg=Past
'The festivities had not taken place.'

For some fixed collocations involving káy ${ }^{n}$ and a noun or adverb, see (324b) in §11.1.5, above.

## 11.2 'Be', 'become', 'have', and other statives

11.2.1 Copula clitic $=\grave{m}(=\varnothing)$ 'it is ...'

This clitic has unconjugated and pronominally conjugated forms. The morphological analysis is tricky because the clitic itself sometimes appears only in the form of a slight tone change on a noun or adjective. There has also probably been a partial historical fusion with nominal suffixes (animate singular $-m$, animate plural/inanimate $-\varnothing$ ), but the split in 'it is' clitic allomorphs groups (animate) plural with singular, so there is no clean synchronic connection.

For the 'it is' clitic with passive -yéy-, see $\S 9.5$.

### 11.2.1.1 Unconjugated positive forms

A clitic with various allomorphs is added to an NP (e.g. an independent pronoun) or to an adverbial in predicative function, as an identificational predicate. We begin with the impersonal form of the clitic, which is not conjugated for subject pronominal category. It resembles 'it is ...' in English, as in 'it's me' or 'it's dogs [focus] that I don't like.' This form is identical to the 3 Sg conjugated form, as in 'he/she/it is ...'. The full set of conjugated forms is described in the following subsection.

After a pronoun, demonstrative pronoun, or demonstrative adverb (all of which end in vowels), the clitic is $=\grave{m}$, with L-tone. In (329) and later examples, the ordinary form is given in parentheses after the translation. Note that animate and inanimate referents are involved.
a. $\quad \dot{\varepsilon} r^{n} \dot{\varepsilon}=\grave{m}$
$3 \mathrm{Sg}=\mathrm{it}$.is
'It's him/her.' ( $\varepsilon r^{n} \varepsilon^{\varepsilon}$ )
b. $\quad i=\grave{m}$
$1 \mathrm{Sg}=$ it.is
'It's me.' (í)
c. $b \hat{u}:=\grave{m}$
$3 \mathrm{Pl}=\mathrm{it}$.is
'It's them.' (bû:)
d. $\grave{\eta} g u ́-r u ̀=\grave{m}$
here $=i t$.is
'It's here.' (ìgú-rù)
h. $\quad \grave{g} g u ́=~ \grave{m}$

Prox.Inan=it.is
'It's this.' ( $\grave{g}$ ú )
i. $\left[a ̀ r^{n a ̀} \quad m u ̌:\right]=\grave{m}$
[man ${ }^{\mathrm{L}} \quad$ Prox.An]=it.is
'It's this man.' (àr ${ }^{n}$ à mǔ:)

Inanimate nouns take a (segmentally) zero allomorph of the 'it is' clitic. We first consider vowel-final stems. If the final vowel is otherwise H-toned, as in òr ${ }^{n}$ ó: 'bush (outback)' or bòlú 'rain', it appears in the 'it is' construction with $<\mathrm{HL}>$-tone. A final short vowel is lengthened to permit this contour tone to be articulated; see Contour-Tone Mora-Addition (§3.7.4.1). Likewise, if the stem-final vowel is $<\mathrm{LH}>$-toned, as in tǎ: 'water source’, in the 'it is' combination it appears with bell-shaped $<$ LHL $>$ tone. In other words, the 'it is' clitic in this instance is audible only by grafting of a segmentally empty L-toned morpheme (floating L) at the right edge of the stem. There is no audible change when the 'it is' clitic is added to a noun that already ends in a long L - or $<\mathrm{HL}>$-toned vowel, like ìsê. 'village', its possessed form ísè:, and tórò 'mountain' (330a-c). The final L-tone is audible in (330d-f).
a. ìsê: $=\varnothing$
village $=$ it.is
'It's a village.' (ìsê:)
b.
$\left.{ }^{H L}{ }_{\text {ísè̀ }}:\right]=\varnothing$
[2SgPoss ${ }^{H L}$ village] $=$ it.is
'It's your-Sg village.' (ú ${ }^{\text {HL }}$ ísè., from ìsê:)
c. tórò $=\varnothing$
mountain=it.is
'It's a mountain.' (tórò)
d. $\grave{\partial r} r^{n} \hat{\imath}:=\varnothing$
outback=it.is
'It's the bush (=outback).' (òr ${ }^{n}$ б:)
e. bòlû: $=\varnothing$
rain=it.is
'It's (the) rain.' (bòlû)
f. tă: $=\varnothing$
water.source $=i$ it.is
'It's a water source (pond etc.).' (tǎ:)

If the noun ends in a consonant (either lexical or suffixal), the clitic again appears as (segmental) zero, with a final L-tone component that is audible only when the noun would otherwise end in an H - or $<\mathrm{LH}>$-toned syllable (331a-b). It is inaudible when the noun would otherwise already end in an L - or $<\mathrm{HL}>$-toned syllable ( $331 \mathrm{c}-\mathrm{d}$ ). Care must be taken to distinguish animate singular suffix $-m$ (which has no intrinsic tone) from the 'it is' clitic allomorph $=\grave{m}$. However, historically it is likely that the 'it is' variant $=\grave{m}$ was partially shaped by resegmentation of old animate singular forms.
a. $\quad \grave{n} j \check{\varepsilon}-\grave{m}=\varnothing$
$\operatorname{dog}-\mathrm{AnSg}=\mathrm{it}$. is
'It's a dog' (ìnjě-m)
b. tù:-búnúgôy= $\varnothing$
age.group-group=it.is
'It's a group of age-mates.' (tù:-búnúgóy)
c. $a^{n} r^{n a ̀}-m=\varnothing$
man- $\mathrm{AnSg}=\mathrm{it}$.is
'It's a man.' (ár $r^{n}$ à-m)
d. [[àr $r^{n a}{ }^{\mathrm{L}} \quad$ mǔ: $\left.] \quad{ }^{\mathrm{HL}} y \hat{a ̂}-m\right]=\varnothing$
[[man $\left.\left.{ }^{\mathrm{L}} \quad \operatorname{Prox} . \mathrm{An}\right] \quad{ }^{\mathrm{HL}}{ }_{\text {woman }}\right]=\mathrm{it}$. is
'It's the woman (= wife) of this man.' ([... ${ }^{\text {HL }}$ yâ-m], from yǎ-m)
The (usually optional) plural particle bè behaves as though H-toned bé, and therefore appears (regularly) as bê: $=\varnothing$ (lengthened to permit the $<\mathrm{HL}>$-tone to be articulated).
a. ìsê: bè
village $\quad \mathrm{Pl}$
'(some) villages'
b. ìsê: bê: $=\varnothing$
village $\quad \mathrm{Pl}=\mathrm{it}$.is
'It's (some) villages.'
Definite particle kù is treated as though it were H-toned inanimate pronoun kú. We therefore get $k u ́=\grave{m}$ (333), homophonous to $k u ́=\grave{m}$ 'that's it'.
a. ár ${ }^{n} a ̀-m \quad k u ̀ ~$
man-AnSg Def
'the (aforementioned) man'
b. [árnà $-m \quad k u ́]=\grave{m}$
[man-AnSg Def]=it.is
'It's the (aforementioned) man'
There are quite a few nouns that end in a long $<\mathrm{HL}>$-toned vowel, whether underlying or due to lengthening by Contour-Tone Mora-Addition; see (109b-c) in $\S 6.3 .1$. The 'it is' form is homophonous to the simple independent form, e.g. kòsû: 'calabash', kòsû: $=\varnothing$ 'it is a calabash'.

Vowel-final animate nouns, including personal names like 'Amadou' and certain kin terms like 'father', present analytical problems. In the singular, the 'it is' combination has a final $m$ even where the stem lacks this final consonant elsewhere. In (334a, c), 'father' lacks (animate) singular suffix - $\grave{m}$ in other contexts, but a final $\grave{m}$ appears in the 'it is' combinations (334b,d). (334d) shows final im after a personal name in the 'it is' construction. One can argue whether the $\grave{m}$ in ( $334 \mathrm{~b}, \mathrm{~d}-\mathrm{e}$ ) is the 'it is' clitic itself, or a morphosyntactically specialized instance of (animate) singular suffix -m. I will take it to be the 'it is' clitic.
a. $\begin{array}{ll}\text { ú } & { }^{\text {HL }} \text { bô: } \\ & \text { 2SgPoss }\end{array}{ }^{{ }^{H L} \text { father }}$
'your-Sg father'
b. mǔ:

Prox.An [2SgPoss $\quad{ }^{H L}$ father] $=$ it.is
'This (man) is your-Sg father'
c. bǒ:
father
'(a) father'
d. bǒ: = $̀ \grave{m}$
father $=$ it.is
'It's a father.'
e. á:mádù $=\grave{m}$
$\mathrm{A}=\mathrm{it}$.is
'It's Amadou (man's name).'

Some other singular kin terms are more complex, since they have (animate) singular $-m$ and $\{\mathrm{HL}\}$ tone overlay in their possessed forms, as for 'mother' in (335a-d). In the possessed form, the 'it is' clitic is now inaudible, as we see by comparing (335b) to (335a). In the unpossessed forms, however, the 'it is' clitic is clearly audible as $=\grave{m}$ (335d), contrast (335c).
(335)
a. ú
${ }^{H L}$ nár ${ }^{n a ̀}-m$
2 SgPoss
${ }^{H L}$ mother-AnSg
'your-Sg mother'
b. mǔ: $\quad\left[u ́ \quad{ }^{H L}\right.$ nár $^{n}$ à- $\left.m\right]=\varnothing$

Prox.An $\quad\left[2 \mathrm{SgPoss} \quad{ }^{H L}\right.$ mother- AnSg$]=\mathrm{it}$.is
'This (woman) is your-Sg mother'
c. nàr $n a ́$
mother
'(a) mother'
d. nàr $r^{n} a^{=}=\grave{m}$
mother $=$ it.is
'It's a mother.'

In the plural, kin terms take plural particle bè. In the 'it is' combination, we get the same $b e ̂:=\varnothing$ described above.
a. ú
${ }^{H L}$ bô: bè
2SgPoss ${ }^{H L}$ father Pl
'your-Sg fathers' (i.e. father and father's brothers)
b. ú $\left.{ }^{\text {HL }} b \hat{\imath}: \quad b \hat{e}:=\varnothing\right]$

2SgPoss ${ }^{\mathrm{HL}}$ father Pl ]
'It's your-Sg fathers.'
Likewise, for ' $\ldots$ are your-Sg mothers', $\ldots$ ú ${ }^{\text {HL }}$ nár ${ }^{n}$ à bê: $=\varnothing$.

### 11.2.1.2 Conjugated positive forms (1st/2nd persons)

The simple clitic $=\grave{m}$ can be conjugated for $1 \mathrm{st} / 2$ nd person subject.
category after H-tone after L-tone

| 1Sg | $=m-1 i^{-1}{ }^{n}$ | $=m-i-y^{\prime}{ }^{n}$ |
| :---: | :---: | :---: |
| 2 Sg | $=m-\underline{u}-\grave{W}^{n}$ | $=m-\grave{u}-\grave{W}^{n}$ |
| 1P1 | $=m-1 i^{\prime} \underline{y}^{n} .:$ | $=m-i-y^{n}{ }^{n}$ |
| 2 Pl | $=m-\underline{u}-\grave{W}^{n}$. | $=m-u ̀-\grave{L}$ |

The tone alternations are similar to those of possessed nouns following undetermined possessors; see §3.7.3.4. In both cases it is difficult to determine whether the HL-toned or Ltoned variant is structurally basic, and any tone-sandhi rule that could be proposed to account for the alternations would have to be morphosyntactically restricted.

For some speakers, the 1 Pl and 2 Pl clitics are added to a noun stem without singular -m , as in [bê:n nù] = mù-ỳ ${ }^{n} .:$ 'we are the people of Beni' [2005.1a.06], as pronounced by an older speaker. For other speakers, including my younger assistant (born 1986), even the pluralsubject forms are (at least seemingly) added to nouns that are singular in form (with animate singular suffix $-m$ ), when the subject is 1 Pl or 2 Pl . The audible effect is that we hear a geminate [mm] in (338b) as well as (338a), and in (338d) as well as (338c). My assistant pronounced the same expression just given as $[b \hat{e}: n ~ n u ̀ ̀-m]=m i ̀-y^{n} .:$ 'we are the people of Beni', in the same recorded text.

The further examples in (338) have interlinears that take the first $m$ to be the (animate) singular suffix.
a. $y i ́-m=m-i ́-\dot{y}$
child-AnSg=it.is-1SgSbj
'I am a child.'
b. $y i \bar{i}-m=m-i ́-\dot{y}$.:
child-AnSg=it.is-1 PlSbj
'We are children.' (cf. yì-tě: 'children')
c. púlò- $m=m-u ́-\grave{v}$

Fulbe-AnSg=it.is-2SgSbj
'You-Sg are a Fulbe.'
d. púlò-m=m-ú-Ẁ. $:$

Fulbe-AnSg=it.is-2P1Sbj
'You-Pl are Fulbe.'

However, there are indications that the geminate [mm] may function for these speakers as an allomorph $=m m$ - of the $=m$ - 'it is' clitic, rather than as the sequence of animate singular $-m$ - and the $=m$ - clitic. In this analysis, the examples in (338) above are segmented as $y_{i} i=m m-i ́-\grave{y}, ~ y i ́=m m-i ́-\grave{y} . \therefore$, púlò $=m m-u ́-\grave{W}$, and púl̀̀ $=m m-u ́-\grave{W} . \therefore$ The best evidence for this is that the geminated mm is heard after vowel-final singular nouns (339).
a. á:mádù $=m m-i ̀-\grave{y}$
$\mathrm{A}=$ it.is -1 SgSbj
'I am Amadou.'
b. $\left[\varepsilon ́ r^{n} \dot{\varepsilon} \quad{ }^{\mathrm{HL}} b \hat{\jmath}:\right]=m m-i \grave{-}-\grave{y}$
[3SgPoss $\quad{ }^{H L}$ father] $=$ it.is- 1 SgSbj
'I am his/her father.'

However, there is also some counterevidence to this (re-)analysis. In a case like púlǒ-m 'Fulbe person', plural púlǒ: 'Fulbe (people)', there is a difference in stem-final vowel length, correlated with presence/absence of the (animate) singular suffix $-m$. We saw in (338d) above that púlò-m=m-ú-ฟ̀. $\therefore$ 'you-Pl are Fulbe' resembles púlǒ-m with short vowel. A similar example is $n u \check{-}-m=m-1 ́-y . \therefore$ 'we are people', cf. nǔ-m 'person' and its long-voweled plural nǔ: 'people'. A partisan of the $=m m$ - analysis of the clitic could respond that the shortening may be due to a (perhaps morphologized) phonological rule, e.g. /pùlò: $=\mathrm{mm}-\mathrm{u}-\mathrm{w} / \mathrm{with}$ long $/ \mathrm{o}: /$ shortening to 0 .

For the noun yí-m 'child' and (irregular) plural yì-tě: 'children', the idiomatic expressions seem to be based on yí-m, e.g. yí-m=m-í-y. $\therefore$ 'we are children' (338b). However, in elicitation I also recorded yì-tť:--= mm-ì-ỳ. 'we are children', based on the irregular plural stem.

### 11.2.1.3 Conjugated positive forms $(3 \mathrm{Pl}=\varnothing$-bつ)

The 3 Pl conjugated form is $=\varnothing$-bó, with an ending that resembles 3 Pl subject inflectional suffix -bó (-bゝ̀) in certain verb paradigms including the unsuffixed perfective, see (278) in §10.3.1. Unlike the case with 1 Pl and 2 Pl clitics just illustrated, an animate noun takes its normal morphological plural form (without singular suffix -m), e.g. púly̌: 'Fulbe (people)’, before $3 \mathrm{Pl}=\varnothing$-bó. However, the stem (if otherwise ending in H - or $<\mathrm{LH}>$-tone) undergoes the tonal changes characteristic of the $=\varnothing$ clitic allomorph (see above), for example in 'dogs' in (340e). Nouns (such as 'father' and 'village') that would otherwise take plural particle bè omit this particle before $=\varnothing$-bó. In (340a), an H. $<\mathrm{LH}>$ noun is realized as H.L before the Htoned clitic; see §3.7.4.5 on the tones.
a. púlǒ: $=\varnothing$-bó

Fulbe. $\mathrm{Pl}=\mathrm{it} . \mathrm{is}-3 \mathrm{PlSbj}$
'They are Fulbe.'
b. ìsê: $=\varnothing$-bó
village $=$ it.is- 3 PlSbj
'They are villages.'
c. [mǔ: bè] [ú $\left.{ }^{\mathrm{HL}} b \hat{0}:\right]=\varnothing$-bó
[Prox.An Pl] [2SgPoss ${ }^{\text {HL }}$ father] $=i t . i s-3 P 1 S b j$
'These (men) are your-Sg fathers'
d. yì-tě: $=\varnothing$-bó
children=it.is-3PlSbj
'They are children.' (never \# yí-m= bj̀)
e. ìnjê: $=\varnothing$-bś
dogs=it.is-3P1Sbj
'They are dogs.' (ìnje)
11.2.1.4 Unconjugated negative 'it is not $\ldots$ ' $(=\grave{m}=d a ́, ~ \varnothing=r a ́)$

Where the positive 'it is' form has $=\grave{m}$, the corresponding negative is expressed by $=\grave{m}=d a ́-$. The stem has the same tones as with the positive $=\grave{m}$ clitic. In slow speech, the negative morpheme is pronounced [...ǹdá], and native speakers correct the linguist's pronunciation when the [ $\grave{\mathrm{n}}$ ] is omitted. However, in normal allegro speech I hear just [...mdá] with no distinct alveolar nasal, and the phonetic [ n ] can be explained as a timing divergence between the labial release and the closing of the velar passage in the articulation of the $m$. I therefore transcribe $=\grave{m}=d a ́$, and I take $=$ dá to be a postnasal form of stative negative = rá-.
a. $k u ́=\grave{m}=d a ́$
Inan=it.is=StatNeg
'It isn't that (discourse-definite).'
b. $\quad i=\grave{m}=d a ́$
$1 \mathrm{Sg}=\mathrm{it} . \mathrm{is}=\mathrm{StatNeg}$
'It isn't me.'
c. á:mádù $=\grave{m}=d a ́$
$\mathrm{A}=\mathrm{it} . \mathrm{is}=$ StatNeg
'It isn't Amadou.'
d. !̀gú = ̀̀ = dá dé

Prox.Inan=it.is=StatNeg if
'if it isn't this' (= 'other than this, aside from this')

The 'if it isn't ...' construction illustrated in (341d) is very common, with demonstrative $\grave{\text { g }} \mathrm{gu}$ 'this' (inanimate) or discourse-definite kú 'that (aforementioned)' as the host of the clitic.

For inanimate nouns or adjectives, the 'it is not $\ldots$ ' construction is expressed by $=\varnothing=$ rá. As with the positive $=\varnothing$, the stem must end in an L-tone.
(342)
a. isê: $=\varnothing=$ rá
village $=$ it.is $=$ StatNeg
'It is not a village.' (ìsê:)
b. [ú
${ }^{\mathrm{HL}}$ ísè: $\left.:\right]=\varnothing=$ rá
[2SgPoss $\quad$ HL village] $=$ it.is $=$ StatNeg
'It is not your-Sg village.' (ú ${ }^{\text {HL }}$ ísè., from ìsê: $)$
c. tórı̀ $=\varnothing=$ rá
mountain=it.is=StatNeg
'It is not a mountain.' (tórò)
d. $\grave{\partial r} r^{n} \hat{\imath}:=\varnothing=r a ́$
outback=it.is=StatNeg
'It is not the bush (=outback).' ( or $^{n}$ 万: $:$ )
e. bòlû: $=\varnothing=$ rá
rain=it.is=StatNeg
'It is not (the) rain.' (bòlú)
f. tă: $=\varnothing=$ rá
water. source $=i$ it.is $=$ StatNeg
'It is not a water source (pond, etc.).' (tǎ:)
g. kòsû: $=\varnothing=$ rá
calabash=it.is=StatNeg
'It is not a calabash.'

### 11.2.1.5 Conjugated negative 'it is not ...' forms (1st/2nd persons)

This $=\grave{m}=d a ́$ 'it is not' clitic sequence can be conjugated pronominally for 1 st $/ 2$ nd person subject (343).
(343)
a. ìnjě-m̀̀ $=\varnothing=d a ́-\grave{y}$
dog-AnSg=it.is=StatNeg-1SgSbj
'I am not a dog.'
b. púlŏ-m= $\varnothing=d a ́-w$

Fulbe-AnSg=it.is=StatNeg-2SgSbj
'You-Sg are not a Fulbe (person).'
The paradigm for first and second person categories is (344). The 2 Sg ends in H -tone.
(344) 'It is not' (1st.2nd person)
$1 \mathrm{Sg} \quad=\grave{m}=d a ́-\grave{y}$
$2 \mathrm{Sg} \quad=\grave{m}=d a ́-\bar{W} \quad$ (H-toned)

$$
1 \mathrm{Pl} \quad=\grave{m}=d a ́-\grave{y} .:
$$

$$
2 \mathrm{Pl} \quad=\grave{m}=d a ́-\grave{w} .:
$$

### 11.2.1.6 Conjugated negative 'it is not ...' forms (3Pl)

The 3 Pl conjugated form is $=\varnothing=$ rá-bó, with a 3 Pl subject morpheme added to the end. The construction is based on the regular plural form of the noun, as for the irregular plural 'children' in (345b) and púly̌: 'Fulbe (people)' in (345c). However, the noun is subject to the usual final tonal modification associated with the $=\varnothing$ clitic if it would otherwise end in H - or $<$ LH>-tone, as with 'dogs' in (345a), which appears with final <HL>-tone and has its final vowel lengthened accordingly by Contour-Tone Mora-Addition (§3.7.4.1).
a. ìnjê: $=\varnothing=$ rá-bó
dog=it.is=StatNeg-3PISbj
'They are not dogs.' (injjé
b. yì-t仑̌: $=\varnothing=$ rá-bó
children=it.is=StatNeg-3PISbj
'They are not children.' (yì-tě:)
c. púlŏ: $=\varnothing=$ rá-bó

Fulbe=it.is=StatNeg-3PISbj
'They are not Fulbe (people).' (púlǒ:, cf. 340a and §3.7.4.5)
11.2.2 Existential and locational quasi-verbs and particles

### 11.2.2.1 Existential (yâ)

The morpheme yá is used before a positive stative (quasi-)verb of existence or possession.
a. nàwnâ: ya
meat Exist be-3SgSbj
'There is some meat.'
b. bérù-m yá só-ỳ
goat-AnSg Exist have-1SgSbj
'I have a goat.'
For bù- ~ bú- ‘be', see §11.2.2.2-3 just below. For só- ‘have’ see §11.5.1, below.
The existential morpheme is disallowed if there is a focalized constuent, such as a WH-interrogative (347).
a. $\left[k \grave{j}^{n^{\mathrm{L}}}\right.$
ǹ̀jé]
bù- $\varnothing$
[thing ${ }^{\mathrm{L}}$ what?] be- 3 SgSbj
'What is there?'
b. ăm $=\varnothing$ bérù-m sò- $\varnothing$
who?=Foc goat-AnSg have-3SgSbj
'Who has a goat?'

In other words, yá is disallowed before a defocalized 'be' or 'have' quasi-verb. These quasiverbs occur only in a single (positive) series, and so cannot themselves express the distinction between ordinary and defocalized status. In effect, yá rectifies this morphological gap. The form with yá is the functional equivalent of a suffixally marked perfective, while the form without yá is the equivalent of the (defocalized) unsuffixed perfective.
yá is also disallowed in negative clauses (348).

```
a. nà \(W^{n}\) â: ŋ̀gó- \(\varnothing\)
meat not.be-3SgSbj
'There is no meat.'
```

b. bérù-m sò-ló-ỳ
goat-AnSg have-Neg-1SgSbj
'I do not have a goat.'
yá is, however, compatible with conditional antecedents (349).
(349) nà ${ }^{n}$ â: yá bú- $\varnothing \quad$ dé
meat Exist be-3SgSbj if
'If there is some meat, ...'
With the 'have' quasi-verb, my assistant made a distinction between presence and absence of yá even in positive contexts, whereby yá só- indicates ownership or other lasting possession, and sò- indicates temporary possession (custody). See §11.5.1-2, below.
yá is occasionally used with progressive and imperfective verb. A progressive example is (89a) in §6.1.3. Imperfective examples are (474) in §15.1.2.1, and (612b) in §18.2.1. Although yá is not very common in these constructions, the fact that it can occur at all suggests an affinity between progressiveness, constant recurrence, and stativity.

### 11.2.2.2 Locational quasi-verbs (bù- ~ bú- 'be', g̀gó- 'not be')

A locational predicate 'be (in a place)' is expressed by an inflected form of quasi-verb bù- following the locational expression, which may be a place name (without spatial postposition) (350a), a locative demonstrative adverb (350b), or a locational PP (350c). In this construction, bù- is L-toned and has a short vowel (unless lengthened by a suffix). L-toned
 stem as bù-. However, in a number of other constructions we get H-toned bú- or a form based on it. The H-toned form occurs after existential yá (§11.2.2.3) and is the likely basis for $<\mathrm{HL}>$-toned variant bû- in adjectival predicates (§11.4.2) and for relative-clause participles like inanimate bú-ẁ (§14.1.6.3).
a. dúwñ́sán bù- $\varnothing$

Douentza be-3SgSbj
'He/She/It is in Douentza'
b. ŋ̀gú-rù
bù-ỳ
here be-1Sg
'I am here.'
c. [úrò tùlù-dá:] b-غ.: ${ }^{n}$
[house behind] be-3PlSbj
'They are behind the house.'
The paradigm is (351). Only the 3 Pl form is irregular. There is a single positive paradigm, morphologically comparable to the unsuffixed (L-toned) perfective of regular verbs. This single series is used without reference to temporal boundaries, and is usually translatable with a present-tense English verb.
(351) category form

| 1 Sg | $b u ̀-\grave{y}$ |
| :--- | :--- |
| 2 Sg | $b u ̀-\grave{W}$ |

1 Pl bù-ỳ:
2 Pl bù-Ẁ:

3Sg bù- $\varnothing$
$3 \mathrm{Pl} \quad b-\grave{\varepsilon}^{n}: \sim b-\grave{\varepsilon}:^{n}-b o ́$

The negative counterpart is $\grave{\eta} g o ́-(352)$.
(352) bàmàkó ந̀ gó-ỳ

Bamako not.be-1 SgSbj
'I am not in Bamako.'

The negative paradigm is (353). The 2 Sg form (disregarding the nasal) is H -toned $\grave{\eta} g o ́-w$, not $<\mathrm{HL}>$-toned \# ! gó-ẁ. The other 1st/2nd person forms are regular. The 3P1 form né-bó consists of 3 Pl subject allomorph -bó plus a thoroughly irregular allomorph né- instead of g̀gó-.
(353) category form

| 1 Sg | ற̀gó-y |
| :---: | :---: |
| 2 Sg | ற̀gó-W |
| 1 Pl | ض̀gó-ỳ ${ }^{\text {a }}$ |
| 2 Pl | ற̀gó-ẁ. |
| 3 Sg | ற̀gó- $\varnothing$ |
| 3 Pl | лé-bó |

### 11.2.2.3 Existential quasi-verbs with yá

In existential function (and in vaguely defined locational function, e.g. 'be present' with no locational adverb), the 'be' quasi-verb is preceded by existential yá.
a. súkórò yá bú- $\varnothing$
sugar Exist be-3SgSbj
'There is some sugar.'
b. pèré yá $b-\varepsilon$ : $:^{n}$
sheep.Pl Exist be-3P1Sbj
'There are some sheep.'
c. yá bú-ỳ

Exist be-1SgSbj
'I am present.'
The paradigm is in (355). The 'be' verb takes the H-toned form bú-, and the 2 Sg (for which we might expect $<\mathrm{HL}>$-toned \#bú-商) appears as H-toned bú-w. The 3 Pl form $b-\grave{\varepsilon}:{ }^{n}$, however, is L-toned, as it is in locational function without yá.
(355) category form

| 1 Sg | yá bú-ỳ <br> 2 Sg |
| :--- | :--- |
| yá bú-w$\quad$ (H-toned) |  |
| 1 Pl | yá bú-ỳ. $\therefore$ |
| 2 Pl | yá bú-Ẁ.: |

### 11.2.3 'Be in, on’

No suppletive stative verbs of the type 'be (put) in' or 'be on', as in Jamsay, have been noted for BenT. The combination yá bú- 'be (in a place)' is used in all such contexts, with an appropriate locational. For postpositions meaning 'on' see §8.4.4-5.

### 11.2.4 Stative stance verbs 'be sitting', 'be lying down'

I have recorded no suppletive or irregular stative stance verbs comparable to those of Jamsay (where stative 'be sitting' and active 'sit down', for example, are expressed by different lexical items).

The reduplicated stative stem (§10.2.1.11) is used with stance verbs to denote static position (356). The same verbs occur in other AN stems in the active sense ('sit down', 'stand up', 'lie down', etc.).
a. ì-Yéw-yè-y

Rdp-sit-MP.Stat-1SgSbj
'I am sitting.'
b. ì-íyà-y

Rdp-stand.Stat-1SgSbj
'I am standing.'
c. bì-bí-yè-Ẁ

Rdp-lie.down-MP.Stat-2SgSbj
'You-Sg are lying down (=in prone position).'

### 11.2.5 'Doesn't connect' (dìmbà- $\grave{\text { a }}=$ rá- $)$

Parallel to Jamsay dìgè=lá-, BenT uses dìmbà- $\grave{W}=$ rá- 'does not follow' (which may take pronominal-subject suffixes). In form, this is the negative (with stative negative clitic = rá-) of the stative, cf. positive dì-dímbà-W 'it follows, is positioned following (something else)'. The phrase can be translated contextually as '(I) don't care whether ...' or 'it doesn't matter whether ...'. The context lends itself to parallelistic constructions (357).
[nár ${ }^{n} \grave{u}=\varnothing \quad$ dìmbà- $-\grave{\text { a }}=$ rá-bó ${ }^{\uparrow}$ ]
[night $=$ it.is follow-Stat=Neg-3PlSbj]
[òmô: $=\varnothing \quad$ dìmbà-Ẁ-rá-bót]
[morning=it.is follow-Stat=Neg-3PlSbj]
'They don't care whether it's night or morning (= day).'

### 11.2.6 Morphologically regular verbs

### 11.2.6.1 'Remain' (bĕ)

This verb is used to indicate the stability of a situation. It is not used in the sense '(quantity) be left over', which is expressed by wàsá-.
a. dà $W^{n a ́} \quad \eta a \hat{y^{n}} \rightarrow \quad$ bè- $\boldsymbol{y}$ thing thus remain.Stat-3SgSbj
'The problem has remained like that.'
b. ŋây ${ }^{n} \rightarrow$ bè-rí- $\varnothing$
thus remain-PfvNeg-3SgSbj
'It didn't remain like that.'

The bare stem is bě. As (358b) shows, the verb has a regular perfective negative. The primary positive paradigm in stative function is (359). An unusual feature is that the third person forms end in $-\dot{y}$ and are homophonous to the 1 Sg forms.
(359) category form

| 1 Sg | $b \grave{̀}-\grave{y}$ |
| :--- | :--- |
| 2 Sg | $b \grave{e}-\grave{W}$ |
|  |  |
| 1 Pl | $b \grave{e}-\grave{y} . \therefore$ |
| 2 Pl | $b \grave{̀}-\grave{a} .:$ |

3Sg/Inan bè-ỳ
3Pl bè-ỳ
In contrast to its usual sense 'remain, stay', bě- is inchoative ('become') when it follows an expressive adverbial (eg. 'become straight'). See $\S 8.6 .7$ for examples and for more on the syntax of expressive adverbials.

### 11.2.6.2 'Become, happen' (tángí-)

In addition to káyn- 'be done' (hence 'happen, take place'), on which see $\S 11.1 .6$ above, there is a verb tángí- 'become', with NP complement (360).

```
\imatĥ:-m tá\etagí:-rè-\varnothing
chief-AnSg become-Pfv1a-3SgSbj
'He became chief.'
```

See also 'he has become a man' (ár"à-m tángí:-rè- $\varnothing$ ) in B's turn in (664) in the sample text.
tángí- also denotes other types of transition in the senses '(fire) be lit', '(liquid) freeze',
and '(person) move out, relocate', and with láwá 'go past' in the chain tángí láwá 'go across (sth); step over'.

### 11.3 Quotative verb and quasi-verb

### 11.3.1 'Say’ (gǔy ${ }^{n}$ - $)$

The inflectable 'say' verb, following a quotation, is $g$ ̌ $^{n}$ - (variant $g 1 ̌ y^{n}$-). It is one of three monosyllabic $C v y^{n}$ stems. These are the only $C v C$ or otherwise C-final verbs in the language (§10.1.3.6). The imperfective 3 Sg is gù-gú-m̀. The same-subject chaining form is gù =ní $\sim$ gì $=n i ́$, and this is the probable etymological source of purposive postposition gǐn $\sim$ gìní $\sim$ gǔn ~ gùní (§8.5.1).

For uninflectable quotative particle wa, commonly used instead of an inflected 'he/she said' verb, see §17.1.2.

### 11.4 Adjectival predicates

If there is a focalized constituent (as in 'that [focus] is what is good'), an adjectival predicate is a $\{\mathrm{L}\}$-toned inanimate form of the adjective (§11.4.3).

In the absence of focalization, there are two adjectival predicate constructions. One has the relevant inflected form of the locational-existential quasi-verb bû- 'be (in a place), exist' following the adjective (which has invariant "inanimate" form). bû- has falling tone in this function (§11.4.1 below). The other construction has the adjective, in animate or inanimate form (depending on referent), followed directly by a pronominally conjugated 'it is' clitic (§11.4.2 below).

Some adjectives are regularly used with bû-, others with 'it is' clitics. There is a fairly good correlation between the choice of predicate construction and the final segment of the stem and/or with presence/absence of inanimate suffix $-W$.
$b \hat{u}-$ is common with stems that have inanimate suffix $-W$ (361a) and is required with those ending in labial $\left\{\begin{array}{l}w \\ u\end{array} \mathrm{~m}\right\}$ (361b-d). These are the modifying forms, not the predicative forms, on which see the following section.
(361) Adjectives with bû:- predicative form
gloss modifying form (inanimate)
a. vowel-final, with inanimate suffix $-W$
'big, adult' díy ${ }^{n}$ à- $W^{n}$
'spacious' káwà-W
'good' غ̀sû-W
'fat' dùgû-W
'long' gùrô-W
'heavy' dùsû-w
'nearby' sòsû-w
'small' dâ:-W
'thin' mènjê-W
'soft' yòrû-w
'lightweight' $\quad n \varepsilon ̀ r r^{n} \hat{u}-W^{n}$
b. with final $W$
'tight; brave' $\quad \check{\varepsilon} W$
'hot' $\widehat{\jmath} W$
'distant' wă:w
c. with final $u$
'crooked' gòlú
'bad, ugly' mòsú
d. with final $m$
'plump' ăm
'cold, slow' tâm
'coarse’ kúnjù-m

Adjectives that take 'it is' clitics in their predicative forms are in (362). This construction is found with some vowel-final adjectives that take inanimate $-w$ (362a), and is required with vowel-final adjectives that have zero inanimate marking (362b), as well as with adjectives
ending in $y$ (362c). Again, the forms in (362) are modifying adjectives, not predicates (on which see $\S 11.4 .2$ below).
(362) Adjectives with 'it is' clitic in predicative form gloss modifying form (inanimate)
a. vowel-final, with inanimate suffix $-W$

| 'unripe' | kèsû-W |
| :---: | :---: |
| 'deep' | Wór ${ }^{\text {ºj- }}$ W |
| 'other' | lă-w |
| 'red' | bár ${ }^{n}$ à- $W^{n}$ |
| 'black' | $j e ́ W^{n}$ è- $W^{n}$ |

b. vowel-final, with zero inanimate suffix
'white' pílé
'skinny' kómbó
'living' úwnó
'old’ $p \varepsilon ̌$ :
'weak, diluted' sèré
'new' kálà
'flat' pàtà-pátà
'easy, cheap' nà:rná
'runty' cété-m (animate singular)
c. final $y$
'half-ripe' bòlòrǒy
'empty' kòrǒy

### 11.4.1 Positive adjectival predicates with 'be' quasi-verb (bî-)

In the regular pattern described here, the form of the predicative adjective is often but not always segmentally identical to the inanimate modifying adjective, but it usually differs tonally. The adjective is followed by an inflected form of bî-, a special <HL>-toned version $b \hat{u}-$ of the locational-existential 'be' quasi-verb bù- ~ bú- (§11.2.2.2-3). The 3Sg (and inanimate) form is $b \hat{u}:-\varnothing$, and the 3 Pl form is $b-\hat{\varepsilon}:^{n}$. While the predicative adjective itself is invariant in form, a $\mathrm{Sg} / \mathrm{Pl}$ distinction is made in this way by the quasi-verb.

The predicative adjective before bû- is either $\{\mathbf{L H}\}$ - or $\{\mathbf{H}\}$-toned, depending on the adjective. In most cases this form is tonally distinct from the inanimate modifying form, which respects the lexical tone melody of the adjective, often /HL/ or /LHL/, less often /LH/, and only rarely $/ \mathrm{H} /$. The form of the predicative adjective is identical to that of the abstractive nominal, specifically the form, $\{\mathrm{H}\}$-toned for some adjectives, used in comparative constructions to specify the domain of comparison (§12.1.1).
gloss Inan modifying predicative with bû-
a. /LH/ in both functions, no nonzero suffix

## final $u$

| 'crooked' | gòlú- $\varnothing$ | gòlú |
| :--- | :--- | :--- |
| 'nearby' | sòsú- $\varnothing$ | sòsú |
| 'bad, ugly' | mòsú- $\varnothing$ | mòsú |
| 'good' | غ̀sú- $\varnothing(\sim$ ह̀sû-W) | ह̀sú |

b. /LHL/ modifying with $-w,\{\mathrm{LH}\}$ predicative without $-w$
final $u$

| 'heavy' | dùsû-W | dùsú |
| :---: | :---: | :---: |
| 'fat' | dùgû-W | dùgú |
| 'soft' | yòrû-W | yòrú |
| 'lightweight' | nèr ${ }^{n} \hat{u}-W^{n}$ | nè̀r ${ }^{\text {u }}$ |
| final 0 |  |  |
| 'long' | gùrô-W | gùrǒ-W |

c. /LHL/ modifying, $\{\mathrm{LH}\}$ predicative, both with final $W$ with -W
'thin' mènjê-W mènjě-W
lexical final $W$
'short' gõ:w- $\varnothing \quad$ ǧ: w
'tall' gẩw- $\varnothing \quad$ gǎw
'distant' wă:w- $\varnothing$ wǎ:w
final consonant, no suffix 'plump' ăm- $\varnothing$ ǎm
d. /HL/ modifying, $\{\mathrm{H}\}$ predicative
final a, with $-w$

| 'small' | dâ:-W | dá:-W |
| :---: | :---: | :---: |
| 'big, adult' | díy ${ }^{n}{ }^{\text {a }}$ - $W^{n}$ | díy ${ }^{n}$ á- $W^{n}$ |
| 'spacious' | káwà-W | káwá-w |
| final $u$, with -m |  |  |
| 'sweet; sharp' | érù-m | érú-m |
| 'coarse' | kúnjù-m | kúnjú-m |
| final consonant, no suffix |  |  |
| 'hot' | $\hat{\jmath} W-\varnothing$ | 万́W |
| 'cold, slow' | tâm- $\varnothing$ | tám |

e. irregular output $\{\mathrm{H}\}$ with nasal extension

| 'tight; brave' | $\tilde{\varepsilon} W-\varnothing$ | $\varepsilon ́ n$ |
| :--- | :--- | :--- |
| 'full' | $b \hat{-}-W$ | bání |

Even aside from the outright irregularities in (363e), the tonal phonology is somewhat opaque. Analysis depends on whether the final L in the /LHL/ and /HL adjectives in the middle column of ( $363 \mathrm{a}-\mathrm{d}$ ) is attributed to the stem (with suffixes inanimate $-W$ and animate
singular $-m$ underlyingly atonal) or to the suffix. In the first analysis, to get the correct outputs in the rightmost column we would need a rule converting /LHL/ to $\{\mathrm{LH}\}$ and $/ \mathrm{HL} /$ to $\{\mathrm{H}\}$. Call it Adjectival Final L-Tone Deletion. In the second analysis, the final L is not part of the stem proper, and the tones in the rightmost column are exactly the lexical melodies, so no tone rule is needed. This second analysis is preferable but I leave the question open.

Examples of the adjectival predication type with $3 \mathrm{Sg} / \mathrm{Inan}$ bû:- $\varnothing$ are in (364). bû:- $\varnothing$ is homophonous with 3 Pl pronoun bû: and with inanimate participial bú-ẁ (§14.1.6.3).
a. mòsú
bû:- $\varnothing$
bad be-3SgSbj
'He/She/It is nasty' (mòsû)
b. ǎm
bû:- $\varnothing$
plump be-3SgSbj
'He/She/It is plump.' (ăm)

| c. | mènjě- $W$ | bû:- $\varnothing$ |
| :--- | :--- | :--- |
|  | thin-Inan | be-3SgSbj |
|  | 'He/She/It is thin.' | $($ mènjêर- $W$ ) |

d. gǒ: $W$
bû:- $\varnothing$
short be-3SgSbj
'He/She/It is short.' (gô:w)
e. káwá-w bû:- $\varnothing$
spacious-Inan be-3SgSbj
'It is spacious.' (káwà-w)
f. díy ${ }^{n}$ á- $W^{n}$
bû:- $\varnothing$
big-Inan
be-3SgSbj
'He/She/It is big.' (díy $\left.{ }^{n} \mathbf{a ̀}-w^{\prime \prime}\right)$
$\begin{array}{lll}\text { g. } & \text { ह́rú-m } & \text { bû:- } \varnothing \\ & \text { sweet-Inan } & \text { be-3SgSbj } \\ & & \text { 'He/She/It is sweet.' } \\ & & (\text { érù-m) }\end{array}$

See also nǔm bů:- $\varnothing$ '(it) is difficult' in line 4 of (673) in the sample text.
For 3 Pl subject, $b-\hat{\varepsilon} .^{. n}$ 'they are' follows the adjective (365).
(365)
a. mòsú
$b-\hat{\varepsilon}^{.}{ }^{n}$
bad be-3PlSbj
'They are bad.' (mòsúu)
b. ǎm
$b-\hat{\varepsilon}:^{n}$
plump be-3PlSbj
'They are plump.' (ăm)

For first and second person subject, the appropriate inflected form of bî̀- 'be' is used (366).
(366)
a. mòsú bû-y (or: bî-y)
bad be-1SgSbj
'I am bad' (mòsú)
b. ǎm
bû-y
plump be-1SgSbj
'I am plump.' (ằm)
a. ǎm b̂̂-w.:
plump be-2PlSbj
'You- Pl are plump.' (âm)
For adjectives that have a suffix $-W$ or $-m$ when modifying an inanimate noun, this suffixal form is used predicatively for all pronominal categories.
a. mènjé-W bû:- $\varnothing$
short-Inan be-3SgSbj
'He/She/It is thin.'
b. mènjé-W b̂̂-y
short-Inan be-1SgSbj
'I am thin.' (gŏ:- w)
c. mènjé-W bû-y.:
short-Inan be-1PlSbj
'We are thin.' (gŏ:- w)

### 11.4.2 Adjectival predicates with 'it is' clitic ( $=m$, etc. )

Adjectives may function predicatively without an overt 'be' quasi-verb. In this case, the adjective itself has the same suffixed form it has as a modifying adjective, except that animate plural is merged into inanimate (except as noted below). We therefore get -m̀ for animate singular reference, and $-\grave{W}$ or zero (depending on the adjective, §4.5.1) for animate plural as well as for inanimate reference. An exception is that the 1 Pl and 2 Pl forms add $-\grave{m}$ instead of zero.

The adjective is then followed by the conjugated 'it is' clitic forms in (368).

| category | form |
| :--- | :--- |
| 1 Sg | $=m-\grave{y} y$ |
| 2 Sg | $=m-u ̀ w$ |
|  | $=m-\grave{y} y$. |
| 1 Pl | $=m-u ̀ w$. |

```
3Sg/Inan
    after consonant: = }(\mathrm{ (with final L-tone)
    after vowel: }\quad=\vdots-\varnothing\mathrm{ (vowel lengthened, with final L-tone)
    =bó
```

Examples with pílé 'white' and jéwnè- 'black' (the latter taking inanimate singular -w suffix) are in (369). Both 'black' and 'white' have their regular "inanimate singular" forms (píĺ, $j e ́ W^{n} \grave{e}-W^{l l}$ ) for inanimate or plural reference (369a-b). The lengthening and $<\mathrm{HL}>$-tone in píle: $-\varnothing=\varnothing$ are due to the clitic; a rendition pílé- $\varnothing=:$ would capture this better but is typographically ungainly. For animate singular reference, the adjective ends in (animate) singular -m̀ for both 'white' and 'black' (369c-d), producing a geminated mm at the boundary For animate plural reference, 'white' is pílغ́- $\grave{m}$ ("animate singular") while 'black' is $j e ́ W^{n} \grave{e ̀-} \grave{W}^{n}$ (morphologically "inanimate") in ( $369 \mathrm{e}-\mathrm{f}$ ).
a. [ú
${ }^{\mathrm{HL}}$ bérè $]$
[2SgPoss ${ }^{\mathrm{HL}}$ stick]
píl̂̀:- $\varnothing=\varnothing \quad\left(j e ́ W^{n}\right.$ è- $\left.W^{n}=\varnothing\right)$
white-Inan=it.is. $3 \mathrm{SgSbj} \quad$ (black-Inan=it.is. 3 SgSbj )
'Your-Sg stick is white (black).'
b. [ú $\quad{ }^{\text {HL }}$ bérè kù bè]
$\left[\begin{array}{llll}{[2 S g P o s s} & \text { HL } & \text { stick } & \text { Def }\end{array}\right.$
píl̂e:- $\varnothing=\varnothing \quad\left(j e ́ W^{n}\right.$ è- $\left.W^{n}=\varnothing\right)$
white-Inan=it.is. 3 SgSbj (black-Inan=it.is. 3 SgSbj )
'Your-Sg sticks are white (black).'
c. pílé- $m=m$-îy $\quad\left(j e ́ w^{n} e ̀-m=m-i ̀ y\right)$
white- $\mathrm{AnSg}=$ it.is- 1 SgSbj (black- $\mathrm{AnSg}=$ it.is- 1 SgSbj )
'I am white (black)'.
d. pílé-ì̀ $=\varnothing \quad\left(j e ́ W^{n} e ́-\grave{m}=\varnothing\right)$
white- $\mathrm{AnSg}=$ it.is. 3 SgSbj (black- $\mathrm{AnSg}=$ it.is. 3 SgSbj )
'He/She/It (person, animal) is white (black).'
e. píl̂:- $\varnothing=b \grave{\jmath} \quad\left(j e ́ w^{n} e ́-\grave{w}^{n}=b \hat{\jmath}\right)$
white.Inan=it.is.3PlSbj (black.Inan=it.is.3P1Sbj)
'They (e.g. people, sheep) are white (black).'

white- $\mathrm{AnSg}=$ it.is-1PlSbj (black-Inan=it.is-1PlSbj)
'We are white (black)'.
g. pílé-ḿn=m-ùW. $\quad\left(j e ́ W^{n} e ́-\grave{W}^{n}=m-u ̀ W \therefore\right)$
white-AnSg=it.is-2PlSbj (black-Inan=it.is-2PlSbj)
'You- Pl are white (black)'.

### 11.4.3 Bare-stem adjectival predicates

A predicate consisting of just the inanimate form of the adjective, in $\{\mathrm{L}\}$-toned clause-final form, occurs after a focalized constituent. For example, the regular predicative form $\grave{\varepsilon} s u ́ b u ̂-$ 'be good' is replaced by $\varepsilon$ ह̀sù in (370a). The other examples in (370) show that the adjective is inanimate in form even with a human singular or plural subject.
a. $k u ́=\grave{m}$ èsù
Inan=Focus good
'That [focus] is what is good.' (2005.1a.05)
b. ŋ̀gú $=\grave{m} \quad$ gj̀:-w $/$ ह̀rù $-m$

Prox.Inan=Focus short/sweet-Inan
'This [focus] is what is short/sweet.'
c. kú= ̣̀ dùgù / wà:W
[Inan=Foc big/distant.Inan
'That [focus] is what is big/far away.'
d. $i=\grave{m} \quad d_{i y}^{n}{ }^{n}-\grave{W}^{n}$
$1 \mathrm{Sg}=$ Focus big-Inan
'It's $\underline{I}$ [focus] who am big (adult).'
e. bû: $=\grave{m} \quad d_{i ̀}^{n}{ }^{n}-\grave{W_{n}}{ }^{n}$
$3 \mathrm{Pl}=$ Focus big-Inan
'It's they [focus] who are big (adult).'
11.4.4 Negative adjectival and stative predicates ( = rá-)

The stative negative clitic = rá- is added to the form of the adjective used as modifier of an inanimate noun. After a nasal, the clitic takes the form $=$ dá-, which in careful pronunciation comes out as = ̀̀dá-. The negative suffix induces tone-dropping on the stem. The regular pronominal-subject suffixes follow -rá-. The paradigm is (371). The 2 Sg suffix is H -toned (as in other negative-suffix paradigms). The 3 Pl is also H -toned.
(371)
category form

| 1Sg | = rá-ỳ |
| :---: | :---: |
| 2Sg | $=r$ á-ẃ $\quad$ ( H -toned) |
| 1P1 | = rá $^{-1} \mathrm{y}$. : |
| 2 Pl | = rá- $\overline{\text { a }}$. $:$ |
| $3 \mathrm{Sg} / \mathrm{Inan}$ | $=r a ́-\varnothing$ |
| 3 Pl | = rá-bó ( H -toned) |

Examples with 3Sg (animate), inanimate, and 3Pl referents are in (372).

| gloss | 'he/she is not. | 'it is not ...' | 'they are not ...' |
| :---: | :---: | :---: | :---: |
| 'bad' | mòsù- $\varnothing$ = rá- $\varnothing$ | mòsù- $\varnothing$ = rá- $\varnothing$ | mòsù- $\varnothing=r a ́-b o ́$ |
| 'red' | $b a ̀ r r^{n}$ à- $W^{n}=r a ́-\varnothing$ | $b a ̀ r{ }^{n} a ̀-W^{n}=r a ́-\varnothing$ | $b a ̀ r{ }^{n} a ̀-W^{n}=r a ́-b o ́$ |
| 'short' | $g$ g̀: $w=$ rá- | $g$ gò $w=r a ́-$ | $g$ gò: $W=$ rá-bó |
| 'cold' | tàm- $\varnothing$ = dá- | tàm- $\varnothing=$ dá- | tàm- $\varnothing$ = dá-bó |

Examples with mòsú 'bad, ugly’ showing a fuller range of pronominal subjects are in (373).
a. mòsù- $\varnothing=$ rá- $\varnothing$
bad-Inan ${ }^{\text {L }}=$ StatNeg-3SgSbj
' $\mathrm{He} /$ She/It is not bad.'
b. mòsù- $\varnothing$ = rá-bó
bad-Inan ${ }^{\text {L }}=$ StatNeg-3P1Sbj
'They are not bad.'
c. mòsù- $\varnothing$ = rá-ỳ
bad-Inan ${ }^{\text {L }}=$ StatNeg-1SgSbj
'I am not bad.'
d. mòsù- $\varnothing=$ rá- ${ }^{\prime}$
bad-Inan ${ }^{\text {L }}=$ StatNeg-2SgSbj
'You-Sg are not bad.'
e. mòsù- $\varnothing=$ rá-ỳ.:
bad-Inan ${ }^{\text {L }}=$ StatNeg-1P1Sbj
'We are not bad.'
f. mòsù- $\varnothing=r a ́-w ̀ .:$
bad-Inan ${ }^{\text {L }}=$ StatNeg-2P1Sbj
'You-Pl are not bad.'

### 11.4.5 Past forms of adjectival predicates $(=b \hat{\varepsilon}:-,=b \grave{\varepsilon}-)$

The past clitic (§10.4.1) may be added to a positive or negative adjectival predicate to relocate the time frame into the past. Variant $=b \hat{\varepsilon}$ - with falling tone, therefore surfacing with long vowel when not followed by a consonantal suffix, is used when the adjectival form used in this construction ends in an H-tone. When the adjective ends in an L-tone, we get L-toned and short-voweled $=b \grave{\varepsilon}$-.

Examples with third person subjects are in (374). In the 3 Pl , two constructions are possible. One has $=b o ́=b$-â:, beginning with the 3 Pl subject suffix used in perfective positive forms (374b). The other has 3 Pl past $=b$-à: added to the plural form of the adjective with suffix $-y \grave{\varepsilon}(374 d)$. Further examples (not reproduced here) confirm that either construction may be used with any adjective. For example, (374d) can also be expressed as $j e^{n}{ }^{n} \grave{e}=b o ́=b-a ̂:$.
a. púľ̌-m mòsú $=\varnothing=b \hat{\varepsilon}:-\varnothing$

Fulbe-AnSg bad=be. 3 Sg Sbj $=$ Past -3 SgSbj
'The Pullo (=Fulbe man) used to be bad.'
b. púlǒ: mòsú=bó=b-â:

Fulbe.Pl bad=be.3PlSbj=Past-3PlSbj
'The Fulbe-Pl used to be bad.'
b. $j e ́ W^{n} \grave{e ̀}-m=b \grave{\varepsilon}-\varnothing$
black-AnSg=Past-3SgSbj
'He/She was black.'
c. jé $W^{n} \mathrm{e}-W^{n}=b \grave{\varepsilon}-\varnothing$
black-Inan=Past-3SgSbj
'It (inanimate) was black.'
d. jéw ${ }^{n}$ è $-y \grave{\varepsilon}=b-a ̀:$
black- $\mathrm{Pl}=$ Past-3P1Sbj
'They (animate) were black.'
e. nî: tám- $\varnothing=b \hat{\varepsilon}:-\varnothing$
water cold-Inan $=$ Past -3 SgSbj
'The water was cold.'

Examples with first/second person subjects are in (375).
(375)
a. jé ${ }^{n}$ è̀- $m=b e ̀-y .:$
black-AnSg=Past-1PlSbj
'We were black.'
b. gùrǒ- $W=b \varepsilon$ -.$-:$.
long-Inan=Past-1P1Sbj
'We used to be tall.'
c. kómbó $=b$ ह́- $\grave{~}$
skinny=Past-2SgSbj
'You-Sg used to be skinny.'
d. dùgú $=b \varepsilon$ - $-\grave{~}$
fat=Past-1SgSbj
'I was fat.'
e. dùgú=bé-ỳ.:
fat=Past-1PlSbj
'We were fat.'

Past negative examples are in (376). The structure is the same as above, except for the addition of stative negative clitic = rá, which forces tone-dropping on the adjective.
a. $\quad j e ̀ W^{n} \grave{e}-W^{n}=r a ́=b \varepsilon ́-y .:$
black-Inan ${ }^{\text {L }}=$ StatNeg $=$ Past-1P1Sbj
'We were not black.' (jéwn'è-)
b. nî: $\quad \grave{\omega} w-\varnothing=r a ́=b \hat{\varepsilon}:-\varnothing$
water $\quad$ hot-Inan ${ }^{\mathrm{L}}=$ StatNeg $=$ Past -3 SgSbj
'The water was not hot.' (ôw)
c. sàlà $=r a ́=b \hat{\varepsilon}:-\varnothing$
small $=$ StatNeg $=$ Past -3 SgSbj
'It was not small.' (sàlá)

### 11.5 Possessive predicates

### 11.5.1 'Have' (yá só-, negative sò-ló-)

The common 'have' predication is a stative quasi-verb só- that occurs in a single paradigm, generally with present (or timeless) time reference. In positive clauses with no focalized constituent, and when possession in the sense of ownership or other lasting possession is involved, existential yá (§11.2.2.1) immediately precedes re the quasi-verb.
(377) úrò yá só-ỳ
house Exist have-1SgSbj
'I have a house.'

The paradigm is (378). The 2 Sg and 3 Sg forms with H-toned suffix -w are homophonous. The 3 Pl is idiosyncratic but is also H -toned.
(378) category form


In the negative, the form is sò-ló-, used without existential yá.
(379)

```
nǎ:-m Sò-ló-w
cow-AnSg have-Neg-2SgSbj
'You-Sg don't have a cow.'
```

The negative paradigm is (380). The 2 Sg suffix is again H -toned, but the 2 Sg and 3 Sg forms are segmentally distinct. The 3 Pl form is again idiosyncratic and difficult to segment (the front vowels may constitute two plural morphemes).
category form

| 1 Sg | sò-ló-ỳ <br> 2 Sg |
| :--- | :--- |
|  | só-ló-W $\quad$ (H-toned) |
| 1 Pl | sò-ló-ỳ $\therefore$ <br> 2 Pl |
| sò-ló-Ẁ $\therefore$ |  |

### 11.5.2 'Have possession of' (sò-)

Jamsay distinguishes the basic 'have' verb sà, denoting ownership, from verbs of temporary possession (custody) jìnè and jèrè, roughly 'hold'. BenT has no such lexical distinction. However, L-toned sò- without existential yá can in some situations be used to express temporary possession, as in (381b). The core sense is 'be holding, have in custody'.

```
a. nǎ:-m yá só-ỳ
    cow-AnSg Exist have-1 SgSbj
    'I have (= own) a cow.'
b. nǎ:-m sò-ỳ
    cow-AnSg have-1SgSbj
    'I have a cow (with me).'
```

In (382), the locative adverbials appear to be (contrastively) focalized, so existential yá is absent.
(382) ú ந̀̀gú-rù sò-Ẁ dè
2 Sg here have- 2 SgSbj if,
[mìbá yà] j̀gá-rù sò-Ẁ
[FarDist.An also] there.Dist have-3SgSbj
'If you-Sg have (one) here, that (other person) too has (one) there.' [2005.1a.06]

This construction without yá did not occur in my data in connection with having money in one's pockets. Here the full construction was used even when the context was clearly about temporary possession.

| pèrí-yěy | yá | Só-ẃ |
| :--- | :--- | :--- |
| ten-two | Exist | have-2SgSbj |
| 'Do you have twenty riyals ( $=100 \mathrm{CFA}$ francs) on you?' |  |  |

### 11.5.3 'Belong to' predicates ( $\left.{ }^{\mathrm{HL}} k \hat{o}:{ }^{n},{ }^{\mathrm{HL}} y \hat{0}-m\right)$

The noun kó: 'thing' is used in predicate genitives (' X belongs to Y '). It takes possessed form ${ }^{\mathrm{HL}} k \hat{0}:{ }^{n}$ or ${ }^{\mathrm{L}} k \grave{\partial}:{ }^{n}\left(1 \mathrm{Sg}\right.$ possessor ${ }^{\mathrm{L}+\mathrm{HL}} k \hat{\jmath}:{ }^{n}$ 'is mine'). The subject X is typically a discoursedefinite, or deictically anchored, inanimate entity. The 'it is' clitic is presumably present, but it has no audible manifestation since ${ }^{\mathrm{HL}} k \hat{0} \cdot{ }^{n}$ and variants already end in a long vowel and final L- tone.
a. [ùrò ${ }^{\mathrm{L}} \quad$ ŋ̀gú] $\quad{ }^{\mathrm{L}+\mathrm{HL}} k{ }^{2}:^{n}=\varnothing$
[house ${ }^{\mathrm{L}} \quad$ Prox.Inan] ${ }^{\mathrm{L}+\mathrm{HL}} 1$ SgPoss.thing=it.is
'This house belongs to me (=is mine).'
b. bú:dù $\quad \begin{array}{ll}{[F} & \left.{ }^{\mathrm{HL}} k \hat{k} \hat{:}^{n}=\varnothing\right] \\ & {[\mathrm{F}}\end{array}$
money [F ${ }^{\mathrm{HL}}$ thing=it.is]
'The money belongs to F (personal name).'
For animate (but nonhuman) subject, the noun yó-m '(unspecified) animal, critter' or its plural yó: replaces kó:n 'thing'. The possessed forms are singular ${ }^{\mathrm{HL}} y \hat{o}-m$ or ${ }^{\mathrm{L}} y \grave{\jmath}-m$ ( 1 Sg ${ }^{\mathrm{L}+\mathrm{HL}}$ yô-m), and plural ${ }^{\mathrm{HL}}$ yô: or ${ }^{\mathrm{L}}$ yò: ( $1 \mathrm{Sg}{ }^{\mathrm{L}+\mathrm{HL}}$ yồ:). Again, the 'it is' clitic is presumably present but has no audible manifestation, as the possessed-noun tone overlay is already falling.

```
pèr\varepsiloň-m [ú [uL yô-m=\varnothing]
sheep-AnSg [2SgSbj HL}\mp@subsup{}{\mathrm{ animal-AnSg=it.is]}}{
    'The sheep-Sg is yours-Sg.'
```


## 12 Comparatives

### 12.1 Asymmetrical comparatives

### 12.1.1 'More, most' (mégge

The noun mégé 'more, most' is common in comparatives. This stem is pronounced with Htones in isolation (386e). In most actual examples it follows a dative (which always ends in an L-tone), denoting the comparandum. Some speakers usually pronounce it in L-toned form as ${ }^{\mathrm{L}} m \grave{\varepsilon} g \grave{\varepsilon}$ in this position, behaving tonally like nouns following a possessor ending in an Ltone. Other speakers clearly pronounce H-toned mégé in post-dative position, and this form is shown in the examples below (though some were originally transcribed with m$̀ g \grave{\varepsilon}$ ).
a. ${ }^{\mathrm{L}+}$ mă:: mégé $\quad{ }^{\mathrm{H}}$ díy $^{n}{ }^{n}$ á- $W^{n}$ Dat.1Sg more ${ }^{H}$ big(ness) ' $\mathrm{He} /$ She is older than I (am).'
b. [ú mâ:] mégé gǎw bí-ỳ
$[2 \mathrm{Sg}$ Dat] more tall(ness) be- 1 SgSbj
'I am taller than you-Sg (are).'
(bí-ỳ occasional variant of bú-ỳ)
c. [û: ${ }^{\mathrm{L}}$ mà:] mégé júwó-ỳ
[2Pl ${ }^{\text {L }}$ Dat] more know.Ipfv-1SgSbj
'I know more than you-Pl (do).'

[1Sg.Dat 3SgSbj give.Pfv-Ppl.Inan Def]
[[ú $\left.{ }^{\mathrm{HL}} k \hat{0}:^{n}\right] \quad{ }^{\mathrm{L}}$ mà:] mégé
[[2SgPoss ${ }^{\text {HL Poss }] ~}{ }^{\mathrm{L}}$ Dat] more
'She gave me more than (she gave) you.'
(lit: "What she gave me [is/was] more than yours.")
e. $\varepsilon r^{n} \dot{\varepsilon}=\grave{m} \quad m \varepsilon ́ g \varepsilon ́ \quad n \grave{\varepsilon}-\varnothing$
$3 \mathrm{Sg}=\mathrm{Foc}$ more eat.Pfv-3SgSbj
'He/She ate more (or: the most).'

If the domain of comparison is adjectival and scalar, e.g. height or sweetness, it is optionally expressed in the form of a deadjectival abstractive nominal following mégé. Abstractives, in other contexts, have an $\{\mathrm{LH}\}$ tone overlay. Many of them end in a suffix $-w$ that resembles the inanimate suffix on modifying adjectives (which, however, generally have a different tone pattern). After mégé, several of these abstractive nominals shift to $\{\mathrm{H}\}$-tone. díy ${ }^{n}$ á- $W^{n}$ 'bigness, size' in (386a) exemplifies this shift, compare the usual $\{\mathrm{LH}\}$-toned abstractive
dìy"ǎ- $W^{n}$. By contrast, gǎw'tallness, height' in (386b) keeps its /LH/ melody in comparatives. For more details and examples, see $\S 4.2 .6$.
 regular $\{\mathrm{LH}\}$-toned abstractive and the $\{\mathrm{H}\}$-toned form with mégé. That the $\{\mathrm{HL}\}$-toned form is an adjective rather than an abstractive nominal is shown by the fact that it takes nominal suffixes that agree with the referent. In addition, it occurs with a preceding tonedropped noun, and is clearly internal to the NP. This construction can be translated as a comparative (with implicit comparandum), or as a superlative. Examples are in (387).
a. màngòrò ${ }_{\text {L }}$
$m \varepsilon ́ g \varepsilon ́$
${ }^{\mathrm{HL}}$ bár ${ }^{n}{ }^{n}-W^{n}$
mango ${ }^{\mathrm{L}}$ more ${ }^{\mathrm{HL}}$ red-Inan
'the reddest mango' or 'a redder mango'
b. nù ${ }^{\mathrm{L}} \quad$ mégé ${ }^{\mathrm{HL}}$ bár ${ }^{n a ̀-m ~}$
person ${ }^{\mathrm{L}}$ more ${ }^{\mathrm{HL}}$ red-AnSg
'the reddest (=brownest) person' or 'a redder (=browner) person'
$\begin{array}{llll}\text { c. } & \text { màngòrò̀ }^{\mathrm{L}} & \text { mégé } & { }^{\mathrm{HL}} \text { dúsù- } \varnothing \\ \text { mango }^{\mathrm{L}} & \text { more } & { }^{\text {HL }} \text { heavy-Ina }\end{array}$
'the heaviest mango' or 'a heavier mango'
d. yà $\begin{array}{lll}\mathrm{L} & \text { mégé } & { }^{\mathrm{HL}} \text { dúgù-yè } \\ \text { woman }^{\mathrm{L}} & \text { more } & { }^{\mathrm{HL}} \text { fat-AnPl }\end{array}$
'the fattest women' or 'some fatter women'
Further examples showing the form of the $\{\mathrm{HL}\}$-toned adjective (rightmost column), in comparison to the regular adjectival form (middle column) are in (388). Only inanimate forms are given. Except in (388b), the only differences are tonal. The $\{\mathrm{HL}\}$ overlay is realized as H.L.L on trisyllabics, the only attested example being that in (388e).
(388) Inanimate modifying and $\{\mathrm{HL}\}$ comparative adjectives
gloss
modifying
$\{\mathrm{HL}\}$ after $m \varepsilon ́ g \varepsilon ́$
a. $-W$ (not homorganic to preceding vowel) retained after mégé
adjective has /LHL/ melody
'long' gùrô- $W \quad$ HL gúrò- $W$
adjective has /HL/ melody
'red’ bár ${ }^{n a ̀-W} \quad{ }^{H L}$ bár $r^{n a ̀-} W^{n}$
'spacious' káwà-W ${ }^{\text {HL }}$ káwà- $W$
'big' díy ${ }^{n}$ à- $W^{n} \quad{ }^{\text {HL }}$ díy $^{n}$ à- $W^{n}$
b. -W (following $u$ ) as inanimate modifier, omitted after mégé
adjective has /LHL/ melody

| 'heavy' | dùsû-W | HL dúsù |
| :--- | :--- | :--- |
| 'fat' | dùgû-W | HL dúgù |


| c. $-m$ adjective has /HL/ melody 'sweet' ह́rù-m | ${ }^{\text {HL }}$ Érù-m |
| :---: | :---: |
| d. final $u$ without $-W$ |  |
| adjective has /LH/ melody |  |
| 'rotten' òmbú | ${ }^{\text {HL }}$ ¢́mbù |
| 'bad' mòsú | ${ }^{\mathrm{HL}}$ mósù |
| 'blind' jìmdú | ${ }^{\text {HL }}$ jímdù |
| e. trisyllabic |  |
| adjective has /LH/ melody |  |
| 'half-ripe' bòlòrǒy | ${ }^{\text {HL }}$ bólòròy |
| f. other |  |
| adjective has /H/ melody |  |
| 'white' pílé | ${ }^{\text {HL }}$ pílè |
| adjective has /HL/ melody |  |
| 'new' kálà | ${ }^{\text {HL }}$ kálà |
| 'hot' $\widehat{\text { ¢ W }}$ | ${ }^{\mathrm{HL}} \hat{\text { ¢ }}$ W |
| 'cold' tâm | ${ }^{\mathrm{HL}}$ tâm |
| 'foul' gôm | ${ }^{\text {HL }} g$ ôm |
| adjective has /LH/ melody |  |
| 'dry' mǎ: | ${ }^{\mathrm{HL}}$ mâ: |
| 'difficult' nǔm | ${ }^{\text {HL }}$ nûm |
| 'ripe' ìrěy | HL írèy |
| adjective has /LHL/ melody |  |
| 'tall' gâw | ${ }^{\text {HL }} g$ âW |

### 12.1.2 'Surpass’ (láwá)

láwá 'pass by' can be used in the sense 'surpass' (389).
(389) kùyó: [ $\left.\varepsilon r^{n} \dot{\varepsilon} \quad m a ̂:\right] \quad m \varepsilon ́ g \varepsilon ́ \quad j u ́ w o ́-m ̀=b \varepsilon ̀-y ̀, ~$
first $\quad[3 \mathrm{Sg} \quad$ Dat $]$ more know-Ipfv $=$ Past -1 SgSbj ,
gà: núw ${ }^{n} \grave{\partial} y^{n}$ í láwá- $j \hat{\varepsilon}:-\varnothing$
but now 1SgObj pass-RecPf-3SgSbj
'I used to know more than he/she (did), but now he/she has surpassed me.'
12.1.3 'Be better, more' (ìrěw)

The form ìrěw 'better' is used with 'be' quasi-verb to constitute the predicate. The comparandum is dative. Negation is with the stative negative = rá- (§10.2.3.4), which induces tone-dropping (390b).
(390)
a. [ú mâ:] ìrěw bú-ỳ
[2Sg Dat] better be- 1 SgSbj
'I am better than you-Sg (are).'
b. ${ }^{\mathrm{L}+}$ mă: $\quad$ ìrè $W=$ rá-bó

Dat.1Sg better=Neg-3P1Sbj
'They are not better than I (am).'

### 12.2 Symmetrical comparatives

### 12.2.1 Expressions with $g \hat{a} y^{n} \rightarrow$ 'like'

The 'like' particle may be used to indicate approximate equality on some measure.

| [[[ú | mâ:] | dà ${ }^{n}$ | í | $\left.n \hat{1}-W^{n}\right]$ | $g a ̂ y^{n} \rightarrow$ ] |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [[[2Sg | Dat] | manner ${ }^{\text {L }}$ | 1 SgSbj | give.Pfv-Ppl.Inan] | like] |
| $\left[\bar{\varepsilon}^{n}{ }^{n} \dot{\varepsilon}\right.$ | mâ:] | $n i ̀ y$ |  |  |  |
| [3Sg | Dat] | give. | $f v-1 \mathrm{SgS}$ |  |  |

### 12.2.2 'Equal; be as good as' (bǎ-)

The stative quasi-verb bǎ- 'equal' is used in transitive symmetrical comparatives. One comparandum may be subject, the other direct object (392b).
(392)
a. [à-jèrú
wó] [á
${ }^{H L}$ bô:] bá- ${ }^{\text {ò }}$ [wrestling
in] [3ReflSgSgPoss
${ }^{H L}$ father] equal.Stat-3SgSbj
' $\mathrm{He}_{\mathrm{x}}$ is as good as his $\mathrm{x}_{\mathrm{x}}$ father in wrestling.'
b. [à-jèrú wó] [á ${ }^{\mathrm{HL}} b \hat{\text { ô: }}$ ] bà-rí- $\varnothing$ [wrestling in] [3ReflSgSgPoss ${ }^{\mathrm{HL}}$ father] equal-PfvNeg-3 SgSbj ' $\mathrm{He}_{\mathrm{x}}$ is not as good as his $\mathrm{x}_{\mathrm{x}}$ father in wrestling.'

The paradigm (for positive clauses) is (393). The negative counterparts are based on the stem bà-rí-, which is morphologically a perfective negative.

| category | form |
| :---: | :---: |
| 1 Sg | bá-ỳ |
| 2 Sg | bá-Ẁ |
| 1 Pl | bá-ỳ. |
| 2 Pl | bá-ẁ: |
| 3 Sg | bá-Ẁ |
| 3 Pl | bá-mà |

### 12.2.3 'Equal(ly)' (cí-céw, céw-céw)

The stem cí-céw 'equal' can be used as a predicate. It may be followed by a 'be' quasi-verb. If the comparanda are expressed as NPs, the 'be' quasi-verb is optionally omitted (394b).
a. cí-céw $b-\varepsilon$ : $^{n}$-bó
equal $\quad$ be ${ }^{\mathrm{L}}-3 \mathrm{PlSbj}-3 \mathrm{PlSbj}$
'They are equal.'
b. [sěydù yà $\rightarrow^{\uparrow}$ ] [á:mádù yà $\rightarrow^{+}$] [àjèrú wó] cí-céw
[Seydou and] [Amadou and] [wrestling in] equal
'Seydou and Amadou are equal (=equally good) in wrestling.'
A related adverbial is the reduplicated céw-céw 'equally' (395).
[sěydù yà $\rightarrow^{\dagger}$ ] [á:mádù yà $\rightarrow^{\dagger}$ ] céw-céw wàrà-bó
[Seydou and] [Amadou and] equally farm.Pfv-3P1Sbj
'Seydou and Amadou did farming (=weeding) to the same extent.'
For simple $c \hat{\varepsilon} W$ in 'willy-nilly' conditional antecedents see $\S 16.3$. Jamsay $c \hat{\varepsilon} W$ 'all' and its derivatives may be the sources of these forms.

### 12.2.4 'Equal(ly)' and 'since' (bǎ $\rightarrow$ )

An adverbial (with final intonational prolongation) bǎ $\rightarrow$, possibly related to the verb bǎ- 'equal (be equal to)' (§12.2.2), can be glossed 'as much (as sb/sth else)'. It may be used predicatively, with following bù- 'be'. The usual context is size (dimensions).

In the combination with following bù- (396), one can clearly hear the rising tone.
[nà: ${ }^{\mathrm{L}}$ mǔ:] gǒ:-m bǎ $\rightarrow \quad$ bù- $\varnothing$ [cow ${ }^{\mathrm{L}}$ ProxSg] elephant equally be- 3 SgSbj
'This cow is as big as an elephant.'
$b \check{a} \rightarrow$ is also used in the negated ' $\ldots$ not so much as $X$ ' construction. Here $b a \check{a} \rightarrow$ is phrase-final, and it is often heard as L-toned.

| támbú-m̀ | [[m̀bá | ${ }^{\text {HL }}$ támb-ì:] | $b a ̀ \rightarrow]$ |
| :---: | :---: | :---: | :---: |
| kick.Ipfv-3SgSbj | [[FarDist.An | ${ }^{\mathrm{HL}}$ kick-VblN] | equally] |
| ùrùyó-m̀-dó |  |  |  |
| hurt-Ipfv-Neg-3SgSbj |  |  |  |
| $\begin{aligned} & \text { 'It (=centipede) } \\ & {[2005.1 \mathrm{~b} .09]} \end{aligned}$ | ings, (but) it | esn't hurt as | as the oth |

$b a \check{a} \rightarrow$ is also used in the temporal sense 'since' after a noun denoting a time, as in $j \hat{\varepsilon} y^{n} b a \check{a} \rightarrow$ 'since last year'. A better gloss is '(going) back to last year' or '(since) as early as last year'. In the fixed phrase kùyó: bă $\rightarrow$ 'long ago, (back) in the old days', the gloss 'since' is
inappropriate insofar as there is no reference to the ensuing time span. The sense '(going) back to (time T)' expresses roughly the same telescopic convergence as 'equal to (X)'.

### 12.2.5 'Attain, equal' (dǒ-)

In the sense ' X come to equal Y ' (e.g. as the culmination of a gradual improvement), the verb dǒ- 'arrive, reach (destination)' may be used.
a. [àjèrú
wó] àbádá [á
[á $\left.\quad{ }^{H L} b \hat{0}:\right]$
[wrestling in] never [3ReflSgPoss ${ }^{\mathrm{HL}}$ father]
dó-m̀-dó- $\varnothing$
arrive-Ipfv-Neg-3SgSbj
' $\mathrm{He}_{\mathrm{x}}$ will never (come to) be as good in wrestling as his $\mathrm{s}_{\mathrm{x}}$ father.'
b. gàwá í dǒ-jê:- $\varnothing$
height 1 SgObj arrive-RecPf- 3 SgSbj
'He/She has (now) reached the same height as (= is now as tall as) me.'

## 12.3 'A fortiori' (wê:y)

The particle wê:y, sometimes wê: $y \rightarrow$ with intonational prolongation, means 'a fortiori, much less'. It could also be transcribed as wéy. $\therefore$ with dying-quail intonation. For this form in the sense 'as well as', see §7.1.3.
$\begin{array}{llll}\text { a. ínjírí } & \text { béré-ı̀̀dó-ỳ } & \text { [wê:y } & \text { jìyé] } \\ \text { get.up } & \text { can-IpfvNeg-1SgSbj } & \text { [much.less } & \text { dance] }\end{array}$
'I can't (even) get up, much less (can I) dance.'
b. [[dồ:-m yà] [nà: ${ }^{\text {L }}$ gúnúm kù] yì=náy $\left.{ }^{n}\right]$
[[Dogon-AnSg too] [cow entire Def] see=and.SS]
júwó-m̀-dó- $\varnothing$
know-Ipfv-Neg-3SgSbj
wê:y [nà:-dúrò ${ }^{L}$ này ${ }^{n}$ ] mò:lù- $\varnothing$
a.fortiori [cow ${ }^{\text {L }}$-tail Inst] gather.Pfv-3SgSbj
'The Dogon person for his part would not know (=recognize it) if he had seen the entire cow, never mind (just) with the cow tail.' [2005.1a.16]

## 13 Focalization and interrogation

### 13.1 Focalization

The overt focus clitic is $=\grave{m}$. It is identical in form to an allomorph of the 'it is' clitic ( $\S 11.2 .1$ ), but unlike the 'it is' clitic it is not conjugated for pronominal subject category.

This clitic is used after pronouns, demonstratives, and personal names. However, it is not often directly added to ordinary common noun stems. Perhaps this is because it would be difficult to distinguish from (animate) singular suffix -m. For example, if the focus clitic were added to ár $r^{n a ̀ ~ ' m e n ', ~ t h i s ~ w o u l d ~ p r o d u c e ~ \# a ̀ r ~} r^{n} \grave{a}=\grave{m}$, which would be homophonous to singular ár $r^{n}$ à-m 'man'. The result is that noun-headed NPs can function syntactically as focalized, without an overt focus morpheme. This focalization is indirectly manifested, in the perfective (positive and negative) by the use of L-toned verb forms, including the (positive) unsuffixed perfective. For subject focus, focalization is also manifested, for $1 \mathrm{st} / 2 \mathrm{nd}$ person categories, by the use of a 3 Sg pronominal-subject suffix on the verb.

Focalization is largely confined to positive utterances for pragmatic reasons, but negative utterances allow focalization in the right context ('it was the women [focus] that he/she did not bring').

Existential particle yá is used chiefly with a following quasi-verb bù- 'be' or só- 'have'. These quasi-verbs are defective and do not themselves distinguish ordinary from (L-toned) defocalized forms. Instead, yá is present in ordinary contexts and is disallowed when a constituent is focalized (it is also absent under negation). See §11.2.2.1-3 for details and examples.

### 13.1.1 Subject focalization

In the (positive) perfective aspect, the unsuffixed perfective stem (L-toned) is regular for past-time reference. The verb shows regular third person subject prefixes, $-\varnothing$ for $3 \mathrm{Sg} / \mathrm{Inan}$, and -bó for 3 Pl .

```
a. sěydù = m̀ lò-\varnothing
    Seydou=Foc go.Pfv-3SgSbj
    'It's Seydou [focus] who went.'
b. kúrnùù yàyà-\varnothing
    stone fall.Pfv-3SgSbj
    'It was a stone [focus] that fell.'
c. árnà yè-bó
    man.Pl come.Pfv-3PlSbj
    'It was the men [focus] who came.'
```

For $1 \mathrm{st} / 2$ nd person subject, the unsuffixed perfective is again used, but the verb has zero (pseudo-)3Sg inflection.
a. $\quad i=\grave{m} \quad l o ̀-\varnothing$
$1 \mathrm{Sg}=\mathrm{Foc} \quad$ go.Pfv-3SgSbj
'It's I [focus] who went.'
b. $\hat{u}:=\grave{m} \quad l \grave{o}-\varnothing$
$2 \mathrm{Pl}=$ Foc $\quad$ go. $\mathrm{Pfv}-3 \mathrm{SgSbj}$
'It's you-Pl [focus] who went.'
In the imperfective, the (positive) form in common use is the unsuffixed imperfective, without reduplication. Again, the 1 st/2nd person subject forms require the (pseudo-)3Sg form of the verb, which in this case is $-\grave{m}$. True third person subject forms have the usual 3 Sg or 3 Pl suffix on the verb.
a. $\quad$ íl $\grave{m} \quad$ ló- $\grave{m}$
$1 \mathrm{Sg}=\mathrm{Foc} \quad$ go-Ipfv. 3 SgSbj
'It's I [focus] who will go.'
b. $\hat{u}:=\grave{m} \quad$ ló- $\grave{m}$
$2 \mathrm{Pl}=\mathrm{Foc} \quad$ go-Ipfv.3SgSbj
'It's you-Pl [focus] who will go.'
c. Sěydù = m̀ ló-m̀

Seydou=Foc go-Ipfv.3SgSbj
'It's Seydou [focus] who will go.'
d. árnà ló-yè
man.Pl go.Ipfv-3PlSbj
'It's men [focus] who will go.'

In the perfective negative, the defocalization of the verb entails a drop in the tone of the AN suffix, elsewhere -rí-, to L-toned -rì-.
(403)
a. Sěydù $=\grave{m}$
$1 \grave{L}^{\mathrm{L}}$-rì- $\varnothing$
Seydou=Foc $\quad$ go $^{\text {L }}$-PfvNeg-3SgSbj
'It was Seydou [focus] who did not go.'
b. $\hat{i}:=\grave{m}$
$1 \grave{o}^{\mathrm{L}}-\mathrm{rì}-\varnothing$
$1 \mathrm{Pl}=\mathrm{Foc}$
go ${ }^{\text {L }}$-PfvNeg-3SgSbj
'It was we [focus] who did not go.'
c. ár ${ }^{n}$ à
$1 \grave{o}^{\mathrm{L}}-r$-à
$\operatorname{man} . \mathrm{Pl} \quad \mathrm{go}^{\mathrm{L}}-\mathrm{PfvNeg}^{\mathrm{L}}-3 \mathrm{PlSbj}$
'It was the men [focus] who did not go.'

When focus $=\grave{m}$ is absent, only the tone on the AN suffix identifies the clause as focalized. Thus ( 403 c ) differs only subtly from unfocalized ár ${ }^{n a ̀ ~ l o ̀-r-a ́ ~ ' m e n ~ d i d ~ n o t ~ g o ' . ~}$

In the imperfective negative, the verb stem retains its lexical tone. The AN suffix complex is -m̀-dó-. 1st/2nd person subject requires (pseudo-) 3 Sg suffix on the verb.
a. sěydù $=\grave{m} \quad$ ló-m̀-dó- $\varnothing$
Seydou=Foc go-Ipfv-Neg-3SgSbj
'It's Seydou [focus] who will not go.'
b. ú= ̀̀ ló-m̀-dó- $\varnothing$
$2 \mathrm{Sg}=\mathrm{Foc} \quad$ go-Ipfv-Neg-3SgSbj
'It's you-Sg [focus] who will not go.'
$\begin{array}{ll}\text { c. } \begin{array}{ll}\text { bû: }=\grave{m} & \text { ló- } \grave{m}-n-\varepsilon \\ \text { 3Pl=Foc } \\ \text { go-IpfvNeg-3PlSbj }\end{array} \\ & \text { 'It's they [focus] who will not go.' }\end{array}$
The subject (or topic) of an 'it is X ' construction can also be focalized. See e.g. $\varepsilon r^{n} \dot{\varepsilon}=\grave{m}$ $j \grave{\eta g} u$ ú-ìm = $\varnothing$ 'it's he [focus] who was the healer' in B's first turn in (679) in the sample text. In this construction, the focalized subject (topic) and the predicate may look alike morphologically.

### 13.1.2 Object focalization

When the focalized constituent is the direct object, we get the same patterns for AN verbal morphology as in subject focalization. Specifically, we get the L-toned unsuffixed perfective, the L-toned negative AN forms, and the unreduplicated unsuffixed imperfective as basic verb forms. However, in object focalization, the verb carries the full set of subject pronominal suffixes.

Nouns and pronouns that take $=\grave{m}$ for subject focus may take accusative clitic $=n \grave{\grave{l}}$ (§8.2) when functioning as focalized objects. This is usual with pronouns and seems common with personal names, but it is not very common with other nouns.

```
a. sěydù = nì yì-\grave{y}
    Seydou=Acc see.Pfv-1SgSbj
    'It was Seydou [focus] that I saw.'
b. yǎ: yì-Ẁ
    woman.Pl see.Pfv-2SgSbj
    'It was the women [focus] that you-Sg saw.'
c. kúrnùu}\quadjìsè-y
    stone throw.Pfv-1SgSbj
    'It was the stone [focus] that I threw.'
```

d. $\quad$ ínì $\quad y \grave{i}-\grave{W}$
$1 \mathrm{Sg}=\mathrm{Acc} \quad$ see.Pfv-2SgSbj
'It was me [focus] that you-Sg saw.'
In (405b-c), only the use of the unsuffixed perfective verb form suggests that 'women' and 'stone' may be focalized.

In all of my elicited examples, the word with = nì clitic is immediately preverbal.
Below are examples of the perfective negative (406a), the imperfective (406b), and the imperfective negative (406c). As in subject relatives, the perfective negative and imperfective negative suffixes have L-tone (-rì-, -m̀dò-) under focalization.
a. sěydù $=n i ̀ \quad y i ̀ ~ L i ̀ n-\grave{~}-1$

Seydou=Acc $\quad$ see $^{\mathrm{L}}-$ PfvNeg-2SgSbj
'It was Seydou [focus] that you-Sg did not see.'
b. yă: jò-ló-m
woman. Pl convey-Caus-Ipfv. 3 SgSbj
'It's the women [focus] that he/she will take (there).'
c. yǎ: jò-ló-mdò- $\varnothing$
woman. Pl convey-Caus-IpfvNeg-3SgSbj
'It's the women [focus] that he/she will not take (there).'

### 13.1.3 Focalization of PP or other adverbial

Since PPs and similar adverbials have inanimate reference (to times, places, and manners), there is no reason to expect them to allow focus clitics. In (407), 'in(side) the house' is focalized, but this is discernible only because the verb is in the unsuffixed (L-toned) perfective.
[úrò pìrè] bìrè-bó
[house inside] work.Pfv-3PlSbj
'It was in the house [focus] that they worked.'

### 13.2 Interrogatives

Polar interrogatives are expressed by a clause-final particle 'yes/no?' particle that is not easily distinguished from an 'or' disjunction. There is also the usual array of content (WH) interrogatives like 'who?'

In textual examples, we observe a tendency to topicalize a constituent, then (after a pause) add a question, with a WH word either as predicate (with 'it is' clitic, indistinguishable from the focus clitic) or immediately before the predicate. However, ordering is variable, and clause-initial position for the WH word is also possible. The examples in (408) illustrate the various linear positions of WH words. Repetitions of the same question, perhaps slightly rephrased, can show different ordering (408a,d). In (408c) the nominal WH word ('what?') is adjacent to a coindexed relative head.
a. ìnìr ${ }^{n} 1$ : kù,
name Def,
[ànây ${ }^{n}{ }^{\mathrm{L}}$ nà $^{n}$ ] ìnìr ${ }^{n}$ ì:-gǎỳ ${ }^{n}$ bèré:-rà-Ẁ,
[how? with] name ${ }^{\mathrm{L}}$-put.VblN get-Prog-2PlSbj
[yí-m ${ }^{\mathrm{HL}}$ ínìr $\left.{ }^{n} i ̀:\right] \quad\left[a ̀ \eta a ̂ y^{n} \mathrm{~L}^{\mathrm{L}}\right.$ nà $\left.^{n}\right]$ bèré:-rà-Ẁ
[child-AnSg ${ }^{H L}$ name] [how? with] get-Prog-2P1Sbj
'The name (of a newborn child), how do you-Pl get (=determine) the putting (=giving) of the name? The child's name, how do you get it?' [2005.1a.02]
b. [kú yà] [kú $\left.{ }^{\text {HL } k o ́ r o ̀ ~}\right] ~ \grave{n j e ̂: ~}=\varnothing$
[DiscDef also] [InanPoss ${ }^{H L}$ meaning] what?=it.is
'as for that, its meaning is what? [2005.1a.02]
c. [kò: $n^{\mathrm{L}} \quad$ ǹjê: $\left.=\varnothing\right] \quad$ [ tànyàsô: ${ }^{\mathrm{L}}$ mà:]
[thing ${ }^{\text {L }}$ what?=Foc] [[T ${ }^{\text {L Dat }]}$
[nî: kù] lóyò káy $\left.{ }^{n}=n i ́\right]$
[water Def] dirtiness make=and.SS]
[ò:rǒy [û: ${ }^{\mathrm{L}}$ mà:] ká: ${ }^{n}$-rà- ${ }^{\text {Wh }}$ ]
[disease [2Pl ${ }^{\mathrm{L}}$ Dat] make-Prog-Ppl.Inan]
'What thing is it that makes the water at Tangaso dirty, and makes (=causes) the
sickness for you-P1?' [2005.1a.04]
d. [nǔ: [kú mâ:] à hây $^{n}$ gì: ${ }^{n}$-bò,
[person.Pl [Inan Dat] how? say.Pfv-3P1Sbj,
àmây ${ }^{n} \quad[k u ́ \quad m a ̂:] ~ m a ̀: n u ̀-W ̀ ~$
how? [Inan Dat] think.Pfv-2PlSbj
'What did the people say about them (=locusts)? What did you-Pl think about them?' [2005.1a.08]
e. [wòngòrò-kùnjú kù yà $\rightarrow$ ] [sè:njê: yà $\rightarrow$ ],
[first.weeding Def and] [second.weeding and]
àngú $=\grave{m} \quad$ mégé $\quad{ }^{\text {HL }}$ nûm
which=Foc more ${ }^{H L}$ difficult
(Between) the wongoro-kunju and senje [two stages of farm work] which (of them) is more difficult?' [2005.1a.10]

### 13.2.1 Polar (yes/no) interrogative (ma)

The particle ma can be added to a statement to make it into a question. It is subject to optional intonational prolongation. The pitch is also subject to an intonational rise, but its basic phonological tone is copied from the immediately preceding tone. It may, alternatively, have falling pitch $(m \hat{a} \rightarrow)$. An example is (409a). Annother option is to express both the positive and negative alternatives, linked by mà $\rightarrow$ 'or', as in (409b). This is pragmatically interpreted as a question. When two or more occurrences of ma occur, as in (409c), I take clause-final ma to be interrogative, and ma at the beginning of the second and later options to be disjunctive.
(409)
a. yě:-r-à: mà
come-Pfv1a-1a3P1Sbj Q
'Did they come?' (or: 'Have they come?')
 come-Pfv1a-3PlSbj or come-PfvNeg-3PlSbj 'Did they come, or did they not come?'
c. hónò hálkérè gây ${ }^{n} \rightarrow$ mà:nù-Ẁ mà $\rightarrow$, for.example destruction like think.Pfv-2P1Sbj $\mathbf{Q}$, $m a ̀ \rightarrow\left[k \grave{:}:^{n^{\mathrm{L}}}\right.$ àdùnà: $r^{n} \grave{u}-$ náw $\left.^{n} a ̀\right]$ gây ${ }^{n} \rightarrow$ mà:nù-̀̀ $\quad$ má $\rightarrow$ or $\quad$ thing ${ }^{\mathrm{L}}$ world ${ }^{\mathrm{L}}$-ruination] like think.Pfv-2P1Sbj $\mathbf{Q}$ 'For example, did you-Pl think it was like (divine) destruction? Or did you-Pl think it was some kind of ruination of (=from) the world (of the living)?' [2005.1a.08]

### 13.2.2 'Who?' (ǎm)

'Who?' is usually ǎm, but this form can also be treated as a 'which?'-type adjectival


In subject function, ǎm 'who?' takes the focus clitic $=\grave{m}(410)$.
a. ǎm $=$ m̀ tê: sírí-m̀ who?=Foc tea cook-Ipfv. 3 SgSbj
'Who will make (=boil) the tea?'
b. ǎm = ì $\quad l o ̀-\varnothing$
who?=Foc go.Pfv-3SgSbj
'Who went?'

In direct object function, the accusative clitic $=$ nì is optional.
a. ǎm( = nì)
yì-Ẁ
who?(=Acc) see.Pfv-2SgSbj
'Who(m) did you-Sg see?'
b. [nù ${ }^{\mathrm{L}} \quad$ ăm $\left.(=n i ̀)\right]$ [ùrò ${ }^{\mathrm{L}}$ pìré:] yì-Ẁ.:
[person who?(=Acc)] [house ${ }^{\mathrm{L}}$ inside] see.Pfv-2PlSbj
'Who(m) did you-Pl see inside the house?'
c. sé:dù [nù ${ }^{\mathrm{L}}$ ǎm] jìyغ̀- $\varnothing$

S [person ${ }^{\text {L }}$ who?] kill.Pfv-3SgSbj
'Who(m) did Seydou kill?

### 13.2.3 'What?' (ǹjé), 'with what?', 'why?'

ǹjé 'what?' may be used by itself, or it may be combined with the noun 'thing' to form kj̀: ${ }^{n \mathrm{~L}}$ ǹjé 'what (thing)?'. In this combination it functions adjectivally, and so induces tonedropping on the noun ( $412 \mathrm{c}-\mathrm{d}$ ).
a. ǹjé lúgúró:-rà-ŋ̀
what? look.for-Prog-2SgSbj
'What are you-Sg looking for?'
b. ǹjé jé-ỳ.:
what? eat.Ipfv-1PISbj
'What will we eat?'
c. $\left[k \grave{y^{2}}{ }^{{ }^{\mathrm{L}}}\right.$ ̀̀jé] ú bèrè- $\varnothing$
[thing ${ }^{\text {L }}$ what?] 2 SgObj get.Pfv- 3 SgSbj
'What has gotten (= is ailing) you-Sg?'
d. [kò: $n^{\mathrm{L}}$ ǹjé] sé: $d u ̀ \quad$ bèrè̀- $\varnothing$ [thing ${ }^{\text {L }}$ what?] S get.Pfv-3SgSbj 'What has gotten (=is ailing) Seydou?'
'With what?' is expressed as the instrumental of kò: ${ }^{n \mathrm{~L}}$ njjé.
(413) [[kj̀:nL ì̀jé] nâà $\left.{ }^{n}\right]$ bíré-Ẁ
[[thing ${ }^{\text {L }}$ what?] Inst] work.Ipfv-2SgSbj
'With what do you-Sg work?'
'Why?' is ǹjé gì-náy ${ }^{n}$ (variant ǹjé gù-náy"). gì-náy ${ }^{n}$ was originally a clause-linking form of gǔy ${ }^{n}$ 'say' (§15.1.9). Another subordinated form of this verb is the source of purposive postposition ǧn (§8.5.1).
(414) [ǹjé gì-náy $\left.{ }^{n}\right] \quad\left[\begin{array}{llll}\text { Hú } & { }_{n i t} & \text { kù }\end{array}\right.$
[what? for] [DiscDef ${ }^{\text {HL }}$ water Def]
kówó-m̀-n-
get.water-Ipfv-Neg-3PISbj
'Why do they not take the water of that (place)?' [2005.1a.05]

### 13.2.4 'Where?’ (án-dá:, án, áygòy)

The common interrogative adverb 'where?' is án-dá:: The -dá: is a common final element in deictic locative adverbials (§4.4.2.1). Perhaps án- is historically related to ăm 'who?' or 'which?'.
a. án-dá: ló-Ẁ
where? go.Ipfv- 2 Sg Sbj
'Where are you-Sg going?'
b. án-dá: gó-m̀
where? exit-Ipfv. 3 SgSbj
'Where does he/she come from?'
c. án-dá: sí-yé-ỳ
where? go.down-MP.Ipfv-1 SgSbj
'Where will I go down (=lodge)?'
d. [[àrsč: bû: = nì] án-dá: jò-ló-yè]
[[animal Def.Pl=Acc] where? convey-Caus-Ipfv.3P1Sbj
'Where do they take the livestock animals?' [2005.1a.15]

S where? meat buy.Pfv-3SgSbj
'Where did Seydou buy the meat?'

Predicative ' $X$ be where?' can be expressed by locational-existential quasi-verb bù- plus án-dá: 'where?'. For fixed entities such as mountains, houses, and villages), the 'where?' adverb may be ángòy or án-dá:
a. ìsê: ángòy bù- $\varnothing$
" án-dá: "
village where? be.Pfv-3SgSbj
'Where is the village?'
$\begin{array}{cccc}\text { b. } & {\left[\begin{array}{ll}\text { tóró } & \text { bè } \\ {["} & "]\end{array}\right.} & \text { ángòy } & \text { án-dá: }\end{array}$
$\left[\begin{array}{ll}\text { mountain } \mathrm{Pl}] \quad \text { where? be.Pfv-3PlSbj }\end{array}\right.$
'Where are the mountains?'
c. án-dá: bù-Ẁ
where? be.Pfv-2SgSbj
'Where are you-Sg?’

A simple form ǎn is also attested. The focalized form is ăn = $\varnothing$, where the focus (='it is') clitic accounts for the final L-tone element. 'Where are you-Sg going?', cf. án-dá: ló-ẁ,= in (415a) above, can therefore also be expressed as ăn = $\varnothing$ ló- $\grave{\text { b }}$.

```
\(a ̆ n=\varnothing \quad g o \check{-j} \hat{j}:-\varnothing\)
where?=Foc go.out-RecPf-3SgSbj
'Where did it (=motorcycle) come from?' [2005.1b.06]
```

This form may also be expanded as $\grave{\partial r} r^{n} \grave{\text { ăn }}=\varnothing$ ‘(in) what place?’, where ǎn functions like an adjective, cf. ór $r^{n} \grave{\jmath}$ 'place'.

### 13.2.5 'When?'

'When?' expressions can be of the type 'which day?' based on the noun ùsú 'day', or of the type 'in/with which time?' based on the noun dógúrú or (from Fulfulde) synonym wákátù ~ wágátù ~ wáyátù 'time'.
a. [àngú ${ }^{\text {HL úsù] }}{ }^{\mathrm{L}}$ wò
[which? ${ }^{H L}$ day] ${ }^{\mathrm{L}}$ in
'when?' (= 'on which day?')
b. [[dògùrù ${ }^{\mathrm{L}}$ ǹjé] nây $\left.{ }^{n}\right]$ yé-ìm
[[time ${ }^{\mathrm{L}}$ what?] Inst] come-Ipfv. 3 SgSbj
'When (= with what time?) will he/she come?'


### 13.2.6 'How?' (àmây')

'How?' is ànây ${ }^{n}(419 a)$ or its extension àmây ${ }^{n}$ Lnày ${ }^{n}$. It may be used predicately with bù̀- 'be' (419b). The iterated form àgây $y^{n}$-ànây ${ }^{n}$ is used adverbially (419c). à gây ${ }^{n}$ is used with káy ${ }^{n}$ - 'do' in the sense 'do what?' (419d).

| a. túní: | ànây $y^{n}$ | cé:lé- $\grave{W}$ |
| :--- | :--- | :--- | :--- |
| mortar | how | make.well.Ipfv-2SgSbj |

'How do you-Sg make a (wooden) mortar?'
b. ànây ${ }^{n} \quad$ bù- $\varnothing$
how? be-3SgSbj
'How is it?' (= 'What's the situation?')
c. àmây ${ }^{n}$-à âa $^{n}$ tégé:-rà-w.:
how?-how? speak-Prog-2SgSbj
'How (= what) are you-Pl talking (about)?'
d. àmây ${ }^{n}$ ká: ${ }^{n}$-rà-̀̀
how? do-Prog-2SgSbj
'What are you-Sg doing?'

### 13.2.7 'How much?', 'how many?' (à:ngá)

'How much?' or 'how many?' is à:クgá. It is adverbial, and when "modifying" a preceding noun, the latter is not tone-dropped. From this are derived distributive à:ngá-à:ngá 'how much/how many (per unit)?', which is usually predicative with 'it is' clitic, and ordinal à:ngày-nદ́ 'how many-th?' (answer would be 'first', 'third', etc.).
a. pèré à:クgá $̀$ èwè-W
sheep.Pl how.many? buy.Pfv- 2 SgSbj
'How many sheep did you-Sg buy?'
b. màngórò à:ngá-à:!ggâ: $=\varnothing$
mango how.much-how.much=it.is
'How much (apiece) are the mangoes?'

### 13.2.8 'Which?' (ǎm, à ŋgû)

ǎm (also 'who?’, §13.2.2) is used with animate referents, àggú with inanimates. As adjectival 'which?', these control tone-dropping on a preceding modified noun (421a-b). They may also be used absolutely, either when the relevant set is already understood, or after specifying this set in a preclausal topicalized phrase (421c). In the case of ǎm, the absolute use converges with the sense 'who?'. Both ǎm and àngú may be pluralized by adding free plural particle bè (421d).
$\begin{array}{lll}\text { a. } & {\left[p \grave{r} \grave{c}^{\mathrm{L}}\right.} & \text { ǎm] } \\ & {\left[\text { sheep }^{\mathrm{L}}\right.} & \text { which.Sg?] }\end{array} \quad$ jóró- want.Ipfv-2SgSbj
'Which sheep-Sg do you-Sg want?'
b. [tì ${ }^{n}{ }^{n} y^{n \mathrm{~L}}$ àngú] jóró-Ẁ
[tree ${ }^{\mathrm{L}}$ which.Inan?] want.Ipfv-2SgSbj
'Which tree do you-Sg want?'
c. $[y \hat{1}: \quad$ yà $\rightarrow]$ [èměy yá $\rightarrow$ ]
[millet and] [sorghum and]
àngú $=\grave{m} \quad$ mégé $\quad{ }^{\mathrm{HL}}$ Ésù
which?=Foc more ${ }^{\mathrm{HL}}$ good
'(Between) millet and sorghum, which is better?'
d. [pèrè ${ }^{\mathrm{L}}$ ăm bè] jóró- $\begin{aligned} & \text { à }\end{aligned}$
[sheep ${ }^{\mathrm{L}} \quad$ which.Sg? Pl] want.Ipfv-2SgSbj
'Which sheep-Pl do you-Sg want?'

### 13.2.9 'So-and-so' (à-mâ:n)

''So-and-so', i.e. a substitute for a variable personal name (French un tel, une telle), is à-mâ:n, mâ:n, or má:nù.

### 13.2.10 'Whatchamacallit?'

The expression $k \grave{:}{ }^{n} k u ́=i ̀$ 'the thing' can be used as a 'whatchamacallit?' filler while a word or name is being searched for.

### 13.2.11 Embedded interrogatives

An embedded interrogative in a context like 'I don't know [who/what/where ...]' can take its original interogative form (422a). Alternatively, it is replaced by a relative clause headed by an appropriate semantically light noun (nǔ-m 'person', kó:" 'thing', dógúrú 'time', ór"̀̀ 'place', dǎy ${ }^{n}$ 'manner') (422b).
$\begin{array}{lll}\text { a. } & {\left[\left[k j:^{\mathrm{L}}\right.\right.} & \text { ǹjé }] \\ {\left[\left[t h i n g^{\mathrm{L}}\right.\right.} & \text { what }] & \left.\begin{array}{l}n \varepsilon ́-\grave{y}^{n} .: \\ \text { eat.Ipfv- }\end{array}\right]\end{array}$

júwó-m̀-dó-ỳ
know-Ipfv-Neg-1 SgSbj
'I don't know what we are going to eat.'
b. [ìggú-rù dày ${ }^{n}$ gó-y $\left.{ }^{n}\right] \quad$ júwó-m̀̀-dó-ỳ
[here manner ${ }^{\mathrm{L}}$ exit.Ipfv-Ppl.AnPl] know-Ipfv-Neg-1SgSbj
'I don't know how to get out of here.' (lit. "... the way that they exit here") [for yè see discussion of (436) in §14.1.6.2]

## 14 Relativization

### 14.1 Basics of relative constructions

As in most other Dogon languages, BenT has what are traditionally called internally headed relative clauses (IHRCs). As a first schematic approximation, 'the goat that Seydou brought to the market yesterday' is expressed as [yesterday Seydou [goat $\boldsymbol{g}_{\boldsymbol{x}}$ (kà:")] [market to] bringPfv.Ppl.AnSg Deff $]_{x}$, where 'goat' is coindexed with the entire NP.

The following are major features of BenT relatives.

- the head may be in any grammatical function within the relative clause, such as subject (§14.2), object (§14.3), possessor of another NP (§14.4), complement of a postposition (§14.5), or a spatiotemporal or manner adverbial (§15.2.1.1, §15.2.2-3);
- the overt head, maximally Poss-N-Adj-Num, is internal to the relative clause, though it may happen to be initial in that clause (§14.2-3);
- if the internal head is an unmodified noun, animate singular -m (the only nonzero animacy-number suffix for nouns) is omitted on the head noun (as it is before an adjective);
- the overt head is the target of tone-dropping controlled by the relative clause, though this may be rendered ineffectual by a possessor-controlled tone overlay (tonosyntactic island);
- an optional relative morpheme kà: ${ }^{n}$ (§14.1.10), unusual for Dogon languages, can occur at the end of the internal head;
- the relative-clause verb is a participle ( Ppl ) marking the usual aspect-mood-negation inflectional categories, and agreeing in animacy-number features with the head, but not agreeing in pronominal-subject category with the subject (§14.1.6);
- late-NP elements associated with the head NP (determiners, 'all', discourse-function morphemes) constitute a coda following the participle, some of whose elements control tone-dropping on the participle (§14.1.8-9);
- in nonsubject relatives, if the subject is a pronoun, it is expressed as a proclitic subject pronoun (§14.1.5) immediately preceding the verbal participle;
- postpositions that are expected to occur with the internal occurrence of the head NP ('the man to/with whom ...') are generally omitted (§14.5);
- in possessor relatives ('the man whose ...'), the possessor NP is treated like other head NPs, and a coindexed resumptive pronominal possessor precedes the possesssum (§14.4);
- the entire construction (including the coda) functions as a regular argument in the higher phrase or clause, e.g. as subject, object, or complement of a postposition;
- Jamsay-type doubling of the head noun following the relative construction (including its coda) did not occur in BenT texts but was accepted in adverbial relative clauses (§15.2.1.1).

In comparison to neighboring Dogon languages, the most notable distinctive features of BenT are the relative morpheme kà: ${ }^{n}$ and the omission of animate singular $-m$ on the internal head.

The BenT construction can be accounted for by assuming an underlying English-like construction where the relative clause ( RC ) is one among several postnominal modifiers within the NP , following the maximal Poss-N-Adj-Num string but preceding late-NP elements, e.g. [goat (Adj) (Num) (kà: $^{\prime \prime}$ ) [RC... (goat) $x_{x}$... Verb-Ppl] Def]. After tonosyntax and case morphosyntax, the bolded pre-RC string then moves into the linear position of the relativization site, becoming the internal head in e.g. [ __x ${ }_{R C} \ldots$ goat (Adj) (Num) ${ }_{x}$ (kà: ${ }^{n}$ ) ... Verb-Ppl] Deff ${ }_{x}$.

This analysis accounts for the morphological and tonosyntactic form of the internal head. Tone-dropping is controlled in right-to-left fashion by the relative clause, likw that controlled on nouns by following adjectives and demonstratives. Relative clauses, adjectives, and demonstratives restrict reference in the same manner, so they form a natural class, along with possessors.

### 14.1.1 Tone-dropping on final word(s) of NP in relative clause

In other syntactic contexts, a NP is of the form (423), disregarding some details (see chapter 6 ). The symbol ${ }^{* *}$ indicates the break point within the NP, such that any morphemes to the right follow the participle when the NP functions as relative-clause head.
(possessor) [noun adjective(s) numeral] ** determiner 'all' DF

The maximal form of the internal head is therefore (424), while the late-NP elements appear after the verbal participle.
(possessor) [noun (adjectives) numeral]

In the absence of a possessor, (424) appears as N , [ $\left.\mathrm{N}^{\mathrm{L}} \mathrm{Adj}\right]$, [ N Num], or [ $\mathrm{N}^{\mathrm{L}}$ Adj Num]. These all end in one or more words that are (so far) tonosyntactically free, although in some sequences the noun has already been tone-dropped by a following adjective. When such sequences occur as internal heads in relative clauses, the final word(s) undergo further tonedropping, becoming respectively $\mathrm{N}^{\mathrm{L}}$, [ N Adj] ${ }^{\mathrm{L}}$, [ N Num$]^{\mathrm{L}}$, and [ N Adj Num $]^{\mathrm{L}}$, with every word now \{L\}-toned. For example, in (425a) both 'red' and 'six' have at least one H-tone, which disappears when this string (except the final definite morpheme) becomes an internal head (425b).

| a. | $\left[n_{\text {à: }}{ }^{\mathrm{L}}\right.$ | bár $^{n}$ à $]$ | kúròy |
| :--- | :--- | :--- | :--- |
| $\left[\right.$ cow $^{\mathrm{L}}$ | red.Pl $]$ | six | bû: |
|  | Def.Pl |  |  |

'the six brown cows'


If an NP with the structure in (424), above, contains an alienable possessor, the possessor controls an overlay such as $\{\mathrm{HL}\}$ on the remaining sequence, with the H limited to the first
syllable (or, for a monosyllabic noun, the first mora). We here focus on cases like (426a) where the $\{\mathrm{HL}\}$ overlay remains audible, specifically on the possessed noun ${ }^{\mathrm{HL}}$ nâ: 'cows' that immediately follows the possessor. In such cases, there is no tonal change when the same Poss-N-Adj-Num string functions as head NP in a relative (426b). In other words, possessor control of $\{\mathrm{HL}\}$ trumps relative-clause control of $\{\mathrm{L}\}$. If relative-clause control were dominant, we would have gotten the incorrect (426c); note the tones on 'cows'.

However, with inalienable posssession the tonosyntactic issues discussed in connection with (102) in §6.2.3 above come into play. Recall that numerals in Poss-N-(Adj)-Num sequences are included in the possessor-controlled overlay for alienable possessors but usually not for inalienables. In (426d), there are two phonetically slightly different outputs. In one, the numeral is separately tone-dropped by the relative clause, leaving the Poss-N-Adj sequence to take its normal form, here with the monomoraic pronominal possessor included in the domain of $\{\mathrm{L}\}$. In the other, the relative-controlled $\{\mathrm{L}\}$ has a wide domain and tonedrops all of the words in the head NP. When Adj-Num Inversion applies, as in (426e), the numeral is tonosyntactically bound by the following adjective and the relative-controlled $\{\mathrm{L}\}$ has a wide domain.

[^2]\mp@subsup{}{}{\textrm{L}}=\mathrm{ then.SS] put.roof.Ipfv-3PlSbj
'They (=young men) will come and help you, and do the roofing'

```

The same-subject element of the syntax of \(=\) ná \(^{n}\) is challenged by (488), since the person doing the hiding (=stealthy activity) is the (generic) 'you-Sg', not the 'he' subject of the following main clause. However, bàngìyí 'hide' (here, by extension, 'do secretly') is conceptually linked to 'get and chew tobacco', so there is a kind of same-subject structure here.
```

$[b a ̀ n g i ̀ y i ̀ ~=~ n a ́ y ~ n ~ " ~=~ d a ́-~ \varnothing ~ d e ́, ~$
[hide ${ }^{\mathrm{L}}=$ then.SS] $=$ StatNeg-3SgSbj if,
táwà bèré hámpé-wú-m̀-dó- $\varnothing$
tobacco get chew.tobacco-Caus-Ipfv-Neg-3SgSbj

```
'Other than (you) hiding (=in secret), he would not allow (you) to get and chew tobacco' [2005.2b.03]

In (489), there is some fuzziness as to who the subject of 'talk' is. The quoted speaker is with a group, and one could infer that his request is for a collective discussion. However, one could alternatively construe the implied subject of 'talk' as coindexed with the quoted speaker, so this is not a clear counterexample to the same-subject requirement.
\begin{tabular}{|c|c|c|c|}
\hline [né: kày] & [[[yǎ-m kù] & \({ }^{\mathrm{HL}}\) têy & kù] tègè = náy \({ }^{n}\) ] \\
\hline [now Top] & [[[woman-AnSg Def] & \({ }^{\text {HL }}\) word & Def] \(\operatorname{talk}^{\text {L }}=\) then.SS] \\
\hline á & lò-ḿ bá & & \\
\hline LogoSg & go \({ }^{\text {L -Hort }}\) Quot & & \\
\hline
\end{tabular}
'He said; now they (he?) should talk about (=discuss) the matter of the woman so he might go.' [2005.2a.01]

The combination lò=náy 'going' is used in durative background clauses of the type 'that (situation) continues, (until ...)'. Such clauses connect the eventuality just described with a succeeding one over a span of time. No concrete referential subject is implied (490a). The
expression may be expanded by chaining ló 'go' to a preceding ǎy 'take'. This construction can be logically interpreted along the lines of 'taking (the preceding situation) and going (forward), ..' (490b). One can justify the same-subject subordinators by assuming a higher "subject" such as the narrative itself. Jamsay yàyá mày", ... 'taking ...' is also used in this way. Incidentally, <LH>-toned dò-ý in (490a) is morphologically the QuotImprt (§10.5.7), not the \(<\) LHL \(>\)-toned verbal noun \(d \check{o}-\bar{y}\).
a. [lò=náy \(\left.{ }^{n}\right]\) hâl ló [[ùsú pé-nì:y] dò-ý] [ \(\mathrm{go}^{\mathrm{L}}=\) then.SS] until go [[day ten-four] arrive-QuotImprt]
'this (= a woman's post-partum seclusion) goes on until forty days are complete' [2005.1a.01]
b. [tòy \({ }^{\mathrm{L}}\) mǎ: kù] tó-jé- \(\grave{\text { l }}\) dé wò:-wôy,
[sowing \({ }^{\mathrm{L}}\) dry Def] sow-RecPf-2SgSbj if all,
[[né: kày] ǎy lò = náy \({ }^{n}\) ]
[[now Top] take \(\mathrm{go}^{\mathrm{L}}=\) then.SS]
[jìrněy \({ }^{n}\) dǒ:-rè- \(\varnothing\)-]
[rainy.season arrive-Pfv1a-3SgSbj—]
'If you-Sg have done the dry sowing, from then until the rainy season has arrived-' [2005.1a.10]

The combination \(g \grave{u}^{n}=\) ná \(^{n}\) or \(g i^{n}=\) náy \(^{n}\), based on \(g u ̌ y^{n}\left(\right.\) variant \(g y^{\prime \prime} y^{n}\) ) 'say', has more or less literal sense in (491a). However, it can also function as a purposive postposition, as in interrogative [ǹjé gì = náy \({ }^{n}\) ] 'why?' ('for what?’, §13.2.3), and as in (491b).
a. \(\left[n u \check{-}-m \quad g \grave{u}^{n}=n a ́ y^{n}\right] \quad l a ̌-w \quad\left[k j:^{n \mathrm{~L}} \quad k a \hat{:^{n}}\right]\)
[person-Pl say \(=\) then.SS] other-Inan [thing \({ }^{\mathrm{L}}\) any]
'There is no longer any (act) of (people saying)...' [2005.2a.08]
b. dŏ:-m kày, [gùló-m̀= \(\varnothing \quad\) gùn \(=\) náy \(\left.^{n}\right]\)

Dogon-AnSg Top, [slave-AnSg=it.is say =then.SS]
[púlǒ-m bèré-jê:- \(\varnothing\) dè] máré-m̀-dó- \(\varnothing\)
[Fulbe-AnSg get-RecPf-3SgSbj if] keep-Ipfv-Neg-3SgSbj
'A Dogon (man), if he has gotten a Fulbe (in this fashion), he would not keep him to be a slave' [2005.2b.02]

\subsection*{15.1.10 VP-chaining with different-subject \(=n i ̀ \sim=\) ǹ}

A common construction for combining two clauses with different subjects is for the first clause to end in clitic \(=n i ̀\), or its common reduced form \(=\grave{n}\), after the simple bare stem of the verb, which keeps its lexical tone melody. Only the tone of the clitic distinguishes it from same-subject clitic \(=n i ́ \sim=n ́\), described just above (§15.1.8). A pronominal subject is expressed as an independent pronoun immediately preceding the verb, as in nonsubject relatives.

The clause with \(=n \grave{i} \sim=n\) denotes an eventuality that chronologically precedes the eventuality denoted by the following clause. \(=n i ̀ \sim=n ̀\) is therefore most directly in opposition to same-subject \(=\) náy \({ }^{n}\).
(492)
a.
\begin{tabular}{llll}
{\([u ́\)} & \({ }^{H L}\) ír \(r^{n}\) à \(]\) & ú & wàrá \(=n i ̀\), \\
{\([2 \mathrm{SgPoss}\)} & \({ }^{\mathrm{HL}}\) field \(]\) & 2 SgSbj & farm \(=\) and.DS,
\end{tabular}
yâ: gǒ:-m gò- \(\varnothing\)
there elephant go.out.Pfv-3SgSbj
'When you-Sg had farmed in your field, an elephant appeared there.'
b. \(I\) : \(:\)
lǎr \(=n i ̀]\)
lò-r-á
[1PlSbj chase.away=and.DS] go-PfvNeg-3P1Sbj
'We (tried to) chase them away, but they wouldn't go.' [2005.1a.08]
c. hà: né: [î: tíní=nì]
well, now [1PISbj look=and.DS]
[ìgú kày] [dàwná kù]
[Prox.Inan Top] [thing Def]
[dà \(W^{n}{ }^{\mathrm{L}} \quad\) dà:yí-m̀ \(]=\) dá
[thing \({ }^{\mathrm{L}}\) be.compatible.Ipfv-Ppl.Inan] \(=\) StatNeg
'Well now, we looked (=considered), and (we felt) the problem was something that would not last long.' [2005.1a.17]
d. [ìsê: kù] bû: \(\quad\) ह́ggé \(=\grave{n}]\),
[village Def] 3P1Sbj abandon=and.DS],
[yâ: ú bě:-rè-Ẁ dè]
[there 2 SgSbj remain-Ipfv-2SgSbj if]
[ [ăm \(\left.\left.\quad{ }^{\mathrm{HL}} k \hat{o}^{n}{ }^{n}\right]=\varnothing\right]\)
[who? \({ }^{\mathrm{HL}}\) thing]=it.is
'If they have abandoned the village, and (if) you-Sg remain there, it (village) is whose?' [2005.1a.07]
e. [bû: \(y \varepsilon ́=\grave{n}\) ĉ̀m] [[kòsǒy wó] lò-ỳ. \(\therefore\) ] [3PlSbj come=and.DS all] [[harvest in] go.Pfv-1PlSbj]
'As soon as they (=locusts) came, we went to the harvest (=to the fields to harvest).' [2005.1a.08]

In (493), we have a DS clause with \(=n ̀\), followed by an SS clause with \(=n\), and a final clause (whose subject is identical to that of the SS clause). The DS clause happens to itself be complex (with kósú 'harvest' chained to ná 'spend night'), but this is not directly pertinent here.

'We stayed up all night harvesting, while they (=locusts) went up and lay down (=slept) in the trees.' [2005.1a.08]

Instead of expressing a change of subject as [X Verb-DS] [Y Verb], an alternative is to change the first clause to same-subject (SS), and add a medial clause with just the verb káy \({ }^{n}\) 'do' carrying the DS marking. Schematically, instead of 'X went-DS, (then) Y ate', we rephrase as
' X went-SS and did-DS, (then) Y ate'. This construction is very common in narrative as a way to make a clear subject switch.

'When she came down, when she did that, they made a dog follow after her, it is said.' [2005.2a.04]
b òrnó: \(\quad\) ló \(=\) ń \(\quad \hat{u}: \quad\) ká \(y^{n}=n i ̀\),
outback go \(=\) and.SS \(2 \mathrm{PlSbj} \quad \mathbf{d o}=\) and.DS,
yì-tě: cèmné cémné-yè
child.Pl fun have.fun.Ipfv-3P1Sbj
'When you-Pl have gone (out) to the bush, the children will play.'
It is worth asking whether there is an affinity (in the mind of native speakers) between this \(=n i ̀ \sim=\bar{n}\) and the same phonological shape functioning (after a noun or pronoun) as optional accusative morpheme (§8.2). I first encountered a morphemic identity between differentsubject switch-reference marking on verbs, and accusative marking on direct objects, in Choctaw (Muskogean family, southeastern U.S.). However, in Choctaw the structure is made clearer by the use of nominative (subject) markers as corresponding same-subject subordinators. No such parallelism is possible in BenT or other Dogon languages, in the absence of overt nominative morphology.

A particle nì (and variants) that may or may not be directly equatable with the differentsubject subordinator is found here and there in the texts at the end of already well-formed clauses or phrases. If the phrase is an object NP or another apparently focalized nonsubject NP, I attribute it to accusative \(=n i ̀\). An example is \(\varepsilon r^{n} \dot{\varepsilon}=\grave{m}=n i ̀\) at the beginning of (679) in the sample text, with focalized \(\varepsilon r^{n} \varepsilon=\) m̀ 'it was he (who ...)'. More difficult cases involving clause-final nì in the sample text are \(j i ̀ y \grave{\varepsilon}=\) ná \(^{n}\) nì including same-subject \(=\) ná \({ }^{n}\) in line 3 of (675), and núm-dó:-rè nì with perfective-1a verb at the end of (683).

\subsection*{15.1.11 Chaining with perfective linker tí}

A linking element tí related to perfective-1b suffix -tî- (§10.2.1.5) is exemplified in (495), where it is followed by \(=\) ná \(^{n}\), and therefore drops its tone to tì. The linker indicates a chronological sequence, which fits with a perfective connection. The free translation reverses the order of the two relevant clauses to make the chronology clearer.
```

[núwn ${ }^{n} y^{n}$ kày] [á dùwó tì=náy ${ }^{n}$ ]
[now Top] [3Refl leave Perf=then.SS]
ló-ré-ý wá
go-ImprtNeg-QuotImprt Quot
'(younger brother said to elder brother:) he (=elder) should not go away, having left
him (= younger brother) now.' [2005.2a.08]

```
\(t i ́\) is also a regular verb with several senses including 'send' and 'dump out'. This verb is likely related etymologically to the perfective-1b suffix, but they are distinct synchronically. They may co-occur: tí-tî:- \(\varnothing\) 'he/she sent', as in (629d) in §19.1.3. Furthermore, 'send; dump out' can to occur in medial position in chains in its literal sense. This is the case in (496a), where the preceding verb (ló- 'go') is incompatible with perfective-1b suffix (it forms perfective-1a ló:-rı̀-), so this example can only be parsed as a chain. Such sequences should, in principle, be distinguished from the perfective-linker construction in (495) above. The combination tó: tí- 'spill' is a lexicalized chain (i.e. a kind of verb-verb compound), so tí- is found even in the imperfective (tó: tí-ỳ 'I will spill') and in other non-perfective contexts like the 'be able to' construction in (496b).
```

a. [bă:-r\varepsiloǹ dè] ló tí dúwó-\̀
[be.full-Pfv1a-3SgSbj if] go dump leave.Ipfv-2SgSbj
'When it (=bag) is full, you-Sg go dump and leave it (in a small pile).'
[2005.1a.10]

```
b. nî: tó: tí béré-ỳ
water spill dump get.Ipfv-1SgSbj
'I can spill water.'

In another construction, a final inflected tí-, separated from a preceding chained verb by an intervening subject pronominal, functions as an emphatic perfective, though a hint of the sense 'send' is still discernible. The construction is in relative-clause form, hence the preverbal pronoun (497). In this example, the quoted speaker triumphantly confirms that he has performed a nearly impossible feat that had been demanded of him.
```

hàyà [sèngû: kù] ǎy sílé tí-Ẁ
well [waterjar Def] take go.down-Caus LogoSg Perf1b-Ppl.Inan

```
'(He said:) well, now that he had (in fact) taken and brought down the waterjar (to them).' [2005.2a.01]

\subsection*{15.1.12 Chaining with \(j i ́-j \grave{\varepsilon} \rightarrow\) ' go with'}

The word \(j i ́-j \grave{\varepsilon} \rightarrow\) functions somewhat like a specialized nonfinal chained verb, where it is regularly followed by a verb of motion. It is not normally directly inflectable. The semantic contribution of \(j i ́-j \dot{\varepsilon} \rightarrow\) is to indicate that the entity in motion is taking a person or thing along. It is preceded by an NP complement. The Jamsay counterpart jíjè has similar properties.
```

[yǎ-m kù] jí-j\varepsiloǹ-> gô-W.:
[woman-AnSg Def] go.with go.out.Ipfv-2PlSbj
'You-Pl will go out (of the village) with the woman.'

```

In BenT, unlike Jamsay, the final \(\varepsilon\) is prolonged intonationally. This suggests that it is interpreted as containing the subordinator \(-j \grave{\varepsilon} \rightarrow\), which occurs in backgrounded durative clauses indicating the continuation of an activity; see (512) in §15.2.1.4.

In one text, the form \(j i-j \varepsilon\) (looking like a regular verb) is followed by 3 Pl subject -mà. The 3 Sg subject counterpart is \(j i ́-j \dot{\varepsilon}-\grave{W}\), with a final \(-\grave{W}\). These forms are suggestive of perfective participial suffixes (§14.1.6.1).

'They would put them (=children) up on the horses. Taking them (=children) along, they would go for example to Bourougou (village) and sell them.' [2005.2b.01]

\subsection*{15.1.13 Chaining with \(j u ̀ W^{n}\) 万́ 'do first, proceed to'}

The verb jùwn \({ }^{n}\) (not to be confused with unnasalized jùwó 'know') occurs a number of times in the texts with a preceding chained VP. My assistant glosses jùwn \({ }^{n}\) in isolation as 'do first', but the textual contexts suggest a free translation 'proceed to VP' or 'now/then VP', implying a brief temporal separatiion between two chronologically sequenced events.

An example (in hortative form jù \(W^{n} \grave{\jmath}-m\) ) is at the end of (685) in the sample text. Another is (500).
(500) [dòró yá bú- \(\varnothing\) dé]
[thorn Exist be-3SgSbj if]
[ló yàwrú yàwrú yàwrú yàwrú yàwrú
[go rake.up [repetitions]
mò:lú-Ẁ dè]
assemble.Pfv-Ppl.Inan if
gô: \(\quad\) gǎy \({ }^{n} \quad j u ́ w^{n}\) б́- \(\grave{W}^{n}\)
fire put do.first.Ipfv-2SgSbj
'If there are thorns, you will go and keep raking them together, then you will proceed to put (=set) fire (in them).' [2005.1a.10]

\subsection*{15.2 Adverbial clauses}

\subsection*{15.2.1 Temporal adverbial clauses}
15.2.1.1 Noun-headed temporal relative clause ('the time when ...')

These are simple relative clauses with the noun wákátù ~ wágátù ~ wáyátù 'time, moment' or other temporal noun ('day', 'year', etc) as head, hence in \(\{\mathrm{L}\}\)-toned form.

In (501a-b), a definite imperfective relative headed by 'time', and therefore with inanimate participle, is followed by instrumental nây \({ }^{n}\) 'with' to create a temporal adverbial clause describing simultaneous eventualities. (501c) is similar construction but with a perfective participle. Definite kù is heard as H-toned kú when followed by nây \({ }^{n}\).
a. [[ô:-m wàgàtù \({ }^{\mathrm{L}}\) yé-rì kú] jây \(\left.{ }^{n}\right]\)
[[chief-AnSg time \(^{\mathrm{L}}\) come.Ipfv-Ppl.Inan Def] with]
òr \({ }^{n}\) ó: \(\quad\) íré \(\quad\) bíré-m̀ \(=b \varepsilon\) - \(̀\)
field work(n) work-Ipfv=Past-1SgSbj
'At the time when the chief was coming, I was working in the fields.'
\(\begin{array}{lllll}\text { b. } & \begin{array}{ll}\text { [wàgàtù } \\ \\ {\left[\text { time }^{\mathrm{L}}\right.} & \text { í } \\ 1 \mathrm{SgSbj} & \text { yé-m̀̀ } \\ \text { come.Ipfv-Ppl.Inan } & \text { Def] }\end{array} & \begin{array}{l}\text { jây } \\ \text { n }\end{array} \\ \text { with }\end{array}\)
'at the time when I was coming'
c. [wàgàtừ úrò yě í dǒ-Ẁ kú jây \({ }^{n}\) ]
[time \({ }^{\mathrm{L}}\) house come 1 SgSbj arrive.Pfv-Ppl.Inan Def with]
[ \({ }^{\mathrm{L}+\mathrm{HL}}\) bô: ìsê: ló:-rغ̀- \(\left.\varnothing\right]\) tèmbì-̀̀ \(]\)
[[1SgPoss. \({ }^{\text {HL }}\) father village go-Pfv1a-3SgSbj] find.Pfv-1SgSbj]
'When I arrived home, I found that my father had traveled.'
In (502a), the temporal relative (this time headed by 'day') is perfective in form. It functions as the subject of the larger sentence, so instrumental nây \({ }^{n}\) is absent. (502b) is a variant showing doubling of the head noun following the verbal participle.
a. [kì-kă::
[Rdp-grasshopper ùsù \({ }^{\mathrm{L}} \quad\left(k a ̀:{ }^{n}\right) \quad y \varepsilon ̌-\grave{W}\)
kù]
[Rdp-grasshopper day \(^{\mathrm{L}}\) (Rel) come.Pfv-Ppl.Inan Def]
ìgú-rù í tèmbì- \(\varnothing\)
here \(\quad 1 \mathrm{SgObj}\) find.Pfv-3SgSbj
'The day when the locusts came found me here.' (<ùsû)
b. [kì-kă: ùsù \({ }^{\mathrm{L}}\) (kà: \(\left.{ }^{n}\right)\) y ̌̌-ฟ̀] \({ }^{\mathrm{L}}\) ùsù (kù)
[Rdp-grasshopper day \({ }^{\mathrm{L}}\) (Rel) come.Pfv-Ppl.Inan] \({ }^{\mathrm{L}}\) day (Def)
[variant of (a)] (< ùsû)
Doubled head nouns were not observed in BenT texts, but examples like (502b) were accepted when proposed. The doubled head noun is normally simple (ummodified), and has the tonal form of a possessed noun. The syntax is therefore '(the) day of [the day the grasshoppers came]', with the primary relative construction functioning as possessor.

For headless versions of temporal (and other adverbial) relative clauses, see \(\S 14.1 .4\) and especially \(\S 15.2 .4\), below.

\subsection*{15.2.1.2 'While X was VP-ing' (-ìm \(|\grave{W}=b a ̀ y,-\grave{m}|-\grave{W}\) dè, \(\grave{m} \mid-\grave{W} n \varepsilon ̀)\)}

The clitic \(=b a ̀ y\), apparently related to past \(=b \grave{\varepsilon}-\sim=b \hat{\varepsilon}\)-, is used in a temporal clause meaning 'while X was VP-ing'. The clause has the syntactic structure of a relative clause; in particular, = bày does not conjugate for subjects, rather a pronominal subject is expressed as a preparticipial pronoun. Except for statives, = bày is preceded by an unconjugated imperfective verb with suffix -m (503a-c) cf. the past unsuffixed imperfective complex \(-\grave{m}=b \dot{\varepsilon}-(\S 10.4 .1 .1)\). Derived stative verbs have \(-w^{\prime}\) instead of \(-m\) ( 504 c , below). With quasi-verb bù- 'be (somewhere)' we get just bú=bày. The clitic =bày cannot be equated precisely with any normal participial form of \(=b \grave{\varepsilon}-(=b \hat{\varepsilon}-)\).
(503)
a. [ध́r \({ }^{n} \dot{\varepsilon} \quad\) tíní-m̀ \(=\) bày \(]\)
[3SgSbj watch-Ipfv=Past.Ppl]
[ \(\varepsilon^{n}{ }^{n} \dot{\varepsilon} \quad{ }^{\text {HL tíyà-m] }}\) sùyò-bó
[3SgPoss \({ }^{H L}\) friend-AnSg] hit.Pfv-3PISbj
'While he \({ }_{x}\) watched, they struck his \({ }_{x}\) friend.'
b. [bû: tíní-m̀= bày]
[3P1Sbj watch-Ipfv=Past.Ppl]
[bû: \({ }^{\mathrm{L}}\) tìyà-m] sùyò- \(\varnothing\)
[3PlPoss \({ }^{\mathrm{L}}\) friend-AnSg] hit.Pfv-3SgSbj
'While they \(\mathrm{y}_{\mathrm{x}}\) watched, he struck their \(\mathrm{r}_{\mathrm{x}}\) friend.'
c. òr \({ }^{n}\) Ǿ: bíré \(\quad\) í bíré- \(\quad \grave{m}=b a ̀ y\),
outback \(\operatorname{work}(\mathrm{n}) \quad 1 \mathrm{SgSbj}\) work-Ipfv=Past.Ppl,
púlŏ-m \(\quad y \grave{\varepsilon}-\varnothing\)
Fulbe-AnSg come.Pfv-3Sgs
'While I was working in the field(s), a Fulbe person came.'
A clause with -ìm= bày may be used as the complement of 'see' or 'find' in the sense of directly observing an event in progress ('I saw him fall', as opposed to the recognitional 'I saw that he had fallen'). Examples are in (504); see also §17.2.3.
\begin{tabular}{|c|c|c|c|}
\hline a. & \(\left[\varepsilon r^{n}{ }^{n} \varepsilon\right.\) & yà yá-m̀ = bày] & yìrí-y \\
\hline & [3Sg & fall-Ipfv=Past.Ppl] & see-PfvNeg-1 SgSbj \\
\hline
\end{tabular}
'I didn't see him/her fall.'
b. [î: yàyá-m̀ = bày] yì-
[1Pl fall-Ipfv=Past.Ppl] see.Pfv-2SgSbj
'You-Sg saw us fall.'
c. \(\left[\begin{array}{c} \\ r^{n} \varepsilon ́ ~ b i ́ y e ́-W ́ ~\end{array}=b a ̀ y\right]\) tèmbù- \(\varnothing\) wà
[3Sg lie.down-Stat=Past.Ppl] find.Pfv-3SgSbj Quot
'she found him lying (in bed), it is said.'
When I sought present-time versions of the \(-\grave{m} \mid-\grave{W}=b a ̀ y ~ c o n s t r u c t i o n, ~ m y ~ a s s i s t a n t ~\) used \(-\grave{m} \mid-\grave{W}\) followed by conditional particle dè (or variant, e.g. déy) 'if' (505). This is not unusual since the 'if ...' particle can often be glossed freely as 'when ...'. The construction resembles that with \(-\grave{W}\) dè (§16.1.2), but in the present construction verbs other than statives have \(-m\) rather than \(-\grave{W}\). There are quite a few textual examples of -m̀ dè.
\begin{tabular}{|c|c|c|c|c|}
\hline [bíré & í & bíré-m̀ & dè] & nú-ré \\
\hline [ \(\operatorname{work}(\mathrm{n})\) & 1 SgSbj & work-Ipfv & if] & go.in-ImprtNeg \\
\hline 'When I & workin & don't come & & \\
\hline
\end{tabular}

A similar construction, common in narratives, has \(-\grave{m} \mid-\grave{W} n \grave{\varepsilon}\), ending with a reduced variant \(n \grave{\varepsilon}\) of topicalizing particle \(n \varepsilon\) ' 'now'. In (506) the phrase is repeated three times.
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline [íyé & yà] & [bû: & \({ }^{\text {L }}\) mà:] & bérù-m & wò-ý & wa \\
\hline [today & also] & [3P1 & \({ }^{\text {L }}\) QuotSbj] & goat-AnSg & catch-QuotImprt & Quot, \\
\hline [bû: & wó-m̀ & & \(n \varepsilon ̀] ~[b \hat{u}\) : & wó-m̀ nè] & [bû: wó-m̀ & \(n \grave{]}\) \\
\hline \multicolumn{7}{|l|}{[3P1Sbj catch-Ipfv now]} \\
\hline [[bér & kù & kày] & \(y \varepsilon ̌=n ́] ~\) & & & \\
\hline [ [goat & Def & Top] & come=and & d.SS ... & & \\
\hline
\end{tabular}
'(so) she told them to take a goat this day too. They kept taking (goats). As for the goats, they came and ...' [2005.2a.06]
\(n \grave{\varepsilon}\) is also attested after defective stative quasi-verb bù- 'be', as in bû: bú nغ̀ 'they kept being (thus)' in line 6 of (668) in the sample text.

\subsection*{15.2.1.3 'While X was VP-ing' \(\left(-\grave{m}=b \check{\varepsilon}-\grave{W}\right.\) kú \(n a ̂ y{ }^{\text {' }}\) )}

A construction that appears to be interchangeable with the - \(\grave{m}=\) bày clause type described in the preceding section, but that is more transparent morphologically, has an inanimate past unsuffixed imperfective participle with suffix complex \(-\grave{m}=b \check{\varepsilon}-\grave{W}\), followed by definite \(k u ́(H-\) toned here before a postposition) and instrumental postposition \(\mu\) ây \({ }^{n}\) 'with'.
\[
\begin{align*}
& \text { [2SgPoss }{ }^{\text {HL }} \text { field] 2SgSbj farm-Ipfv=Past-Ppl.Inan Def Inst, }  \tag{507}\\
& \text { gǒ:-m gò- } \varnothing \\
& \text { elephant-AnSg come.out.Pfv-3SgSbj } \\
& \text { 'While you-Sg were farming in your field, an elephant appeared.' }
\end{align*}
\]

\subsection*{15.2.1.4 '(While) X continue(-s/-ed) to VP’ (-ı̀, tíném, túnó, -jè \(\rightarrow\), dê:-, wó)}

Several constructions are used in narrative to indicate prolongation of an activity. Any such construction provides a background for a new, foregrounded event. This new event may take place while the activity is continuing ('while ...'), or it may follow the activity or or serve as its endpoint or result.

One construction, which may be used for present or non-present time frames, has the invariant imperfective - \(\grave{m}\) (cf. past unsuffixed imperfective \(-\grave{m}=b \grave{\varepsilon}\)-) with no pronominal inflection, repeated three or more times. The subject is expressed by a preparticipial pronoun in each occurrence (508), or it is omitted as in yárá-m̀ yárá-m̀ yárá-m̀ 'kept walking around' in line 4 of (666) in the sample text.
\begin{tabular}{|c|c|c|c|c|c|}
\hline [yòg-î: & \multicolumn{2}{|r|}{tùmdì- \(\varnothing]\)} & \multicolumn{2}{|c|}{wà,} & \\
\hline [run-VblN & \multicolumn{3}{|l|}{N begin.Pfv-3SgSbj]} & uot, & \\
\hline \(\left[\varepsilon^{\prime}{ }^{n} \dot{\varepsilon}\right.\) & уธ์ชธ́-m̀] & &  & & \\
\hline [3Sg & run-Ipfv] & & [3Sg run & pfv] & \\
\hline  & уо́ชธ́-m̀] & \(\left[\varepsilon r^{n}{ }^{\text {c }}\right.\) & уо́үо́-m̀] & \(\left[\varepsilon r^{n} \dot{\varepsilon}\right.\) & уо́¢о́-m̀] \\
\hline \([3 \mathrm{Sg} \mathrm{r}\) & run-Ipfv] & [3Sg & run-Ipfv] & [3Sg & run-Ipfv] \\
\hline
\end{tabular}
'.. she began to run, it is said. She kept running and running.'
[2005.2a.02]

A more explicity durative clause is -m̀ followed by an adverb tíném (or any of several dialectal variants, e.g. túném), which suggests an extended temporal continuation of an activity. Because it is an adverb, tíném is invariant for pronominal category of subject. There is no requirement for a preparticipial subject pronoun.
```

tì-tă:-m [yàrỳyí-m̀ tín\varepsilońm]
Rdp-hyena-AnSg [stroll-Ipfv continuing]
mùmùrn"ú-m̀ yì-\varnothing
scorpion-AnSg see.Pfv-3SgSbj
'While Hyena was continuing to stroll around, (suddenly) he saw Scorpion.'

```

The verb plus tíném may be repeated three or so times for narrative effect. In (510), the light verb káy \({ }^{n}\) 'do' substitutes for a more substantive VP given earlier in the discourse.
```

béré-m̀-n-\varepsiloń Wá,
be.able-Ipfv-Neg.3Pl Quot,

```

```

[like.that do-Ipfv continuing

```
'... they (=numerous suitors) couldn't do it (=a heroic feat). They kept doing that
(= trying and failing), they kept doing that, they kept doing that. (Then ...)'
[2005.2a.01]

On tape, tíném often sounds L-toned, which I attribute to the influence of the preceding -m̀ suffix. When tíném is followed by another element, such as bù- 'be' or bě- 'remain', the Htone is clearer.

A variant túnó is attested in similar function (511). Most attestations of this variant are with bù- 'be (somewhere)'. There is no subject pronoun, and no imperfective -mi on the verb. Since bù- is a stative quasi-verb, it would not allow specifically imperfective suffixes in any event.
(511) [yâ: bú túnó] bú-túnó bú-túnó bú-túnó bú-túnó,
[there be continuing] ...
[yà-gùró gò=ń]
[woman-young go.out=and.SS]
'They continued to be there for a long time. (Eventually) she grew up to become a young woman, ...' [2005.2a.04]

Another durative clause type in narrative is with \(-j \grave{\varepsilon} \rightarrow\) added directly to the verb stem. The verb may be single, or repeated up to four times. A morphological parsing as perfective \(j \grave{\varepsilon}:-\varnothing\) ' \((3 \mathrm{Sg})\) brought', or a connection with recent perfect \(-j \dot{\varepsilon}-\), are excluded since neither has the requisite durative sense. A more likely historical connection is with \(j i ́-j \grave{\varepsilon} \rightarrow\) 'go with' (§15.1.12), and some examples are compatible with this specific sense, but in other examples there is no indication of literal accompanied motion. Togo Kan same-subject 'while' subordinator \(-j \varepsilon ̀\) may be related


A somewhat different construction is of the type ' X did that (=kept doing that) until X got tired'. This is a fairly common narrative construction that does not necessarily denote literal weariness. The verb \(d \check{\varepsilon}\) - 'get tired' is used, in a conjugatable falling-toned perfective form \(d \hat{\varepsilon}\) :- (e.g. 3Pl \(d \hat{\varepsilon}\) :-bj̀) or in a headless adverbial participial form \(d \hat{\varepsilon}\) - \(\grave{W}\), after an intonationally prolonged form of a chained verb. The \(<\mathrm{HL}>\) tone is found in one version of the perfective for third person subject; see \(\S 10.2 .1 .3\).

Often the activity in question is described in one clause, followed by a clause denoting its prolongation with káy \({ }^{n}\) 'do' replacing the VP. In one narrative containing songs, this construction is regularly used after each snatch of song, preceding the next foregrounded event, e.g. (513).

'[song]. (He) did that (=sang) until he was tired (=for a long time). (But) she refused to come down.' [2005.2a.03]

For a different construction involving 'get tired', see \(\S 15.2 .1 .8\) below.
Locative postposition wó is attested in a similar durative background clause in (514), with an H-toned stative dímbá- 'follow' (i.e. continue as before) plus -ẃ. This is morphologically interpretable as a 3 Sg subject form.
\begin{tabular}{|c|c|c|}
\hline ỳgú & dímbá-Ẃ & \({ }^{\mathrm{HL}}{ }_{W}{ }^{\text {ÓJ, }}\) \\
\hline Prox.Inan & follow.Stat-3SgSbj & \({ }^{\mathrm{HL}} \mathbf{i n}\), \\
\hline ̀̀gú & dímbá-Ẃ & \({ }^{\mathrm{HL}}\) WÓ], \\
\hline Prox.Inan & follow.Stat-3SgSbj & \({ }^{\mathrm{HL}} \mathbf{i n}\), \\
\hline
\end{tabular}
'This (argument) keeps going on and on, then ...' [2005.1b.05]

\subsection*{15.2.1.5 'While VERB-ing' (iterated imperfective as adverb)}

Adverbs of the type 'while VERB-ing' can be derived from activity verbs by iterating a form ending in \(m\) (compare imperfective \(-\grave{m}\) before past clitic), with repeated \(\{\mathrm{HL}\}\) tone overlay, expressed as \(<\mathrm{HL}>\), H.L, and H.L.L on mono-, bi-, and trisyllabic stems, respectively. Like the corresponding verb, the adverb may take a complement, such as a cognate nominal, and examples of this are included in (515). The special phonological features in (515b-c) are
consistent with the phonology of the corresponding unsuffixed imperfective forms. yáràm-yáràm 'while taking a walk ( \(=\) strolling)' (515f) reduces a trisyllabic stem to bisyllabic by lopping off a final mediopassive suffix. A similar reduction occurs in derived statives, see (253d) in §10.2.1.11).
(515)
\begin{tabular}{lll} 
& gloss & verb
\end{tabular} \begin{tabular}{l} 
'while VERB-ing'
\end{tabular}

\subsection*{15.2.1.6 ‘Before ...‘ (mà:, -rè)}

The usual 'before ...' clause has a clause-final particle mà: following a perfective verb. If the subject is pronominal, it is expressed as a preverbal pronoun rather than as a pronominal-subject suffix on the verb. Whether there is a historical relationship between mà: 'before' and dative postposition \({ }^{\mathrm{L}}\) mà: or quotative subject particle má: \(\sim^{\mathrm{L}}\) mà is unclear.

The modality of the 'before ...' clause may be factive (the event in question did in fact take place) or hypothetical (the event may or may not take place).
a. í ínjírí:-rè mà:, gǒ:-r-à: \(=b\)-à:
1 SgSbj get.up-Pfv1a before, go.out-Pfv1a-3PlSbj=Past-3P1Sbj 'Before I got up, they had (already) gone out.'
b. [bòlú yદ̌:-rè mà:] [úrò nú]
[rain(n) come-Pfvla before] [house enter.Imprt]
'Go-Sg into the house, before the rain comes!'
c. [bû: yě:-rè mà:] bàngíy-à
[3PlSbj come-Pfv1a before] hide.Imprt
'Hide (yourself), before they come!.'
d. [ह́r \(\left.{ }^{n} \dot{\varepsilon}=n i ̀ ~ i ́ ~ s u ́ y o ̄:-r \varepsilon ̀ ~ m a ̀:\right] ~ l o ̀-\varnothing ~\)
\(3 \mathrm{Sg}=\mathrm{Acc} 1 \mathrm{SgSbj}\) hit-Pfv1a before go.Pfv-3SgSbj
'He went away before I (could) hit him.'
e. [bòlú yě:-rè mà:] nù- \(\varnothing\)
[rain come-Pfv1a before] enter.Pfvl-3SgSbj
' \(\mathrm{He} /\) She went in before the rain came.'

sheep- AnSg [ 1 SgSbj slaughter-Pfv1a before] run.Pfv-3SgSbj
'Before I could slaughter the sheep, it ran away (= bolted).'
In the frequent combination with gǔy \({ }^{n}\) (and variants) 'say', a morpheme lè is added, hence gǔy \({ }^{n} l e ̀\) mà: 'before saying'.
\begin{tabular}{lllll}
{\([\) [láwá:-r-à: } & bû: & ǧ̌:n-lè & mà: & wôy] \\
[pass-Pfv1a-3PlSbj & 3PlSbj & say-? & before & all]
\end{tabular}
'before they could say that they had passed through' [2005.2a.02]
Another 'before ...' or 'by the time that ...' construction is seen in (518), which reports an ultimatum with a time limit. The suffix -rè with no pronominal-subject inflection is added to the chaining form of the verb (with no lengthening of the vowel). The word is \(\{\mathrm{HL}\}\)-toned. A preverbal subject pronoun (logophoric in this example) is present. All textual examples of this type involve the verb 'come', but others were elicitable ( \({ }^{\mathrm{HL}}\) gó-rغ̀ 'before going out',
 'before' form has \(\{\mathrm{HL}\}\) tone overlay with just the first syllable H -toned.

'(They said:) By the time they (=Hyena and Hare) came on another day, if this (goat kid) had not attained the size of a lion, there would be no peace for her.' [2005.2a.06]
'Before S' with some clause S can be paraphrased with a negation: '(at the time) when not (yet) S'. An association between -rè 'before' and negation is suggested by examples like (519), which is a relative clause in form. A paraphrase 'at the time when today had not (yet) come' would match the syntactic form. Other negative suffixes/enclitics of the segmental shape -rv are not hard to find (prohibitive \(-r \varepsilon ́\), perfective negative \(-r i ́\), stative negative \(=\) ráá).
\begin{tabular}{llll} 
[wàkàtù \(^{\mathrm{L}}\) & kà: \(\left.^{n}\right]\) & Íyé & \(y\) érè \\
[time \(^{\mathrm{L}}\) & Rel] & today & come-before
\end{tabular}
'at the time before today (=the present era) came' [2005.2a.09]

\subsection*{15.2.1.7 Clause-final = rà: 'when'}

There are occasional textual occurrences of a clitic = rà: following an inflected verb form (perfective or stative). My transcription assistant suggested emending by deleting the clitic. However, the examples suggest that the = rà: clause does provide a background for the next clause and I therefore translate it (roughly) as 'when'. For example, in (520a), Warthog is digging to get at Hyena, and Hyena is advised to spray salt in Warthog's eyes when he gets too close.
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multicolumn{2}{|r|}{\multirow[t]{2}{*}{\begin{tabular}{l}
[tórú-m \\
[warthog-AnSg
\end{tabular}}} & kù] & gánjì-m̀ & gánjì-m̀ & gánjì-m \\
\hline & & Def] & dig-Ipfv & & \\
\hline & \(y \varepsilon ̌{ }^{\text {c }}\) [ \(r^{n}{ }^{n} \dot{\varepsilon}\) & mâ:] & \multicolumn{3}{|l|}{sósí-lí:-rè- \(\varnothing=\) rà:,} \\
\hline & come \([3 \mathrm{Sg}\) & Dat] & near- & ch-Pfv1a- & \(\mathrm{bj}=\) when, \\
\hline & [[Ér \({ }^{n}{ }^{\text {c }}\) [ \({ }^{\text {HL }}\) jírè \(]\) & \({ }_{W}\) & písé & \(g \mathrm{a}^{n}-y\) ́r & W \\
\hline & [[3SgPooss \({ }^{\text {HL }}\) eye] & \({ }^{\text {L }}\) in & spray & put-Quot & rt Quot, \\
\hline
\end{tabular}
'The warthog was digging and digging; when he (=Warthog) came up close to him (=Hyena), he (=Hyena) should spray it (=salt, by spitting) into his (=Warthog's) eye(s)' [2005.2a.07]
b. yà-pě-m sù:-díyáy j̀gó- \(\varnothing=\) rà:,
woman-old-AnSg francolin-thigh not.be-3 \(\mathrm{Sg}=\) when,
[íyé yà] [bû: \({ }^{\mathrm{L}}\) mà:] bérù-m wò-ý wá
[today also] [3Pl \({ }^{\text {L }}\) QuotSbj] goat-AnSg catch-QuotImprt Quot
'The old woman didn't have a francolin thigh, (so) she told them to take a goat this day too.' [2005.2a.06]
c. [nù nínáy \({ }^{n}\) bû:] úrò né = rà: \({ }^{\dagger}\),
[person reliable Def.Pl] house not.be. \(3 \mathrm{Pl}=\) when,
[yì-tê: bèré-j-â: dè] wó-yà
[children get-RecPf-3P1Sbj if] catch.Ipfv-3PlSbj
'When the able-bodied people (=Dogon men) were not at home, if they (=Fulbe raiders) found children, they would take (=kidnap) them.' [2005.2b.01]
15.2.1.8 Lengthened final vowel in complement of 'be tired'

BenT has a counterpart to a specificalized clause-type found in Nanga. In both languages it occurs in connection with main-clause dě 'be tired', expressing extended duration of an activity ('they met and met until they got tired', i.e. 'they kept meeting for a long time'). In addition to the data in (521), I elicited examples with the following: bìr- \(\varepsilon\) : 'work', \(n-\varepsilon\) : 'eat',

a. [tǔ: mâ:] bàt-á: dě:-rè-Ẁ.: dé wôy
[Recip Dat] meet-Dur be.tired-Pfv1a-2PlSbj if all 'when you-Pl are mutually tired of meeting with each other' [2005.1b.05]
b. [kú wó] líy-દ́: dě:-rè- \(\varnothing\)
[Inan in] drag.on-Dur be.tired-Pfv1a-3SgSbj
'(If) it drags on for a long time, ...' [2005.1b.05]
For a different construction involving 'get tired', see (513) in §15.2.1.4 above.

\subsection*{15.2.1.9 'While standing/sitting' (type í-Ríyà-m)}

A morphological construction involving initial H-toned reduplication, \{HL\} stem overlay, and invariant final imperfective - \(\grave{m}\) is attested with three stance verbs: í-Ríyà-m 'while standing', é-Réw-yè-m 'while sitting', bí-bí-yè-m 'while lying down'. The association with stance verbs and the \(\{\mathrm{HL}\}\) stem overlay suggest an affinity with the reduplicated stative (§10.2.1.11), as opposed to the reduplicated imperfective, but the invariant final -m and the H -tone of the reduplicative segment show that this is a distinct formation.

These forms are attached to a regular VP with the same subject, and function as one-word temporal adverbial clauses. The relevant textual passage is (522).
\begin{tabular}{|c|c|c|c|c|}
\hline [ú & kùyó: & \(\varepsilon r^{n}{ }^{\text {c }}\) & yì & dé] \\
\hline \([2 \mathrm{Sg}\) & first & 3 SgObj & see.Pfv & if] \\
\hline \multicolumn{2}{|l|}{[í-Píyà-m} & \multicolumn{2}{|c|}{tá-Ẁ]} & \\
\hline [Rdp- & nd-Ipfv & \multicolumn{2}{|r|}{shoot.Ipfv-2SgSbj} & \\
\hline
\end{tabular}
'if you-Sg (=hunter) see it first (=before it sees you), you will shoot while standing' (2005.1b.01)

\subsection*{15.2.2 Spatial adverbial clause ('where ...')}
 relative (which therefore takes an inanimate participle). ór \(r^{n} \grave{̀}\) is distinct from \(\grave{\text { or }} r^{n}\) : ' (the) bush, outback, (the) fields (away from the village)'.
\[
\begin{array}{lllll}
\text { a. } & \grave{r}^{n} \grave{\jmath}^{\mathrm{L}} \quad \text { bíré } & \text { bû: } & \text { bìré-Ẁ }  \tag{523}\\
& \text { place }^{\mathrm{L}} \quad \text { work(n) } & \text { 3PlSbj } & \text { work.Pfv-Ppl.Inan } \\
& \text { 'there where they worked' }
\end{array}
\]
b. sòfé:rù-m \(\grave{r l}^{n} \grave{\partial}{ }^{\mathrm{L}}\) éw-yé-Ẁ
driver-AnSg place \({ }^{\mathbf{L}} \quad\) sit-MP.Pfv-Ppl.Inan
'(the place) where the driver sat'

\subsection*{15.2.3 Manner adverbial clause (dày \({ }^{n} \ldots\) 'how ...')}

The head noun dǎy \({ }^{n}\) 'manner', in L-toned form dà \(y^{n \mathrm{~L}}\), is the head of a relative clause in examples like (524).
\begin{tabular}{|c|c|c|c|}
\hline dày \({ }^{n}{ }^{\text {L }}\) & bíré & \(\varepsilon^{\prime} r^{n} \varepsilon{ }^{\prime}\) & bìré-rà-W \\
\hline manner \({ }^{\text {L }}\) & work(n) & 3 SgSbj & work-Prog-Ppl.Inan \\
\hline \multicolumn{4}{|l|}{'the manner in which (= how) he worked'} \\
\hline
\end{tabular}

For quasi-purposive functions of such dà \(y^{n}\) clauses, see \(\S 17.5 .1 .2\).

\subsection*{15.2.4 Headless adverbial clause \((-\grave{W})\)}

Adverbial clauses may take the form of a headless relative clause (§14.1.4), i.e. with covert abstract head NP like 'time', 'place', 'situation', or 'manner' that takes inanimate participial suffixes. The most common interpretation is temporal or situational.

For example, (525a) has no head noun. The verb here takes the form of an inanimate perfective participle (suffix \(-\grave{W}\) ). In context, the most common interpretation is as a temporal clause ('when ...'), which can be made explicit by adding a noun like 'time' in L-toned form as head NP (525b).
 snake-AnSg time \({ }^{\mathrm{L}} \quad 1 \mathrm{SgSbj}\) see.Pfv-Ppl.Inan with, уə̀ц̀̀-y run. \(\mathrm{Pfv}-1 \mathrm{SgSbj}\)
'(At the time) when I saw a snake, I fled.'

In (526a-b), universal quantifier wôy is added following the participle. This gives a (mildly) emphatic sense that can, in some contexts, be translated freely as 'ever since \(\ldots\) '. wǒy is also common at the end of conditional antecedent clauses, \(\S 16.1 .1\).
a. [â:
\(y \varepsilon ̌-\underset{W}{ }\)
Wôy] gò-rá- \(\varnothing\)
[3ReflPl come.Pfv-Ppl.Inan all] go.out-PfvNeg-3PlSbj
'Since they \({ }_{x}\) came, they \({ }_{x}\) haven't gone out.'

Headless relative clauses with \(-\grave{W}\) are often used in narratives instead of regular main clauses. In such contexts they are often best translated as main clauses, each denoting one event among many in a chronological sequence. A typical example is (527), where two relative clauses in -Ẁ (note the preparticipial subject pronominals) denoting sequential events are followed by a clause with a conjugated perfective verb.

'One day they (=Hyena and Hare) killed a francolin. They came bringing the francolin meat. They gave (it) to the old woman.' [2005.2a.06]

For ùsú tùw \({ }^{n} \hat{\jmath}-m\) 'one day' with (pseudo-)animate singular suffix in this example, see §4.7.1.1.

The headless relative clauses in (526a) and (527) have subjects coindexed to the subjects of the following main clauses. This accounts for the third-person reflexive subject pronouns (here 3Reflexive plural â:); see §18.2.3.

\subsection*{15.2.5 'From X, until (or: all the way to) Y'}

The complete construction 'since/from the time that ..., until ...', can be expressed by using a loose chaining subordinator on the first verb (e.g. same-subject \(=n i ́\), different-subject \(=n i ̀\) ), then an inflected clause beginning with hâl 'until, all the way to'. This results in a biclausal adverbial that usually constitutes background for another (foregrounded) event expressed in the main clause.
\begin{tabular}{|c|c|c|c|}
\hline [[bíré & túmdú = ní] & [hâl & dùwò-Ø]] \\
\hline [[work(n) & begin=and.SS] & [until & leave.Pfv-3SgSbj]] \\
\hline [něy \({ }^{\text {n }}\) & \(n \grave{\text { ¢ }}\) - \({ }^{n}\) í- \(\left.\varnothing\right]\) & & \\
\hline [meal & eat-PfvNeg-3SgSbj] & & \\
\hline
\end{tabular}
'From the time he started working until he stopped (working), he didn't eat.'
The verb dùwò- \(\varnothing\) in (528) is a conjugated perfective; the 1 Sg equivalent would have dùwò- \(y\).
(529) is an example where the subjects of the 'from' and 'until' clauses are disjoint. Therefore the subordinating clitic in the 'from' clause is L-toned different-subject \(=n\) ì.

'From the time that his father went (away) until his elder brother came, he didn't eat.'
15.2.6 'As though ...' clause \(\left(g \hat{y} y^{n} \rightarrow\right)\)

In (530), the 'like' adverbial \(g a ̌ y{ }^{n} \rightarrow\) is added at the end of a relative clause denoting a (generic) animate referent.
(530) [[ùsú \(\quad\) yěy] \(\quad n \varepsilon ̌ y^{n} \quad\) nè-r \(r^{n} u\)-ŋ̀ \(\quad\) gây \(\left.n \rightarrow\right]\)
[[day two] meal eat-PfvNeg-Ppl.Inan like]
[něy \({ }^{n}\) né:-rà-w]
[meal eat-Prog-3SgSbj]
'He is eating like (someone) who hadn't eaten for two days.'
In (531), gây \({ }^{n} \rightarrow\) follows a regular main clause, and the free translation is 'as though \(\ldots\) '.
(531) [bòlú mìr \({ }^{n}\) :́-rà = rá- \(\varnothing \quad\) gây \({ }^{n} \rightarrow\) ]
[rain(n) rain.fall-Prog=StatNeg-3SgSbj like]
wóngóró wàrá:-rà-Ẁ
farming do.farm.work-Prog-3SgSbj
\(' \mathrm{He} /\) She is working in the field as though the rain were not falling.'

\subsection*{15.2.7 'Be really true that ...' (-ì̀ wò bĕ)}

A construction meaning 'if it is really true that ...', and contextually ' X insist (=be dead set) on [VP-ing], X be determined to VP]', consists of the appropriate inflected form of bě 'remain', a clause ending in imperfective -m, and locative \({ }^{\mathrm{L}}\) Wò (which often becomes bò after the nasal). The phrasing 'remain on VP-ing' is not far from the etymological sense of English insist on.
\begin{tabular}{lllll} 
a. & {\(\left[\left[\left[\varepsilon ́ r^{n} \dot{\varepsilon}\right.\right.\right.\)} & má: \(]\) & yà-sámà & jórró-m̀ \(]\) \\
{\([[[3 \mathrm{Sg}\)} & QuotSbj] Y & love-Ipfv \(]\) & \({ }^{\mathrm{L}}\) bò \(]\) \\
& \(\left.{ }_{\text {in }}\right]\)
\end{tabular} bě:-rè- \(\varnothing\) dé wôy
remain-Pfv1a-3SgSbj if all
'(they said): if he insisted on loving Yasama (girl's name), ...'
[2005.2a.01; this required achieving a nearly impossible feat]
b. hàyà [[[Érr \({ }^{n}\) má:] lì-ló-m̀ \(\quad{ }_{W}\) Wò \(]\)
well [[[3Sg QuotSbj] Rdp-go-Ipfv \(\left.{ }^{\text {Lin }}\right]\)
bě:-rè- \(\varnothing\) dè
remain-Pfv1a-3SgSbj if
'(another girl said to her): well, if she insisted on going (to get a giraffe's tail), ...' [2005.2a.02]

The phrasing [ \(X^{\mathrm{L}}\) Wò] bě:-rè- \(\varnothing\) dè can also be used with X a manner adverb such as ánày \({ }^{n}\) 'thus, like that'. See (485c) in §15.1.9, above.

A perfective version of the clausal complement with wò, followed by bě:-rè- \(\varnothing\) dé wǒy, is (533).
(533) [jà \(W^{n a ̂: ~ i ́ n j i ́ r i ́=~ n i ́] ~[[\varepsilon ́ r ~}{ }^{n} \varepsilon\) mâ:] póndé:-rè \({ }^{\mathrm{L}}{ }_{W}\) ò \(]\) [crowd get.up=and.SS] [[3Sg Dat] head.for-Pfv1a \(\left.{ }^{\mathrm{L}} \mathrm{in}\right]\) bě:-rغ̀- \(\varnothing\) dé wôy
remain- \(\mathrm{Pfv} 1 \mathrm{a}-3 \mathrm{SgSbj}\) if all
'if it were the case that a crowd got up and headed for it (=lion)' [2005.2b.05]

\section*{16 Conditional constructions}

\subsection*{16.1 Hypothetical conditional with de 'if'}

The clause-final 'if' particle is de. When it is clause-final, its tone is carried over from the preceding morpheme. When followed by another particle it is H-toned dé, see \(\S 16.1 .1\) below.

In typical hypothetical conditionals specifying a causal relationship between two temporally bounded events, the antecedent has an inflected perfective verb followed by \(d e\), and the consequent is in the imperfective (534a-b).

b. \(\varepsilon r^{n} \dot{\varepsilon}\) yè-rí- \(\varnothing ~ d e ́, ~ n \varepsilon ́-\grave{m}-d o ́-y ̀ .: ~\)

3 Sg come-PfvNeg-3SgSbj if, eat-Ipfv-Neg-1P1Sbj
'If he/she doesn't come (=hasn't come), we won't eat.'

\subsection*{16.1.1 Extensions of de (dé wôy, dé wò wôy)}

The most common extended variant of de 'if' is dé wôy. wôy is elsewhere a universal quantifier 'all' (§6.8.1). In rapid speech, an optional vocalic assimilation to dó wôy is common, but intermediate pronunciations also occur and I have normalized transcriptions to dé wôy. An extended form dé wò-wôy is also used. In all of these combinations, dé has H-tone regardless of the final tone of the preceding word.
dé wôy (or variant) is associated with more emphatic contexts ('as soon as ...', 'unless \(\ldots\)..., etc.); for 'unless ...' see \(\S 16.4\), below. However, in recordings one observes dé wôy also in contexts that are not particularly emphatic, more or less interchangeably with simple de.

One distinctive function of dé wôy (or variant) is marking the right edge of an antecedent clause, and especially the right edge of a multi-clausal antecedent. (This is a regional pattern.) The construction can be schematized as [ \(\left[\mathrm{S}_{1}\right.\) de, ( \(\mathrm{S}_{2}\) de, ) ... \(\mathrm{S}_{\mathrm{n}}\) dé wôy], \(\mathrm{S}_{\mathrm{n}+1}\) ], where \(\mathrm{S}_{\mathrm{n}}\) is the last in a string of two or more antecedent clauses, and is itself directly followed by the consequent clause \(\left(\mathrm{S}_{\mathrm{n}+1}\right)\).
\begin{tabular}{|c|c|c|c|c|}
\hline \(\left[\left[j i r r^{n}\right.\right.\) Ěy \({ }^{n}\) & \multicolumn{2}{|c|}{cé:lé:-rı̀- \(\varnothing\)} & \multicolumn{2}{|c|}{dè],} \\
\hline [[rainy.season & \multicolumn{4}{|c|}{be.good-Pfv1a-3SgSbj if],} \\
\hline [bíré & \(\grave{\varepsilon} S \hat{S}^{n} \rightarrow\) & bìré-tú-Ẁ & dé & wôy]], \\
\hline work(n) & very & work-Pfv1b-2SgSbj & if & all]], \\
\hline yû: & \(b a ̆ y^{n} \rightarrow\) & béré-Ẁ & & \\
\hline millet & much & get.Ipfv-2SgSbj & & \\
\hline
\end{tabular}
'If the rainy season is good (=rain is abundant), and you-Sg work hard, you-Sg will get a lot of millet.'
16.1.2 -Ẁ kù dè (perfective) and -Ẁ dè (pseudoconditional)

A construction with a verb form ending in \(-\hat{W}\), followed by definite kù and (apparent) 'if' particle de in L-toned form dè, is used in narrative as an alternative to a regular perfective verb form. The \(-\grave{W}\) is perhaps to be identified as the inanimate perfective participial suffix, but the construction is difficult to parse. If the subject is pronominal, it is expressed as a preparticipial pronominal. This syntactic feature distinguishes the current construction from a main-clause perfective verb form where \(-\grave{W}\) functions as the 3 Sg subject marker (§10.2.1.2).
(536) [ònjǒ-m kù yà]
[younger.brother-AnSg Def too]

' \(\ldots\) the younger brother for his part replied, to his elder brother: ...' [2005.2a.08]
3Refl á expresses coindexation of the subject of the (headless) nonsubject relative to the subject of the following clause (not shown), see \(\S 18.2\).3.

An informant indicated that the consruction in \(-\underset{\text { Wh }}{ }\) kù dè can also be expanded as \(-\grave{W}\) kù mà dè.

A similar construction with \(-\grave{W}\) and dè but without the definite kù is also attested. The clause in \(-\grave{W}\) dè denotes an eventuality that precedes the one described in the following clause, with no necessary causal relationship. All examples in my data involve future time. I label this the pseudoconditional. A similar construction occurs in some other Dogon languages, including Togo Kan.
a. \(\varepsilon^{n} r^{n} \dot{\varepsilon}=n i ̀ ~ i ́ ~ s u ́ y o ́-W ̀ ~ d e ̀, ~\)
\(3 \mathrm{Sg}=\mathrm{Acc} \quad 1 \mathrm{SgSbj}\) hit.Pfv-Ppl.Inan if,
[bóró-m̀-dó- \(\varnothing\) dé] yí-ỳ.:
[result-Ipfv-Neg-3SgSbj if] see.Ipfv-1P1Sbj
'I will hit him and we'll see whether nothing happens (as a result).'
[bóró-m̀̀-dó- \(\varnothing\) is used in such boasting utterances]
b. \(\varepsilon^{n} r^{n} \quad g u^{n}-\grave{W}^{n} \quad d e ̀\),

3Sg say.Pfv-Ppl.Inan if,
[í súyó-Ẁ dè,
[1SgObj hit.Pfv-Ppl.Inan if,
ற̀gú-rù í làrú-m̀] bà
here 1 SgObj chase.away-Ipfv.3SgSbj] Quot
'He said he will hit me, and (that) he will run me out of here.'
c. [í yě-Ẁ dè] [nčy \({ }^{n}\) bírá]
[1SgSbj come.Pfv-Ppl.Inan if] [meal cook.Imprt]
'Cook-2Sg the meal (only) when I have come back!'
d. [něy \({ }^{n}\) î: bìré-Ẁ dè] ná
[meal 1PlSbj cook.Pfv-Ppl.Inan if] eat.Ipfv
'We'll cook the meal, then (you) eat!'
For a superficially similar construction with -m̀ dè (and stative \(-\grave{W}\) dè), see §15.2.1.2.
Historical interpretation of the origin of -Ẁ kù dè and \(-\grave{W}\) dè should consider the probably related Nanga subordinators -sغ̀ gù-ndè and related forms. One possibility is that Ben Tey kù and Nanga gù- derive from the 'say' verb (Ben Tey gǔy \({ }^{n}\)-, Nanga kíy'́-, and many Dogon cognates), although the erratic \(g / k\) correspondences make exact equation difficult.

\subsection*{16.2 Alternative 'if' particles}

\subsection*{16.2.1 kálà 'even if ...'}
kálà 'even' may replace de 'if', resulting in an 'even if ...' antecedent clause. Here the consequent is not contingent on the antecedent.
(538) [yû: yá só-ẃ kálà], ní-m̀-dó- \(\varnothing\)
[millet Exist have-3SgSbj even], give-Ipfv-Neg-3SgSbj
'Even if he/she has some millet, he/she won't give (it).'

\subsection*{16.2.2 tán 'as soon as ...’}

The particle tán, borrowed from the Fulfulde particle 'only', is another alternative to de 'if'. It suggests that only the (delayed) instantiation of the eventuality denoted by the antecedent clause is holding up the instantiation of the eventuality denoted by the consequent clause.
núw \({ }^{n} \grave{j} y^{n}\) yè-Ẁ tán, sú: \(r^{n a ̀}\)
now come.Pfv- \(2 \mathrm{SgSbj} \quad\) if, rest.Imprt
'When you-Sg have come, take a rest!'
A translation 'as soon as ...' would also work. For another way to express 'as soon as ...', see (492f) in §15.1.10.

\subsection*{16.3 Willy-nilly and disjunctive antecedents ('whether X or Y...')}
\(c \hat{\varepsilon} W\) (likely borrowed from Jamsay \(c \hat{\varepsilon} W\) 'all’) occurs in reduplicated or iterated form (cí-céw, \(c \varepsilon ́ W-c \varepsilon ́ W)\) in the sense 'equally' (§12.2.3). As simple \(c \hat{\varepsilon} W\) it occurs at the right edge of a biclausal conditional antecedent of the type '(whether) \(\mathrm{S}_{1}\) or not- \(\mathrm{S}_{1}\) ', or any other combination of two component clauses that are (more or less) truth-conditionally antagonistic.
```

[[ú mâ:] \varepsilońrì-m=\varnothing }->\quad\mathrm{ ह̀rì-m=dá-Ø ĉ\W],
[[2Sg Dat] sweet-Inan=it.is sweet-Inan=it.is.not-3SgSbj equally]
bír\varepsiloń bíré-Ẁ
work(n) work.Ipfv-2SgSbj
'(Regardless of) whether it pleases or doesn't please you-Sg (= like it or not), you-Sg
will work.'

```

When the two disjuncts are expressed by verbs (not e.g. by adjectival predicates), with the subject held constant, the first verb may take inanimate participial form, as in (541).
a. [ár \({ }^{n}\) à-m kày] ló=ń
[man-AnSg Top] go=and.SS
[nàwná- \(\grave{W}^{n}\) jà \({ }^{n}\) à̀-r \({ }^{n} 1\) - \(\left.\varnothing ~ c \hat{\varepsilon} W\right]\)
[be.ruined.Pfv-Ppl.Inan be.ruined-PfvNeg-3SgSbj equally]
'As for a man, when he goes, whether he will be ruined or he will not be ruined, (he goes to earn money)' [2005.1b.06]
b. \([y i ̌-m ~ j \check{\varepsilon}-\grave{W} \rightarrow \quad j \check{\varepsilon}:-r i ́-\varnothing \quad c \hat{\varepsilon} W]\)
[child-AnSg bring.Pfv-Ppl.Inan bring-PfvNeg-3SgSbj equally]
[yá góy \({ }^{n}\) á- \(\hat{W}^{n}\) ]
[Exist wait.Stat-3SgSbj]
whether the child (eventually) brings (something) or does not bring (anything), he (=father) waits for (something)' [2005.1b.06]

\section*{16.4 'Unless' antecedent}

An 'unless' antecedent, i.e. one that specifies a necessary as well as sufficient (positive) condition, can be expressed (542) with a simple negative clause ending in dé wôy (§16.1.1).
[mòbílì j̀gú-rù làwà-rí- \(\varnothing\) dé wôy] tíwé-ỳ.: [vehicle here pass-PfvNeg-3SgSbj if all] die.Ipfv-1PlSbj
'Unless a vehicle comes by here, we'll die.'

\subsection*{16.5 Counterfactual conditional}

In counterfactuals, both the antecedent and the consequent are expressed with past perfect predicates involving an inflected form of the L-toned past variant \(=b \dot{\varepsilon}-\) (§10.4.1). The unmarked verbal categories are as follows: for the antecedent, past stative (positive) or perfective negative; for the consequent, past unsuffixed imperfective (positive) or past imperfective negative.
\[
\begin{equation*}
\text { a. òmô: } y \check{\varepsilon}-\grave{W}=b \grave{\varepsilon}-\varnothing \quad \text { dè, } \tag{543}
\end{equation*}
\]
morning come-Stat \(=\) Past- 3 SgSbj if,
bóyrì béré-m̀ =bè- \(\varnothing\)
porridge get-Ipfv=Past-3SgSbj
'If he/she had come in the morning, he/she would have gotten some porridge.'
b. béré \(j \hat{\text { ê:-rí }=b \varepsilon ́-\bar{y} \text { dè, }}\)
stick bring-PfvNeg=Past-1SgSbj if,
àwă-m í kúwó-m̀ \(=b \grave{\varepsilon}-\varnothing\)
snake-AnSg 1 SgObj eat-Ipfv=Past- 3 SgSbj
'If I hadn't brought my stick, the snake would have eaten me.'
c. [ú \({ }^{\mathrm{HL}}\) áyà:] mìr \(^{n} \dot{\varepsilon}-\grave{W}=b \grave{\varepsilon}-\grave{W} \quad d e ̀\),
[2SgPoss \({ }^{H L}\) medication] swallow-Stat \(=\) Past-2SgSbj if, sèlc̀̀-rí ká-m̀-dó \(=b \check{\text { č- }}\) -
be.healthy-PfvNeg do-Ipfv-Neg=Past-2SgSbj
'If you-Sg had taken your medicine, you wouldn't have gotten sick.'
The antecedent clause may also be based on a nominal or adjectival predicate (544).

'If you-Sg were not my (younger same-sex) sibling, I'd kill you.'

\section*{17 Complement and purposive clauses}

\subsection*{17.1 Quotative complement}

\subsection*{17.1.1 'Say that ...' with 'say' verb (gǔy \({ }^{n-}\)-)'}

The inflectable quotative verb is \(g \check{y y}^{n}{ }^{n}\)-, variant \(g\) Ǐy \(^{n}\). . In the most common construction with inflected 'say' verb, this verb follows the quotation. There is also a construction for a preposed 'say' verb (§17.1.1.5).

Two major features of quotative clauses are a) the presence of a clause-initial quotativesubject phrase (NP or pronoun followed by QuotSbj má: ~ \({ }^{\text {L }}\) mà̀:), and b) the neutralization of pronominal-subject marking in the verb to 3 Sg , except that the verb does agree with a 3 Pl (regular or logophoric) subject.

The quotative clitic wa ( \(\$ 17.1 .2\), below) is omitted when the full 'say' verb follows the quotative complement.

\subsection*{17.1.1.1 Quotative subject (QuotSbj) má: ~ \({ }^{\text {L mà: }}\)}

The majority of quoted clauses begin with quotative-subject phrase, consisting of either an independent pronoun or a nonpronominal NP, followed by quotative subject particle má: ~ mà:: For examples, see (547) in the following section. The quotative-subject phrase gives the addressee an "early warning" that the clause in question is quoted. It is present in most quotative clauses, elicited or textual. However, it is optionally omitted after a nonpronominal NP subject, especially a nonhuman one like 'rainy season' in (545).
[kú-đá: jirn \({ }^{n} y^{n}\) èsú bû:- \({ }^{n}\) g gìy \({ }^{n}\)-bó
[there.DiscDef rainy.season good be-3SgSbj] say.Pfv-3PISbj
'They said that the rainy season is good there.'
On the other hand, occasionally a topical clause-initial NP or PP that is not a subject is followed by má: ~ mà:: In (546), the clause-initial constituent followed by QuotSbj ma: is a spatial PP rather than the subject. Perhaps this is favored by the low referentiality of the subject bǒl 'rain', cf. §11.1.4.


Quotative subject má: may be followed by NP-final discourse participles such as topic kày, see the end of C's first turn in (660) in the sample text.

The quotative subject particle usually acquires its tone by spreading from the final tone of the preceding word, so it appears as má: after an H-tone and as \({ }^{\text {L }}\) mà: after an L-tone. However, if the constituent in question is a possessed NP, the possessed NP constitutes a tonosyntactic island and its final L-tone does not spread to má:. See (548b) in the following section. This suggests that the quotative subject particle is lexically H -toned (má:)

The L-toned form \({ }^{\mathrm{L}}\) mà: is homophonous to \({ }^{\mathrm{L}}\) mà: as L-toned form of dative postposition mâ: ( \(\S 8.3 .1\) ). Both instances of \({ }^{\mathrm{L}}\) mà: occur after NPs ending in an L-tone.

\subsection*{17.1.1.2 Complement with regular AN-marked verb}

The quotative complement clause often has one or another of the regular AN (aspectnegation) forms of the verb. However, pronominal-suffix marking is restricted in these complements. The usual \(1 \mathrm{Sg}, 1 \mathrm{Pl}, 2 \mathrm{Sg}\), and 2 Pl suffixes are omitted, merging with 3 Sg . There is, however, special marking of 3PI subjects.

In (547), the verb inside the quoted clause ends in imperfective -m, which is used when the subject of the quoted clause is other than 3Pl. This -m is identical to the 3 Sg suffix in the inflected paradigm of the unsuffixed imperfective, but in morphological contexts where pronominal-subject distinctions are neutralized \(-\grave{m}\) is generalized to other pronominal categories (except 3Pl). Generealization of -malso occurs in the past unsuffixed imperfective, preceding the conjugated past clitic \(=b \dot{\varepsilon}\) - (or variant). In these neutralizing contexts I gloss -m̀ simply as imperfective (Ipfv). A pronominal subject is expressed by a quotativesubject phrase (547b). Examples ( \(547 \mathrm{a}, \mathrm{c}\) ) have logophoric subject because the subject of the quoted clause is coindexed with the quoted speaker (§18.2.1). 3Pl subject agreement on the final verb is exemplified in ( \(547 \mathrm{~g}-\mathrm{h}\) ).
```

a. [[á má:] yì-yé-m̀] gìyn-\varnothing
[[LogoSg QuotSbj] Rdp-come-Ipfv] say.Pfv-3SgSbj
'Hex said that he ex is coming.'
b. [[ú má:] yì-yé-m̀] gìy ${ }^{n}-\varnothing$
[[2Sg QuotSbj] Rdp-come-Ipfv] say.Pfv-3SgSbj
'He/She said that you-Sg are coming.'
c. sěydù [[á má:] júwó-m̀-dó-Ø]
Seydou [[LogoSg QuotSbj] know-Ipfv-Neg-3SgSbj]
gìy ${ }^{n}-\varnothing$
say.Pfv-3SgSbj
'Seydou ${ }_{x}$ said that he ${ }_{x}$ doesn't know.'

```
d. í [[ह́rn \({ }^{n}\) má:] yì-yé-m̀̀]

1SgSbj [[LogoSg QuotSbj] Rdp-come-Ipfv]
gì-ní-y
say-PfvNeg-1SgSbj
'I didn't say that he/she is coming.'
e. [[sěydù \({ }^{\mathrm{L}}\) mà: \(]\) yì-yé-m̀ \(] \quad\) gì \(y^{n}-y^{n}\)
[Seydou \({ }^{\text {L }}\) QuotSbj] Rdp-come-Ipfv] say.Pfv- 1 SgSbj
'I said that Seydou is coming.'
f. [[û: \({ }^{\mathrm{L}}\) mà: \(] \quad\) yì-yé-m̀ \(] \quad\) gìy \({ }^{n}-\varnothing\)
[[2Pl \({ }^{\text {L }}\) QuotSbj] Rdp-come-Ipfv] say.Pfv-3SgSbj
'He/She said that you-Pl are coming.'
g. yéngù [[â: \(\quad{ }^{\mathrm{L}}\) mà:] yì-yé-yè]
yesterday [[LogoPl \({ }^{\text {L }}\) QuotSbj] Rdp-come.Ipfv-3P1Sbj]
\(g u^{n}-y \grave{\varepsilon}=b\)-à:
say.Ipfv-3P1Sbj=Past-3PlSbj
'Yesterday they \({ }_{x}\) were saying that they \(y_{x}\) were coming (= would come).'
h. [[â: \({ }^{\text {L mà:] Wóngóró wárá-yè] }}\)
[[LogoPl \({ }^{\mathrm{L}}\) QuotSbj] farming do.farm.work.Ipfv-3P1Sbj]
gìy \({ }^{n}\)-bó
say.Pfv-3P1Sbj
'They \({ }_{x}\) say they \({ }_{x}\) will farm.'
The suffixally marked progressive may also be quoted (548). The 3 Sg form :-rà- \(W\) generalizes (548a-b,d), except for 3 Pl subject (548c).
(548)
a. [[á má:] wóngóró wàrá:-rà-w]
[[LogoSg QuotSbj] farming do.farm.work-Prog-3SgSbj]
gìy \({ }^{n}-\varnothing\)
say.Pfv-3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) says he \(\mathrm{e}_{\mathrm{x}}\) is farming.'
b. [[[á HL yî-m] má:] Wóngóró wàrá:-rà-w] gìyñ \(-\varnothing\)
[[[LogoP \({ }^{\text {HL }}\) child] QuotSbj]
' \(\mathrm{He}_{\mathrm{x}}\) says that his \(\mathrm{s}_{\mathrm{x}}\) child is farming.'
c. [[â: \({ }^{\mathrm{L}}\) mà:] wóngóró wàrá:-rà-ẁ-bó
[[LogoPl \({ }^{\text {L }}\) QuotSbj] farming do.farm.work-Prog-Stat-3P1Sbj
gìyn-bó
say.Pfv-3PlSbj
'They \({ }_{x}\) said they \({ }_{x}\) are farming.'
d. [î: \({ }^{\mathrm{L}}\) mà:] Wóngóró wàrá:-rà-W
[1Pl \({ }^{\mathrm{L}}\) QuotSbj] farming do.farm.work-Prog-3SgSbj
gìy \({ }^{n}-\varnothing\)
say.Pfv-1SgSbj
'He/She said we are farming.'
The examples in (549a-b) have perfective verbs (549a-b). The perfective takes a (pronominally) unsuffixed form (except for 3 Pl ), identical in form to the zero 3 Sg inflected form, but here transcribed as suffixless. The verb may have the unsuffixed perfective stem
(L-toned version of the bare stem) as in (549a). Perfective-1a suffix :-rè- is also possible ( \(549 \mathrm{~b}-\mathrm{c}\) ), as are perfective-1b suffix -tî- ( 549 d ) and other perfective-system markers such as recent perfect \(-j \hat{\varepsilon}\) - \((549 \mathrm{e})\). Agreement with 3 Pl subject is observed in (549c-e).
a. [ 1 î: \({ }^{\mathrm{L}}\) mà: \(]\) á sùỳ̀ \(]\) gìy \({ }^{n}-\varnothing\)
[1Pl \({ }^{\text {L }}\) QuotSbj] LogoSgObj hit.Pfv] say.Pfv-3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) said that we hit him x .'
b. [[̂̂: \({ }^{\mathrm{L}}\) mà: \(\left.] \quad y \check{:}:-r \grave{\varepsilon}\right] \quad\) gì \({ }^{n}-\varnothing\)
[[2Pl \({ }^{\text {L QuotSbj] come-Pfv1a] say.Pfv-3SgSbj }}\)
'He/She said that you-Pl had come.'
c. [[yì-tě: \({ }^{\mathrm{L}}\) mà:] y ̌:-r-à:] \(\quad\) gì \(y^{n}-\varnothing\)
[[child-Pl \({ }^{\text {L }}\) QuotSbj] come-Pfv1a-3P1Sbj] say.Pfv-3SgSbj
'He/She said that the children had come.'

[[LogoPl \({ }^{\mathrm{L}}\) QuotSbj] sheep-AnSg slaughter-Pfv1b-3PlSbj]
gìy \({ }^{n}\)-bó
say.Pfv-3P1Sbj
'They \({ }_{x}\) said that they \({ }_{x}\) have slaughtered a sheep.'
e. [[â: \({ }^{\mathrm{L}}\) mà:] \(\left.n \varepsilon ̌ y^{n} \quad n \varepsilon ́-j-a ̂:\right] \quad g 1^{n}-y \varepsilon ̀\)
[[LogoPl \({ }^{\text {L }}\) QuotSbj] meal eat-RecPf-3PlSbj] say.Ipfv-3P1Sbj
'They \({ }_{x}\) will say that they \({ }_{x}\) have already eaten.'
The alternative form of the unsuffixed perfective, with lexical tone on the verb stem and with \(3 \mathrm{Sg}-\grave{W}\) (generalized in quotatives to all first and second persons) and \(3 \mathrm{Pl}-m a ̀ ~(\S 10.2 .1 .2\) ), is illustrated in (550).
(550)
a. [[í
má:]
wóngóró
wàrá-ẁ]
[[1SgSbj QuotSbj] farming farm.Pfv-Ppl.Inan]
gìy \({ }^{n}-\varnothing\)
say.Pfv-3SgSbj
'He/She said that I did farming.'
b. [[î: mà:] wóngóró wàrá-ẁ]
[[1PlSbj QuotSbj] farming farm.Pfv-Ppl.Inan]
gìy \({ }^{n}-\varnothing\)
say.Pfv-3SgSbj
'He/She said that we did farming.'
c. [[yì-tě: \({ }^{\mathrm{L}}\) mà:] Wóngóró wàrá-mà]
[[child-Pl \({ }^{\text {L }}\) QuotSbj] farming farm.Pfv-Ppl.AnPl]
gìy \({ }^{n}-\varnothing\)
say.Pfv-3SgSbj
'He/She said that the children did farming.' (< yì-tě:, cf. §3.7.4.4)
(551a-b) are perfective negative.
(551)
```

a. [ú má:] wóngóró wàrà-rí- $\varnothing$
[2Sg QuotSbj] farming do.farm.work-PfvNeg-3SgSbj
gìy ${ }^{n}-\varnothing$
say.Pfv-3SgSbj
'He/She said that you-Sg didn't do farm work.'

```
b. [â: \({ }^{\mathrm{L}}\) mà:] Wóngóró wàrà-r-á
[LogoPlSbj \({ }^{\text {L }}\) QuotSbj] farming do.farm.work-PfvNeg-3P1Sbj
gìy \({ }^{n}-\varnothing\)
say.Pfv-3SgSbj
'He \(\mathrm{e}_{\mathrm{x}}\) said that they \(\mathrm{x}_{\mathrm{xy}}\) didn't do farm work.'
(552a-b) are imperfective negative.
a. [î: \({ }^{\mathrm{L}}\) mà:] yògó-m̀-dó- \(\varnothing \quad\) gìyn \({ }^{n}-\varnothing\)
[1P1 \({ }^{\mathrm{L}}\) QuotSbj] run-Ipfv-Neg-3SgSbj say.Pfv-3SgSbj
'He/she said that we won't run.'

[LogoPl \({ }^{\text {L }}\) QuotSbj] run-Ipfv-Neg-3PlSbj say.Pfv-3PlSbj
'They \({ }_{x}\) said that they \({ }_{x}\) won't run.'

\subsection*{17.1.1.3 Complement with stative verb or quasi-verb}

As expected, stative predicates follow the same patterns as aspectually-marked verbs in quotative complements, including merger of all 1 st/2nd person pronominals into the 3 Sg suffix on the verb. (553a-b) illustrates this with the 'have' quasi-verb, using 1 Pl and (logophoric) 3 Pl subjects.
(553)
a. [î: \({ }^{\mathrm{L}}\) mà:] wògòtórò yá só-ẃ gìyn n \(\varnothing\).
[1Pl QuotSbj] cart Exist have-3SgSbj say.Pfv-3SgSbj
'He/She said that we have a cart.'
b. [â: \({ }^{\mathrm{L}}\) mà:] wògòtórò yá \(s\) - : \(^{n}\) gìy \({ }^{n}\)-bò
[LogoPl \({ }^{\text {L }}\) QuotSbj] cart Exist have-3PlSbj say.Pfv-3PlSbj
'They said \({ }_{x}\) that they \({ }_{x}\) have a cart.'

\subsection*{17.1.1.4 Complement with adjectival predicate}

The quotative clauses in (554) contain adjectival predicates. The adjective takes the same form it has before bû- 'be' (§11.4.1), except that with 3Pl subject we get suffix -bó (not -yè) on the adjective (554c).
a. [[tórò kù \({ }^{\mathrm{L}}\) mà:] gǎw] gìy \({ }^{n}-y^{n}\)
[[mountain Def \({ }^{\mathrm{L}}\) QuotSbj] tall] say.Pfv- 1 SgSbj
'I said that the mountain is high.'
b. [úrò \({ }^{\mathrm{L}}\) mà:] èsú gìyn-bò
[house \({ }^{\text {L }}\) QuotSbj] good say.Pfv-3P1Sbj
'They said that the house is good.'
c. [nǔ: kù \({ }^{\mathrm{L}}\) mà:] mòsú-bó gìyn -bò
[person.Pl Def \({ }^{\text {L QuotSbj] bad-3P1Sbj say.Pfv.3P1Sbj }}\)
'They said that those people are bad.'
d. [yěy má:] Érúm gìy \({ }^{n}\)-bò
[honey QuotSbj] sweet say.Pfv-3P1Sbj
'They said that the honey is sweet.'
e. [yěy (má:)] g̀rùm = dá gìy \({ }^{n}\)-bò
[honey (QuotSbj)] sweet=StatNeg say.Pfv-3P1Sbj
'They said that the honey is not sweet.'

\subsection*{17.1.1.5 Construction with preposed quotative verb}

When the quotative verb precedes the quotation, a special construction is used. It is attested only for reported past speech events ('X said, ...'). The 'say' verb takes what appears to be the inanimate perfective participle form \(g u^{n}-\grave{W}^{n}\), and is followed by de (presumably the 'if' particle, but here without any modal force). If the subject of 'say' is pronominal, it is expressed as a preparticipial independent pronoun, as in (555a-c). The quoted clause follows after a prosodic break. The quotative subject construction with particle ma: is absent. Clausefinal quotative clitic wa is possible but uncommon. As usual, except for 3 Pl as in (555b), the verb has 3 Sg subject form for all subjects.
(555)

> a. \(\varepsilon^{n}{ }^{n} \dot{\varepsilon} \quad g u^{n}-\grave{W}^{n} d e ̀\),
> 3Sg say.Pfv-Ppl.Inan if,
> [û: \({ }^{\text {L }}\) mà:] ǹ̀jé ká: \({ }^{n}\)-rà-ẁ \(\quad\) mà \(\rightarrow\) wà
> [2Sg \({ }^{\text {L }}\) QuotSbj] what? do-Ipfv-3SgSbj Q Quot
> 'He/She said (= asked), "hey what are you-Pl doing?",
b. \(\hat{i}\) :
\(g u^{n}-\grave{W}^{n}\)
dè,
1PlSbj say.Pfv-Ppl.Inan if,
[yì-ť̌: \(\quad y \varepsilon ̌:-r-a ̀:]\)
[child-P1 come-Pfv1a-3P1Sbj]
'We said, the children have come.'
c. bû: \(\quad g u^{n}-\grave{W}^{n} \quad d e ̀, \ldots\)

3PlSbj say.Pfv-Ppl.Inan if,
'They said, ...'

\subsection*{17.1.2 Quotative clitic wa ( \(\rightarrow\) ba after nasal)}

The quotative (Quot) clitic occurs at the end of a quotation. It may be repeated in a multiclause quotation, at clause boundaries and similar junctures (for example, after a quoted vocative). In extended quotations, particularly of back-and-forth conversations between two or more parties, wa replaces the more cumbersome inflectable 'say' verb. wa may occur at the end of a quotation introduced by \(g u^{n}-\grave{W}^{n}\) dè. However, wa is not used at the end of a quotation that is directly followed by an inflected form of gǔyn- 'say' (i.e., wa and gǔyn- may not occur adjacent to each other (unless they belong to different quotative levels).

The clitic is usually pronounced ba after a nasal, e.g. after 3 Sg imperfective -m. As this suggests, the clitic is phonologically tightly bound to the quotation. It also adopts the final tone of the preceding word. In several Dogon languages, the clause-final quotative particle is identical in form to the quotative-subject particle. This is not the case in BenT, which has quotative subject particle ma: and (clause-final) quotative particle wa.

Although the clitic representation = wa would be phonologically appropriate in BenT, I write the morpheme as a separate word on grounds of typographic clarity, and in conformity with my practice in transcribing this particle in Jamsay and other Dogon languages.
a. \([n \grave{j} j \hat{e}:=\varnothing \quad\) mà \(\rightarrow] \quad\) wà
[what?=it.is Q] Quot
، "What is it?," he/she said (=asked)."
b. \(\quad[[[a ́\)
\begin{tabular}{lll} 
[[[á & \({ }^{\mathrm{HL}}\) bô:] & \({ }^{\mathrm{L}}\) mà:] \\
[[[LogoSgPoss & \({ }^{\mathrm{HL}}\) father \(]\) & \({ }^{\mathrm{L}}\) QuotSbj]
\end{tabular}
wóngóró wárá-m̀] bà farming do.farm.work-Ipfv.3SgSbj] Quot ' \(\mathrm{He}_{\mathrm{x}}\) says that his \({ }_{\mathrm{x}}\) father is farming.'

The quotative clitic, unlike the 'say' verb, has a "hearsay" pragmatic quality. It is typically used when the attributed speaker is third person. Under most circumstances, first person attributed speaker (self-quotation, "I said that ...") has no need of a hearsay evidential. Use of a hearsay evidential in cases with second person attributed speaker ("you said that ...") is also pragmatically shaky in noninterrogative contexts, but it is common in requests for clarification or confirmation ( \(X\) wà 'did you say X?'). The \#? notation in (557) indicates that wa is disallowed except in special cases.

b. ú \(\quad g u^{n}-\grave{W}^{n}\) dè, \([\varepsilon ́ r n ́ \varepsilon(-n i ̀) ~ s u ́ y o ́-W ̀ ~ d e ̀, ~\)

2 SgSbj say.Pfv-Ppl.Inan if, \([3 \mathrm{SgObj}\) hit.Ipfv- 2 SgSbj if,
ŋ̀gú-rù \(\varepsilon^{r} r^{n} \dot{\varepsilon} \quad\) làrú-ẁ \(] \quad\) (\#?wà)
here 1 SgObj chase.away.Ipfv-2SgSbj] (\#?say)
'You-Sg said you will hit him, and (that) you will run him out of here.'

\subsection*{17.1.3 Jussive complement}

Jussive complements are reported imperatives or hortatives.

\subsection*{17.1.3.1 Quoted imperative with suffix \(-y\) ~ \(-\dot{y}\)}

In this construction, the imperative verb in the original utterance is replaced by the quoted imperative (QuotImprt) form with suffix \(-\dot{y} \sim-y ̀\) ( \(\S 10.5 .7\) ), invariant for original addressee number. Singular-addressee imperative (558a) and plural-addressee imperative (558c) both correspond to the invariant quoted imperative \(y \grave{\varepsilon}-y^{\prime}\) in jussives ( \(558 \mathrm{~b}, \mathrm{~d}-\mathrm{e}\) ). If the original addressee is referred to by a pronoun, it appears in a clause-initial quotative-subject phrase (558b,d-e).
a. yá
come.Imprt
'Come-2Sg!'
b. [[í má ]
[[1Sg QuotSbj] come-QuotImprt]
gì \(y^{n}-\varnothing\)
'He/She told me to come.'
c. yá-nì
come-Imprt.Pl
‘Come-2P1!'
d. [[î: \({ }^{\mathrm{L}}\) mà:] yè-ý] gìyn-bó
[[1Pl \({ }^{\text {L }}\) QuotSbj] come-QuotImprt] say.Pfv-3PlSbj
'They told us to come.'
e. [[bû: \({ }^{\mathrm{L}}\) mà:] yغ̀-ý] gìy \({ }^{n}-\varnothing\)
[[3Pl \({ }^{\text {L }}\) QuotSbj] come-QuotImprt] say.Pfv-3P1Sbj
'He/She told them to come.'

A direct object NP, if present, has its usual form. For example, 'sheep' does not change from the imperative (559a) to the jussive (reported imperative) (559b).
a. pèrě-m séwná
sheep-AnSg slaughter.Imprt
'Slaughter-2Sg the sheep-Sg!'
b. [[ú má:] pèrě-m \(\left\langle\varepsilon w^{n} \dot{\varepsilon}-y ́\right]\)
[[2Sg QuotSbj] sheep-AnSg slaughter-QuotImprt]
gìy \({ }^{n}-y ̀\)
say.Pfv-1SgSbj
'I told you-Sg to slaughter the sheep-Sg.'

Negative counterparts are in (560). The form of the verb in the jussive clause (the original imperative) is hortative negative, with suffix complex \(-r \varepsilon\) é-y. Again, the original distinction between singular and plural addressee in the imperative verb is not carried over into the verb of the jussive.
a. yé-ré
come-ImprtNeg
'Don't-2Sg come!'
b. [[í má:] yè-rè-ý] gìyn- \(\varnothing\)
[1Sg Emph] come-ImprtNeg-QuotImprt] say.Pfv-3SgSbj
'He/She told me not to come.'
c. yé-ré-nì
come-ImprtNeg-2PlSbj
'Don't-2Pl come!'
d. [[̂̂:: \({ }^{\mathrm{L}}\) mà: \(]\) yè-ré-ý] gìy \({ }^{n}\)-bó
[1Pl \({ }^{\text {L }}\) QuotSbj] come-ImprtNeg-QuotImprt] say.Pfv-3PlSbj
'They told us not to come.'
e. pèrě-m \(\quad s \varepsilon ́ W^{n} \dot{\varepsilon}-r \varepsilon ́\)
sheep-AnSg slaughter-ImprtNeg
'Saughter-2Sg the sheep-Sg!'
f. [[ú má:] pèrě-m séwnéré-y]
[[2Sg QuotSbj] sheep-AnSg slaughter-ImprtNeg-QuotImprt]
gì \(y^{n}-y^{n}\)
say.Pfv-1SgSbj
'I told you-Sg not to slaughter the sheep-Sg.'

By adding purposive postposition gǐn or variant (§8.5.1) to a quoted imperative, we get a kind of purposive clause; see §17.5.1.3.

Some greeting formulae appear to contain quoted imperatives (§19.5).

\subsection*{17.1.3.2 Embedded hortative (-ḿ, -mây")}

The hortative in -ḿn (for two referents) or \(-m a \hat{y} y^{n}\) (for three or more) can be embedded without change in a jussive. The subjects are expressed as quotative-subject phrases, with pronominal categories adjusted to the current speech event. Thus (561b) and (561c) are distinct jussives, but both derive from the same original utterance ("Let's go to Sevare!"). (561b) has 1Pl subject (since the current speaker is included), while (561c) has a logophoric plural subject.
```

a. lò-mây ${ }^{n}$
gì $y^{n}-\varnothing$
go-Hort.Pl say.Pfv-3SgSbj
'He/She said, "let's-3+ go!.",

```
b. \(\varepsilon r^{n} \tilde{\varepsilon} \quad g \check{u}^{n}-\grave{W}^{n} d e ̀\),

3SgSbj say.Pfv-Ppl.Inan if,
[ 1 î: \({ }^{\mathrm{L}}\) mà: \(]\) sèwá:rà lò-ḿn] gìy \({ }^{n}-\varnothing\)
[[1P1 \({ }^{\text {L }}\) QuotSbj] Sevare go-Hort.Du] say.Pfv-3SgSbj
'He said (to me), let's (=he and I) go to Sevare.'
(=‘He suggested that we [=he and I] go to Sevare.')
c. á:mádù [sěydù \({ }^{\mathrm{L}}\) mà:] érné \(\quad g \hat{u}^{n}-W^{n} \quad\) dè,

Amadou [Seydou \({ }^{\mathrm{L}}\) Dat] 3SgSbj say.Pfv-Ppl.Inan if,
[ [â: \({ }^{\mathrm{L}}\) mà: \(]\) sèwá:rà lò-ḿ] bá
[[LogoPl \({ }^{\text {L }}\) QuotSbj] Sevare go-Hort.Du] Quot
'Amadou said to Seydou, "let's go to Sevare!".'
(=‘A suggested to S that the two of them go to Sevare.')
See also the discussion of 1 Sg subject hortatives (§10.5.6, above).

\subsection*{17.2 Factive (indicative) complements}

\subsection*{17.2.1 'Know that ...' complement clause}

The complement of jùwó- 'know' takes regular AN suffixes, but instead of a pronominalsubject suffix on its verb, a pronominal subject (if present) is expressed by an independent pronoun preceding the verb, followed by quotative subject particle ma: (§17.1.1.1). In other words, the complement is treated as a quotation.
[ \(\left[1\right.\) í má:] sèllè̀ \(\left.{ }^{\mathrm{L}}-r i ́-\varnothing\right] \quad\) júwó-m̀
[[1Sg QuotSbj] be.healthy-Neg-3SgSbj] know.Ipfv-3SgSbj
'He/She knows that I am ill.'
The negative 'not know (that ...)' is expressed with an embedded question, i.e. 'not know (whether ...)', even when it is now common knowledge that the embedded proposition is true.
\begin{tabular}{|c|c|c|c|}
\hline \(\left[\left[\varepsilon r^{n} \dot{\varepsilon}\right.\right.\) & \({ }^{\text {HL }}\) yá:jì:] & páyá-tí-yà & mâ:] \\
\hline [3SgPoss & \({ }^{\text {HL }}\) marriage] & tie-Pfv \(1 \mathrm{~b}-3 \mathrm{PlSbj}\) & Q] \\
\hline
\end{tabular}
\(j u ́ w o ́-m ̀-d o ́=b \varepsilon ́-\bar{y}\)
know-Ipfv-Neg=Past-1 Sg
'I didn't know that he had gotten married.' (lit., "..., did they contract his marriage?")
17.2.2 'The fact that ...' with final determiner

A regular main clause may be followed by an apparent definite kú or kù to constitute a factive clause that can be glossed '(the fact) that ...'. The H-toned form is preferred in careful speech. It can be parsed either as the definite morpheme (which has H-toned form before postpositions), or as inanimate near-distant demonstrative kú (§4.4.1). The latter would be most appropriate for a proposition that was recently established in the discourse.
\begin{tabular}{lllll}
{\([b o ̀ l u ́ l\)} & yé-m̀-dô:- \(\varnothing\) & kú \(]\) & {\([\) ǹjêe: \(=\varnothing\)} & kày \(\left.{ }^{n}\right]\) \\
{\([\) rain } & come-Ipfv-Neg-Ppl.Inan & Def/NearDist.Inan \(]\) & {\([\) what?=it.is } & do.Pfv] \\
'The fact that rain isn't coming, what caused it?' & &
\end{tabular}

For an example with L-toned definite kù as complement to 'be afraid (that)', see (585b) in §17.3.10

In (565), in addition to the the final determiner, the verb of the factive clause is possessed (by its logical subject). Without the \(\{H L\}\) possessed-noun overlay, the verb form would be àwú-m̀-dó- \(\varnothing\) 'it does not accept'.
\begin{tabular}{|c|c|c|}
\hline [á & \({ }^{\text {HL }}\) áwù-m̀-dò- \(\varnothing\) & kú] \\
\hline [3ReflSgPoss & \({ }^{\mathrm{HL}}\) accept-Ipfv-Neg-3SgSbj & Def/NearDist.Inan] \\
\hline íyé & \(g o{ }^{\mathrm{L}}-r i ́-\varnothing\) & \\
\hline today & go.out-PfvNeg-3SgSbj & \\
\hline
\end{tabular}
'This (fact that) it (=Beni) doesn't accept (being pushed around), it didn't come out (=just begin) today' [2005.2b.04]

\subsection*{17.2.3 'See (find, hear) that ...'}

An ordinary main clause may function as the complement of a verb of recognition of a state of affairs. The common verb of this type is témbí- 'find (a situation, or someone in a situation)' (566a), but y̌̌- 'see' is also used in this construction when the subject infers that an eventuality has taken place from circumstantial evidence (566b).
a. [pèrě-m bèré-jé-Ẁ] tèmbì-ỳ
[sheep get-RecPf-2SgSbj] find.Pfv-1SgSbj
'I found that you-Sg had gotten a sheep.'
b. [bòlú yè-rí- Ø] yǐ-jદ́-ỳ
[rain(n) come-PfvNeg-3SgSbj] see-RecPf-1 SgSbj
'I saw (e.g. from observing the dry ground) that rain had not come.'

In examples of the type ' X see \([E]\) ', where \(X\) observed the event \(E\) (rather than recognizing from visual or other signs that X had taken place), we get a complement with imperfective suffix -m̀ on the verb, followed by clitic =bày, see (594a-c) in §15.2.1.2.
'Hear (that ...)' in the hearsay sense has a different syntax because it involves reported speech by a third party. It therefore has an initial quotative-subject phrase (particle má:).
\begin{tabular}{|c|c|c|c|}
\hline [[ú má:] & kòsǒy & kósú-jê:] & nù-ỳ \\
\hline [[2Sg QuotSbj] & harvest( n ) & harvest-RecPf] & hear.Pfv-1SgSbj \\
\hline 'I heard that yo & g have alr & y harvested.' & \\
\hline
\end{tabular}

\subsection*{17.3 Verbal noun (and other nominal) complements}

For the morphology of the basic verbal noun in \(-\hat{1}: \sim-\bar{y}\), see \(\S 4.2 .2\).

\subsection*{17.3.1 Structure of verbal noun phrase}

If a simple noun (without a quantifier or determiner) functioning as direct object or as a similar nonsubject complement (such as the locational with 'go') directly precedes the verbal noun, it takes L-toned compound-initial form.
a. bù:rù \({ }^{\mathrm{L}}-\left[n \check{\varepsilon}-\mathrm{y}^{n}\right]\)
bread \({ }^{\text {L }}\)-[eat-VblN]
'eating bread' (bú:rù)
b. bè:nì \({ }^{\mathrm{L}}-[l \check{o}-\mathrm{y}]\)

Beni-[go-VblN]
'going to Beni (village)' (bé:nì)
This construction can be extended to cases where the compound initial represents a core NP consisting of a noun and an adjective. In (569), the entire core NP, which elsewhere takes the form bù:rù \({ }^{L}{ }^{j e ́} w^{n} \dot{e}-W^{n}\) 'black bread', functions (in L-toned form) as the initial.
```

[bù::\grave{̀-[jèW}\mp@subsup{W}{}{n}\grave{e}-\mp@subsup{W}{}{n}]\mp@subsup{]}{}{L}-[n\varepsiloň-y}\mp@subsup{}{}{n}
[bread-[black-Inan]] [-[eat-VblN]
'eating black bread'

```

NPs containing a postnominal quantifier (including cardinal numerals) and/or a determiner cannot be reduced to compound-initial form. These NPs are construed morphosyntactically as possessors, and therefore control possessed-noun \(\{\mathrm{HL}\}\) overlay on the "possessed" verbal noun.
a. [Èlèy \({ }^{\mathrm{L}}\) ग̀gú] \({ }^{\mathrm{HL}}\) kúw-ì: [peanut \({ }^{\text {L }}\) Prox.Inan] \({ }^{\text {HL }}\) eat-VblN 'eating these peanuts' (kùw-î:)

If the direct object is separated from the verbal noun by an intervening constituent, such as a pronoun, there is no "possession" or compounding, and the verbal noun appears with its normal \{LHL\} tone overlay (571).
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{ú
2 Sg} & ènjé-m̀ & \(\left[\varepsilon\right.\) ér \({ }^{n} \dot{\varepsilon}\) & mâ:] & \(n i ̌-y^{n}\), \\
\hline & chicken-AnSg & [3Sg & Dat] & give-VblN, \\
\hline \multicolumn{5}{|l|}{já: \(W^{n}\) but \(\quad\) but \(\varnothing\)} \\
\hline \multicolumn{5}{|l|}{appropriate be-3SgSbj} \\
\hline 'For y & -Sg to give hir & her & , i & (=proper) \\
\hline
\end{tabular}

A personal pronoun functioning logically as direct object may, as in main clauses, have either its unmarked independent form or it may occur with accusative clitic \(=\grave{n} \sim=n i ̀\). In either
case, it behaves as a possessor. The verbal noun therefore appears with possessed-noun tone overlay, either \(\{\mathrm{HL}\}\) after an H-tone or tone-dropped after an L-tone.
\(\begin{array}{ll}\text { a. } & { }^{\text {HL }} \text { jíy-ì: } \\ & 1 \text { SgPoss }\end{array}{ }^{\mathrm{HL}}\) kill-Vb
1SgPoss \({ }^{\text {HL }}\) kill-VblN
'killing me' (lit. "my killing’)
b. í=ǹ \(\quad\) L \(j i y-i ̀:\)

1SgObj \({ }^{\mathrm{L}}\) kill-VblN
'killing me'
c. \(\hat{i}: \quad \quad \quad\) jìy-ì:

1PlPoss
\({ }^{\text {L }}\) kill-VblN
'killing us'

\subsection*{17.3.2 'Begin' (túmdí-) plus nominal complement}
'Begin' takes a verbal noun or other nominal as complement. In (573a), the complement is a cognate nominal. In (573b-c) it is a verbal noun, with a simple noun representing the direct object functioning as L-toned compound initial. In (573d) has a similar structure, but with a pronominal object. The latter can be expressed as simple \(i ́\) as in this example, or with accusative clitic as \(\hat{i}=n i ̀\).
a. nùwñ́
túmdí-tí-yà
song begin-Pfv1b-3P1Sbj
'They have begun to sing.'
b. nù \(W^{n}{ }^{\mathrm{L}}{ }^{\mathrm{L}}-\left[n u ̀ W^{n}-\hat{1}:\right] \quad\) túmdí-tí-yà
song \(^{\mathrm{L}}-[\) sing-VblN] begin-Pfv1b-3PlSbj
[= (a)]
c. nà \(W^{n}\) à: \(^{\mathrm{L}}-[k u ̀ w-\hat{1}:] \quad\) túmdí-yè
meat \({ }^{\mathrm{L}}\)-[eat-VblN] begin.Ipfv-3PlSbj
'They will begin to eat the meat.'
d. [í sùy-î:] túmdí-tî:- \(\varnothing\)
[1SgPoss hit-VblN] begin-Pfv1b-3SgSbj
'He/She began to hit me.'
17.3.3 'Prevent' (gà:lí-) plus nominal complement

The complement is expressed as a verbal noun (or other nominal). The logical subject of the complement clause functions as a direct object of 'prevent'.
a. \(1=n \grave{i} \quad\) bìrè \({ }^{\mathrm{L}}-[b \grave{r}-\hat{1}:] \quad\) gà:lì- \(\varnothing\)
\(1 \mathrm{Sg}=\) Acc \(\quad \operatorname{work}(\mathrm{n})^{\mathrm{L}}\)-[work-VblN] prevent.Pfv-3 SgSbj
'He/She prevented me from working.'
b. \(1=n i ̀ \quad\) ènjı̀ \({ }^{\mathrm{L}}\)-[tìy-î:] gà:lì \(\varnothing\)
\(1 \mathrm{Sg}=\mathrm{Acc}\) chicken \({ }^{\mathrm{L}}\)-[sell-VblN] prevent.Pfv-3SgSbj
'He/She prevented me from selling the chicken.'

\subsection*{17.3.4 'Consent' (àwú-) plus nominal complement}

The verb àwú- 'receive, accept (sth given)', which is usually heard as ǎw, is used in the sense 'consent, give permission' with a verbal noun complement. If there is no overt subject of the complement clause, it is understood that the main-clause subject has consented to perform the action (' X agreed to come') (575a). If there is a disjoint subject, it appears overtly (' X agreed that \(Y\) could go') (575b).
a. \(y \varepsilon ̌-\bar{y}\)
ǎw- \(j \hat{\varepsilon}:-\varnothing\)
come-VblN receive-RecPf-3SgSbj
'He/She has consented to come.'
b. [bàmàkó í lǒ-ỳ] ǎw-jê:- \(\varnothing\)
[Bamako 1 SgSbj go-VblN] receive-RecPf-3SgSbj
'He/She has agreed (=consented) to my going to Bamako.'

\subsection*{17.3.5 Obligational 'must' (wá:jíbù) plus nominal subject}

The noun wá:jíbù or wá:jìbì 'obligation' (from Arabic via Fulfulde) is the predicate. Presumably an 'it is' clitic is attached to it ('it is an obligation'), but the clitic is inaudible since it is an inanimate noun already ending in an L-tone. The NP denoting the necessary action functions as subject NP with '(it is) an obligation' as predicate. This NP may be a verbal noun or other nominal. When the verbal-noun construction is used, the subject (agent) of the verbal-noun clause may be expressed either as a possessor of the verbal noun (576a), or as a dative preceding wá: \(j i ́ b u ̀=\varnothing(576 b)\).
a. [bàmàkó
\(\varepsilon \varepsilon^{n}{ }^{n} \dot{\varepsilon}\)
\(\left.{ }^{\mathrm{HL}} 1 o ́-y ̀\right]\)
wá:jíbù = \(\varnothing\)
[Bamako 3SgPoss \({ }^{\mathrm{HL}}\) go-VblN] obligation=it.is
'He/She must go to Bamako.' (lit. "His/Her going to Bamako (is) an obligation")
\(\begin{array}{llll}\text { b. [ìgú-rù } & \text { wàs-î:] } & { }^{\mathrm{L}+} \text { mă: } & \text { wá:jíbù }=\varnothing \\ {[\text { here }} & \text { remain-VblN] } & { }^{\mathrm{L}+} 1 \mathrm{Sg} . \text { Dat } & \text { obligation }=\text { it it }\end{array}\)
[here remain- VblN ] \({ }^{\mathrm{L}+}\) 1Sg.Dat obligation=it.is
'I must remain here.' (lit. "Remaining here is an obligation for me")
An alternative construction seen in a text puts wá:jìbù \(=\varnothing\) (or wá:jìbì \(=\varnothing\) ) in front, followed by an imperfective clause. The flavor of the construction can be captured by the phrasing 'definitely, we will ...'. In (577), the imperfective clause has a verb with -m̀ since it is in a quotation (§17.1.1.2).
wá:jìbì \(=\varnothing \quad[b \varepsilon ́ r u ̀-m \quad n i ́-m ̀] \quad\) bà
obligation=it.is [goat-AnSg give-Ipfv] Quot
'She was obligated to give them a goat, they said.' [2005.2a.06]

\subsection*{17.3.6 'Dare’ (dà:rí-, sú:ś́-) plus nominal complement}
dà:rí- has a range of senses including 'crave' and 'miss (nostalgically)'. It can be used something like a 'dare to, have the audacity to' verb, though perhaps a better gloss would be 'can't help (doing)'. It takes a verbal noun or other nominal complement.
```

yž-ỳ dà:rú-m̀
come-VblN dare-Ipfv.3SgSbj
' $\mathrm{He} /$ She dares to come.'

```

Another verb sú:sغ́-, from Fulfulde, is also used with a similar syntax.
(579) [ŋ̀gúu-rù è è-y-î:] sú:sદ́-m̀
[here sit-MP-VblN] dare-Ipfv.3SgSbj
' \(\mathrm{He} /\) She dares to sit here.'

\subsection*{17.3.7 'Cease', 'desist' (dùwó-) plus nominal complement}

The verb dùwó- 'leave, abandon' may be used to indicate the abandonment of an activity. In this context it takes a verbal noun or similar nominal complement.
```

d\grave{rògù-[nǒ-y}\mp@subsup{\}{}{n}] dùwó-tî:- }
drug}\mp@subsup{}{}{L}-[drink-VblN] leave-Pfv1b-3SgSbj
'She has given up drinking (alcohol).'

```

For ‘finish (VP-ing) with dùmdú- ~ dùmdí- ‘finish’, see §17.4.1, below.

\subsection*{17.3.8 'Want' (jòró-, má:-yí-~ mª́:-yí-, negative mì-rá-) plus complement}

The verb jòró- 'want' is morphologically regular as far as its paradigm goes. The common positive form is the unsuffixed imperfective (3Sg jóró-m̀ 'he/she wants', 3Pl jóró-yè 'they want'). However, there is a suppletive negative 'not want' verb, see below.

When the complement clause has the same subject, we get a verbal noun or similar nominal construction.
a. bè:nì-[lŏ-ỳ] jóró-ỳ
Beni \({ }^{\text {L }}\)-go-VblN want.Ipfv- 1 SgSbj
'I want (= would like) to go to Beni.' (bé:ni)
b. núwn \({ }^{n}{ }^{\text {y }}{ }^{n}\) bù:rù-[nč-ỳn] jóŕ́-ẁ mà now bread \({ }^{\text {L}}\)-eat-VblN want.Ipfv-2SgSbj Q 'Do you-Sg want to eat some bread now?' (bú:rù)
c. \(\left[\begin{array}{ll}i ́=i ̀ n & j \grave{n}-\hat{1}:] \quad \text { jòrò }-\varnothing\end{array}\right.\)
[1SgObj kill-VblN] want.Pfv-3SgSbj
' \(\mathrm{He} /\) She wanted (= tried) to kill me.'
With different subjects, the verb of the complement takes imperfective form and ends with -m, for all person-number categories of subject. The -m could be taken as the inanimate imperfective participial suffix -m, or else as a 3 Sg subject imperfective suffix -m̀ that has generalized in this construction to all subject categories. A pronominal subject in the complement is expressed as a preparticipial pronoun.
 'He wants me to go with him.'
b. [nằy bû: ló-m̀̀] jóró-ỳ [1Sg.with 3PISbj go.Ipfv-Ppl.Inan] want.Ipfv-1SgSbj 'I want them to go with me.'

There is a less common near-synonym má:-yí- or mbá:-yí- 'wish for, want (sth)', which is used with NP (not clausal) complement. There is a related noun m̀bâ: 'what one wants'.

The negative 'not want' verb is mì-rá- (the expected \#jóró-m-dó- is ungrammatical) The segmentation is not transparent, but I will put the morpheme break in on the assumption that native speakers can discern a similarity to stative negative clitic = rá-. Nasalization-Spreading does not apply to the rhotic, suggesting an internal reconstruction *m̀ mì-rá-, which is supported by e.g. Bankan Tey m̀mbì-rá-
mì-rá- occurs in the same syntactic constructions as positive \(j \grave{r} r\) 万́, as just described: for same subject a verbal noun complement (583a), for different subject an imperfective participial complement (583b).
a. \(n \check{z}-\grave{y}^{n} \quad\) mì-rá-ỳ eat-VblN want-Neg-1SgSbj
'I don't want to eat'.
b. [bû: ló-m̀ ] mì-rá-ỳ.:
[3PlSbj go.Ipfv-Ppl.Inan] want-Neg-1PlSbj
'We don't want them to go.' [2005.1b.06]
(or: 'We don't like the fact that they go.')
Related nouns are jórì 'wanting' (cognate to j̀̀ró-) and \(m^{b}\) â: '(one’s) wish, what one wants'.

\subsection*{17.3.9 'Forget' (ir' \(\varepsilon\)-), 'remember' (ilì-rí-) plus nominal complement}

Both 'forget' and 'remember' take verbal noun or similar nominal complements to express a same subject complement ('forget/remember to VP'). 'Remember' is the suffixally derived reversive of 'forget' (§9.1), and may therefore be accompanied by 'go out' (584c).
a. \(y \check{c}-\grave{y} \quad\) ì \(\check{\varepsilon}:-r \grave{\varepsilon}-\varnothing\)
come-VblN forget-Pfv1a-3SgSbj
'He/She forgot to come.'
b. tà: \(:^{n \mathrm{~L}}-\left[d \check{a}^{n}-\grave{y}^{n}\right] \quad\) ìré-ŕ́
door \({ }^{\text {L }}\) [lock.up-VblN] forget-ImprtNeg
'Don't-2Sg forget to lock the door.' (tâ:n, dán-)
c. tà: \({ }^{n \mathrm{~L}}-\left[d \check{a}^{n}-\grave{y}^{n}\right] \quad\) ìlì-rí \(\quad\) gǒ:-rè-y
door \({ }^{\text {L-[lock.up-VblN] remember go.out-Pfv1a-1SgSbj }}\)
'I remembered to lock the door.'

\subsection*{17.3.10 'Be afraid to' (ú:-yí-) plus complement}

The verb ú:-yí- 'fear, be afraid' (cf. archaic causative ú:-rú- 'frighten, scare', noun ùwǎw 'fear') takes a verbal-noun complement when the lower clause has the same subject ('he is afraid to swim'), as in (585a). If the lower clause has a different subject ('he is afraid that a snake will bit him'), we get a factive complement ending in a definite morpheme (585b), cf. §17.2.2.
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{\multirow[t]{2}{*}{a. tàmòrj̀ \({ }^{L}-[k u ̀ w-i ̂:]\) date \({ }^{\mathrm{L}}\)-[eat-VblN]}} & ù-?úwá-ẁ \\
\hline & & Rdp-fear-Stat.3SgSbj \\
\hline
\end{tabular}
'He/She is afraid to eat dates.'

\([3 \mathrm{Sg}=\mathrm{Acc} \quad 2 \mathrm{SgSbj}\) hit-Ipfv Def] Rdp-fear-Stat. 3 SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) is afraid that you will hit \(\mathrm{him}_{\mathrm{x}} / \mathrm{him}_{\mathrm{y}}\).'

\subsection*{17.4 Complements with simple bare stem (direct chains)}

I include these examples here since we usually think of them as involving a matrix-clause verb like 'finish' and a complement clause or VP. However, in BenT they are direct chains (serial construction), see §16.1. That is, the nonfinal VP ("complement clause") ends in a verb in the simple bare stem, with lexical tones.

In BenT (more so than in e.g. Jamsay), one could seriously consider the possibility of reanalysing the apparent perfective-system AN "suffixes"-ŝô- (resultative), -jê- (recent perfect), and -tâ- (Experiential perfect) as separate auxiliary verbs. Since the preceding main verb occurs in its bare stem, if these AN morphemes are taken to be separate verbs, the main verb would have to be reanalysed as a nonfinal member of a direct chain. See §10.1.1 and (for pronouns that can intervene between main verb and auxiliary) §14.1.7.

\subsection*{17.4.1 'Finish' (dùmdú-) plus nominal complement or chained verb}
dùmdú- \(\sim\) dùmdí- is a transitive verb that can take a nominal complement (586a), or it can be directly chained to the nonfinal VP (586b).
a. kòsǒy dùmdí-tî:- \(\varnothing\)
harvest(n) finish-Pfv1b-3SgSbj
'He/She finished harvesting (= finished the harvest).'
b. [yû: kósí] dùmdítî̀: \(\varnothing\)
[millet harvest(v)] finish-Pfv1b-3SgSbj
'He/She finished harvesting the millet.'
The explicitly biclausal 'finish VP-ing' construction gets some competition from recent perfect \(-j \hat{\varepsilon}\) - and its negation \(-j \grave{\varepsilon}-r i ́-\). For example, 'finish eating' was expressed with the verb dùmdú- by my assistant in contexts like the imperative (587a). However, in contexts favoring a perfect reading, he avoided dùmdú- and used the recent perfect (587b).
a. j \(\check{:} \quad\) dǔmd-à
eat finish-Imprt
'Finish-Sg up eating!'
b. dôm jěy \({ }^{n} \quad\) né-jè-rí-ỳ
up.to.now meal eat-RecPf-PfvNeg-1SgSbj
'I haven't finished eating.'

\subsection*{17.4.2 'Help' (bàrí-) plus chained verb}

As in other nearby Dogon languages, there is a verb with a range of senses including 'add (to), increase' and 'help, assist'. The BenT verb is bàrí-. The semantic range suggests that 'help' is conceptualized as 'reinforce (effort), add (oneself, to a collective effort)'. See discussion of (487) in §15.1.9.

An example of the 'help' sense with a clausal complement is (588). The individual being helped appears as a direct object with optional accusative clitic. The complement verb appears in its simple bare stem, as in chains, and may be preceded by other complements.
\begin{tabular}{|c|c|c|c|}
\hline íl \(=\) nì & [wóngóró & wàrá] & bàrú-ı̀̀ \\
\hline \(1 \mathrm{Sg}=\mathrm{Acc}\) & [farming & do.farm.work] & help-Ipfv. 3 SgSbj \\
\hline /S & help me & farmi & \\
\hline
\end{tabular}

In BenT the semantic range of bàrí- does not extend to 'gather', which is expressed by bàrá-. The 'add, increase; help' and 'gather' verbs are homophonous in Jamsay and Toro Tegu.

\subsection*{17.4.3 Capability}

\subsection*{17.4.3.1 'Be able to, can' (bèré- 'get') plus chained verb}

The 'be able to' verb is bèré-, which is also a simple transitive verb 'get, obtain'. In the 'be able to' construction it occurs in imperfective form (positive or negative), so it is heard as \(\{\mathrm{H}\}\)-toned béré-. The logical subject of the complement clause is coindexed with the subject of 'be able to' and is not overtly expressed in the complement, whose verb is in bare stem form as in chains. Direct objects or other complements have the same form as in main clauses.
\(\begin{array}{ll}\text { a. ínjírí } & \text { béré-m̀-dó- } \varnothing \\ \text { get.up } & \text { can-Ipfv-Neg- } 3 \mathrm{SgSbj} \\ & \text { 'He/She cannot get up.' }\end{array}\)
b. [tê: nó] béré-yè
[tea drink] can.Ipfv-3P1Sbj
'They can drink tea.'
A more literal construal 'acquire the means to VP' (cf. English be in a position to \(V P\) ) is possible in some cases. See bé:nì bèré èw-yè- \(\varnothing\) 'Beni was able to be settled' in B's second turn in (676) in the sample text, where bèré is nonfinal in a verb chain.

\subsection*{17.4.3.2 gòrnó- 'be capable of'}
gə̀rńz- is less common but more explicitly denotes capability. It often has a nonpropositional NP complement. Contextual glosses are 'be capable of, be up to (a challenging task)' and 'be stronger than, be able to defeat (sb)', see (53) in §4.3.2 and (195) in §9.3.

\subsection*{17.5 Purposive, causal, and locative clauses}

\subsection*{17.5.1 Purposive clauses}

\subsection*{17.5.1.1 Verb with purposive suffix (-rá: ~ -ré:)}

In one construction, purposive suffix -rá: \(\sim\)-ré: is added to an L-toned form of the relevant verb stem. This construction is common when the purposive is subordinated to a verb of motion.
a. [pèré tìyè \({ }^{\mathrm{L}}\)-rá:] yè-ỳ
sheep.Pl sell \({ }^{\mathrm{L}}\)-Purp] come.Pfv- 1 SgSbj
'I came in order to sell sheep-Pl.'

'He has come back to his village to die.'
c. [Wóngóró wàrà \({ }^{\mathrm{L}}-\mathrm{r}\) : :] ló:-rè- \(\varnothing\)
[farming farm \({ }^{\text {L }}\)-Purp] \({ }^{\text {L }}\), go-Pfv1a- 3 SgSbj
'He/She went to do some farming.'
d. [bú:rù \(\grave{\text { è }}{ }^{\mathrm{L}}\)-rá:] ló-ỳ
[bread buy \({ }^{\text {L }}\)-Purp] go.Ipfv- 1 SgSbj
'I will go and buy some bread.'
e. [yû: lùgùrù \({ }^{\mathrm{L}}-\) rá:] lò-bó
[millet look.for \({ }^{\text {L }}\)-Purp] go.Pfv-3PlSbj
'They went to look for (=try to get) some millet.'
See also (138) in §7.1.2 and ( 469 g ) in \(\S 14.4\).
The three \(C v y^{n}\) verbs fuse their \(y^{n}\) with the suffixal \(r\) to produce \(l\), hence apparent allomorph -lá:. For the phonology see §3.5.4.4. The two clean examples are gǎy \({ }^{n}\) - 'put' (hence \(g a^{\mathrm{L}}\)-lá:) and \(k\) áy \(^{n}\) - 'do' (kà \({ }^{\mathrm{L}}\)-lá:). My assistant produced gùn-lá: from gǔy \({ }^{n}\) - 'say', in this instance preserving nasalization (on the vowel), but indicated that \(g \grave{u}^{n \mathrm{~L}}\)-lá: is rare.

In (591), the higher clause (here a same-subject clause) and the embedded purposive clause share the same verb ('arrive'). This is a stylistic narrative device that I try to capture with 'finally' in the free translation.
(591) tórúu-m [Ér \({ }^{n} \dot{\varepsilon}\) gànjí-m̀ nغ̀]
warthog-AnSg [3SgSbj dig-Ipfv now]...

(repetitions)
\(d \grave{\mathrm{~L}}\)-rá: \(\quad\) ह́r \(r^{n} \dot{\varepsilon} \quad d \check{o}=n i ̀, \ldots\)
arrive \({ }^{\mathrm{L}}\) - Pu urp 3 SgSbj arrive \(=\mathbf{a n d} . \mathbf{S S}, \ldots\)
'The warthog kept digging. When he had finally come close (to Hyena), ...' [2005.2a.07]

This explicitly purposive construction gets some competition from various types of VP chain, where the purposive element is implied rather than stated. This is common when the intended eventuality actually took place. In (592), the same-subject clitic \(=n i ́\) is used.
[gô:: gǎy \(\left.{ }^{n}=n i ́\right] \quad\) kì-kầ: jìyè-bó
[fire put=and.SS] Rdp-grasshopper kill.Pfv-3P1Sbj
'They set a fire and killed (= in order to kill) the grasshoppers.'

\subsection*{17.5.1.2 Quasi-purposive clause in manner-adverbial form (dày \({ }^{n}\) )}

In this construction, the purposive clause takes the form of a manner adverbial (§15.2.3), cf. English in such a way that ... in vaguely purposive sense. The manner adverbial may precede or follow the main clause. Given the forward-looking temporal context, the verb of the manner adverbial will normally appear as an inanimate imperfective participle (-m̀ after imperfective stem).
\begin{tabular}{|c|c|c|c|c|}
\hline [wògòtórò & \multicolumn{2}{|l|}{cé:lé-ỳ.} & \multirow[t]{2}{*}{dè]} & \\
\hline [cart & fix.Ipf & & & \\
\hline [dày \({ }^{\text {L }}\) & wá:lè & 1̂: & & ló-m̀ \\
\hline [manner \({ }^{\text {L }}\) & Walo & 1P1Sbj & & go.Ip \\
\hline
\end{tabular}
'We will fix the (donkey) cart, so that we may go to Walo (village).'

\subsection*{17.5.1.3 Clauses ending in purposive postposition ǧ̌n}

Here purposive postposition gǐn, gìní, gǔn, or gùní 'for; because of' (§8.5.1) follows a verbal noun or other nominal denoting an action. The construction is uncommon in purposive contexts in my data. In (594), the verb of the complement is in quoted imperative form, as in jussives (i.e., reported imperatives, §17.1.3.1). This makes sense in that the postposition is related to \(g u ̌ y^{n}\) 'say', and specifically to \(g u ̀ y^{n}=n i ́ \sim g i ̀ y^{n}=n i ́\) (same-subject past sequential subordinator, §15.1.8).
\begin{tabular}{|c|c|c|c|c|}
\hline \({ }^{\text {L+HL }}\) năr \({ }^{n}\) à & & ற̀gú-rù & ílin & \\
\hline 1 SgPoss. \({ }^{\text {H }}\) & \({ }^{\text {L }}\) mother & here & \(1 \mathrm{Sg}=\mathrm{Acc}\) & \\
\hline [ \(\mathrm{n} \hat{\mathrm{i}}\) : & kówó-y & & gin] & \(t i=\varnothing\) \\
\hline [water & draw.wat & QuotImprt & for] & send.Pfv-3SgSbj \\
\hline
\end{tabular}

Final gǐn is more common in causal ('because') clauses, see §17.5.4.2, below.

\subsection*{17.5.1.4 Purposive clause with [...jè \(\left.y^{\mathrm{HL}} n \hat{n}:\right]^{\mathrm{L}}\) wò}

This construction occurred once in a text. For [ \(\left.X^{\mathrm{HL}} n \hat{1}:\right]{ }^{\mathrm{L}} W o ̀\) as a causal PP , see §8.5.3. \(j \varepsilon ̀ y\) appears to be a purposive morpheme in (595). Without jèy, [ \(\left.X^{\mathrm{HL}}{ }_{n \hat{\imath}}:\right]^{\mathrm{L}}\) Wò is attested but uncommon in causal ('because') clauses, see \(\S 17.5 .2 .4\) below.
dǎnnà-m \({ }^{\dagger}\),
hunter-AnSg,
[[á
[[3ReflSgPoss dǎnnà túmdú-ǹ
hunt(n) begin.Ipfv-3Sgs
'A hunter, himself, in order to make his sauce (=meal) good-tasting, he begins a hunt.' [2005.1b.01]

\subsection*{17.5.2 Causal ('because’) clause}

The clauses under this rubric are translatable as 'because ...'. Unlike purposives, which are prospective in time reference, causal clauses are retrospective. They express a causal relationship between an eventuality that already exists (or has already occurred) and a second eventuality.

\subsection*{17.5.2.1 Clause-initial sábù 'because’}

This clause-initial particle, from Arabic sabab- 'reason, cause', is now common (in various form)s in all languages of the zone. The following clause has regular main-clause form.
\begin{tabular}{|c|c|c|}
\hline [ì̀ \({ }^{\text {á-dá: }}\) & yû: & ìrè- \(\left.\mathrm{I}_{1}-\varnothing\right]\), \\
\hline [around.there & millet & ripen-PfvNeg-3SgSbj], \\
\hline sábù & bòlú & ógú-rú \(\quad\) yè-ríl \(\varnothing\) \\
\hline because & rain(n) & fast-Inch come-PfvNeg-3SgSbj \\
\hline
\end{tabular}
'The millet hasn't ripened (well) there, because the rain did not come early (=the rain came late).'

\subsection*{17.5.2.2 Causal clause with gin and variants}

In §17.5.1.3 above, purposive-causal postposition gǐn, gìní, gǔn, or gùní (§8.5.1) occurs in a purposive clause. It is more common as a causal complement ('because'). The clause takes normal main-clause form.
\begin{tabular}{lllll}
{\([[k \hat{k}:\)} & â: & yá & Só-ẃ \(]\) & gì-ní \(]\) \\
[[hunger & ReflPISbj & Exist & have-3SgSbj] & for \(]\) \\
isế: & gò-bó & & \\
village & go.out.Pfv-3PISbj & \\
'They have left the village because they are/were hungry ("had hunger").'
\end{tabular}

The origin of gǐn as a same-subject anterior subordinated form of gǔy \({ }^{n} \sim\) gǐ: ' 'say' is not opaque to native speakers, and explains its ability to function in either purposive (prospective) or causal (retrospective) contexts. 'Say' here means 'say to oneself, think', and focuses on the agent's motivations rather than on objective causal relationships among events. Therefore (597) could be literally glossed 'they have left the village, saying (= thinking, on the grounds that) they-Logophoric were hungry'. Another clause-linking form, gì= náy \({ }^{n}\), more transparently connected to 'say', is also attested (598).
```

bé:nì yé-m̀-dó-\varnothing,
Beni come-Ipfv-Neg-3SgSbj,
[ťॅW sò-ló-\varnothing] gì= náy }\mp@subsup{}{}{n
[kin have-Neg-3SgSbj] say }\mp@subsup{}{}{\mathbf{L}}=\mathrm{ =then.SS

```
    'She doesn't come to Beni, since (= on the grounds that she has no kin (there).'
\(g \grave{=}=\) ná \(y^{n}\) also occurs in a negative purposive clause in (601) in §17.5.3.

\subsection*{17.5.2.3 Clauses with final causal déngèy}

Clause-final déngèy (with possessed \(\{H L\}\) overlay) is more or less interchangeable with clause-initial sábù.
\begin{tabular}{llll} 
[ற̀gá-dá: & yû: & ìrè-rí- \(\varnothing\) ], & \\
[around.there & millet & ripen-PfvNeg-3SgSbj], & \\
bòlú & ógú-rú & yè-rí- \(\varnothing\) & déngèy \\
rain(n) & fast-Inch & come-PfvNeg-3SgSbj & because
\end{tabular}
'The millet hasn't ripened (well) there, because the rain did not come early (=the rain came late).'

\subsection*{17.5.2.4 Causal clause with final \({ }^{\mathrm{HL}}\) nî:] \({ }^{\mathrm{L}}\) Wò}

The complex PP [ \(\left.X^{\mathrm{HL}} n \hat{1}:\right]^{\mathrm{L}}\) Wò 'because of X , on account of X ', which generally refers to human motivation or reasoning rather than to physical causality ( \(\S 8.5 .3\) ), is occasionally used with a clausal complement (600). For purposive \(\left[\ldots j \varepsilon ̀ y{ }^{\mathrm{HL}}{ }_{n \hat{i}} \cdot{ }^{\text {: }}{ }^{\mathrm{L}}\right.\) wò, see \(\S\) 17.5.1.4 above.
(600) né: \(\quad n \grave{e}:-W^{n}-\hat{1}: \quad\) j̀ gó- \(\varnothing\),
now eat-Caus-VblN not.be-3SgSbj
[[[kj̀: \({ }^{n^{\mathrm{L}}}\) bû: nàygù-rú-m̀ ] j̀gó- \(\left.\varnothing\right]\)

\({ }^{H L}\) cause] \({ }^{\mathrm{L}}\) in
'Now there is no feeding (= tending the animals), because there is nothing that they (= animals) (can) damage.' [2005.1a.15]
17.5.3 Negative purposive (= prohibitive) clause

In (601), an imperfective main clause is followed by a negative purposive clause ending in gì \(=\) ná \(y^{n}\) 'say and'.
(601) tèmbè-kû: bíré-ỳ.:
roof replaster.Ipfv-1P1Sbj

water go.down-MP-ImprtNeg-QuotImprt \(\mathbf{s a y}^{\mathbf{L}}=\) then.SS
'We will replaster the roof (with mud), so that (rain) water doesn't come down (=leak).'

\section*{18 Anaphora}

\subsection*{18.1 Reflexive and emphatic pronouns}

The third person anaphoric pronouns are á \((\mathrm{Sg})\) and \(\hat{a}:(\mathrm{Pl})\). When used as reflexives (§18.2.1), or to coindex relative-clauses subjects with the higher subject (§18.2.3), I use 3ReflSg" and "3ReflPl" in interlinears. When used as logophorics (§18.2.2), I use "LogoSg" and "LogoPl."

\subsection*{18.1.1 Third-person reflexive pronouns (á, Pl â:)}

There are no special reflexive forms for first or second person; one says 'I hit me', 'you hit you', etc.. Examples with 'cut' (perfective-1b form) are in (602).
a. í césé-tí-ỳ 'I cut myself.'
î: césé-tí-ỳ.: 'We cut ourselves.'
b. ú césé-tú-Ẁ 'You-Sg cut yourself.'
û: césé-tú-Ẁ.: 'You-Pl cut yourselves.'
For third person subjects, a direct object coindexed to the subject is expressed by a thirdperson reflexive pronoun, singular á or plural â:, with optional accusative \(=n i ̀ \sim=\grave{n}\).
(603)
\(\begin{array}{ll}\text { a. á } & \text { ćésé-tî:- } \varnothing \\ & \text { 3ReflSgObj } \\ \text { cut-Pfv1b-3SgSbj }\end{array}\)
'He cut himself.'
b. \(\hat{a}\) :
césé-tí-yà
3ReflPlObj cut-Pfv1b-3P1Sbj
'They cut themselves.'
\(\begin{array}{llll}\text { c. } \begin{array}{lll}\text { â: }=\grave{n} & \text { dànìgí- } \grave{m} & \text { tíném }\end{array} & \text { bé-yè } \\ & \text { 3ReflPlObj } & \text { get.ready-Ipfv } & \text { continue }\end{array}\) remain.Ipfv-3PISbj
'They would be getting themselves ready.' [2005.2a.09]
18.1.2 Reflexive possessor (á, Pl â:)

There is no special reflexive form for first or second person possessors. The regular possessor forms are used even when the clausemate subject is coindexed.
a. \({ }^{\mathrm{L}+\mathrm{HL}}\) ǐnjè \(-m \quad\) lǎr-tí-ỳ

1 SgPoss. \({ }^{\text {HL }}\) dog-AnSg chase.away-Pfv1b-1SgSbj
'I chased my dog away.'
b. [ú \(\quad{ }^{\mathrm{HL}}\) ínjè-m] lǎr-tú-Ẁ
[2SgPoss \({ }^{H L}\) dog-AnSg] chase.away-Pfv1b-2SgSbj
'You-Sg chased your-Sg dog away.'
Third-person reflexives are used when the possessor of a nonsubject NP is coindexed to a third-person clausemate subject. Contrast (605a), where such coindexation applies, to (605b), where the clausemate subject and the possessor are disjoint.
a. Sěydù [á \({ }^{\mathrm{HL}}\) ínjè-m] lǎr-tî:- \(\varnothing\)

Seydou [3ReflSgPoss \({ }^{\text {HL }}\) dog-AnSg] chase.away-Pfv \(1 \mathrm{~b}-3 \mathrm{SgSbj}\)
'Seydou \({ }_{x}\) chased his \(_{x}\) (own) dog away.'
b. sěydù [Érñ \(\quad{ }^{\text {HL }}\) ínjè \(\left.-m\right] \quad\) lǎr-tî:- \(\varnothing\)

Seydou [3SgPoss \({ }^{H L}\) dog-AnSg] chase.away-Pfv1b-3SgSbj
'Seydou \({ }_{\mathrm{x}}\) chased her \(\mathrm{r}_{\mathrm{y}}\) (e.g. Hawa's) dog away.'
A singular clausemate subject may be coindexed with a more inclusive third person possessor, e.g. denoting the family containing the subject referent. This requires a plural reflexive pronominal (606a). Of course the same plural form is used when the coindexed subject and possessor are both plural and denote the same set (606b).
a. sěydù [â: \({ }^{\mathrm{L}}\) ìnjè \(-m\) ] lǎr-tî:- \(\varnothing\)

Seydou [3ReflPIPoss \({ }^{\text {L }}\) dog-AnSg] chase.away-Pfv1b-3SgSbj
'Seydou \({ }_{x}\) chased their \({ }_{\mathrm{xy}}\) ( \(=\) his \(_{\mathrm{x}}\) family's) dog away.'
b. [sěydù yà \(\rightarrow^{\uparrow}\) ] [á:màdù yà \(\rightarrow^{\dagger}\) ]
[Seydou and] [Amadou and]
[â: \({ }^{\text {Linnjè-m] lǎr-tí-yà }}\)
[3ReflPIPoss \({ }^{\mathrm{L}}\) dog-AnSg] chase.away-Pfv1b-3PlSbj
'Seydou \({ }_{x}\) and Amadou \(\mathrm{u}_{\mathrm{y}}\) chased their \(\mathrm{x}_{\mathrm{xy}}\) (jointly owned) dog away.'
This issue is especially relevant when the possessed noun is 'house', since one usually says 'our house', 'their house', etc., rather than 'my house' or 'his/her house', even in clauses like 'I went to my/our house'.

\subsection*{18.1.3 Expressions with 'head' (kû:)}

Expressions of the literal type 'my head', etc., are not the common reflexives or emphatics in BenT. However, I did elicit a reflexive-like construction with datives (607). In the third person form (607b), the reflexive pronoun á is the possessor of 'head'.
(607)
a. [[ú \(\left.{ }^{\mathrm{HL}} k \hat{u}:\right] \quad{ }^{\mathrm{L}}\) mà: \(] \quad k \grave{a}^{n}-W^{n}\) [[2SgPoss \({ }^{\text {HL }}\) head] \({ }^{\text {L }}\) Dat] do.Pfv- 2 SgSbj
'You did (it) to yourself.'
b. [[á
\(\left.{ }^{\text {HL }} k \hat{u}:\right] \quad{ }^{\mathrm{L}}\) mà:] kày \({ }^{n}-\varnothing\) [[3ReflSgPoss \({ }^{\text {HL }}\) head] \({ }^{\mathrm{L}}\) Dat] do.Pfv- 3 SgSbj
'He did (it) to himself.'
c. [ 1 î: \({ }^{\mathrm{L}}\) kù:] \({ }^{\mathrm{L}}\) mà:] \(k \mathrm{a}^{n}-\grave{y}^{n} . \therefore\)
[[1PlPoss \({ }^{\text {L }}\) head] \({ }^{\text {L Dat] do.Pfv-1PlSbj }}\)
'We did (it) to ourselves.'

\subsection*{18.1.4 Emphatic pronouns with nàyàná: 'all'}

For nàmàná: 'entirety', usually appearing with \(\{\mathrm{HL}\}\) or \(\{\mathrm{L}\}\) overlay as a possessed noun, see §8.6.7.5.

The same construction (with pronominal possessor) may be used as an emphatic. This function is most clearly identified when the pronoun is singular in reference (608).
```

L+HL nû̀: tí-ỳ,
1SgPoss. HL person.Pl send.Ipfv-1SgSbj,
gà: [í }\quad\mp@subsup{}{}{HL}náyànà:] ló-m̀-dó-ỳ
but [1Sg HL all] go-Ipfv-Neg-1SgSbj
'I am sending my people, but I personally will not go.'

```

\subsection*{18.2 Logophoric and indexing pronouns}

The logophoric pronouns are á \((\mathrm{Sg})\) and \(\hat{a}\) : \((\mathrm{Pl})\). The same forms are also used as third person reflexive pronouns (§18.1.1-2).

\subsection*{18.2.1 True logophoric function}

Logophorics are original 1Sg or 1Pl pronouns that occur somewhere within a "logophoric space," i.e., within a (speech or thought) quotation attributed to an author who is a third person (not the current speaker or addressee). Another way to say this is that logophorics are a special type of third person pronominal coindexed to the attributed author of a proposition.

In (609), the logophoric is the subject of a quotative clause, and is therefore part of a quotative-subject phrase with particle ma: (§17.1.1.1). Recall that e.g. ' \(\mathrm{He}_{\mathrm{x}}\) said that he \(\mathrm{e}_{\mathrm{x}}\) isn't coming' is a reformulation of the direct quotation 'He said: "I am not coming."'

> a. [[á má:] yé-m̀̀-dó- \(\sigma] ~ g \grave{y}{ }^{n}\) - \(\varnothing\)
> [[LogoSg QuotSbj] come-Ipfv-Neg-3SgSbj] say.Pfv-3SgSbj
> ' \(\mathrm{He}_{\mathrm{x}}\) said that he \(\mathrm{e}_{\mathrm{x}}\) isn't coming.'
b. [[â: \({ }^{\mathrm{L}}\) mà: \(] \quad\) yé-m̀-n- \(\overline{]}\)
gì̀ \({ }^{n}\)-bó
[LogoPl \({ }^{\text {L }}\) QuotSbj] come-Ipfv-Neg-3P1Sbj] say.Pfv-3P1Sbj 'They \({ }_{x}\) said that they \(y_{x}\) aren't coming.'

In (610), the logophoric functions as direct object within its clause.

'Boura \({ }_{x}\) says that you-Sg hit-Past him \({ }_{x}\).'
b. yì-ť̌: bû: \(\quad g u^{n}-\grave{W}^{n} \quad d e ̀\),
child-Pl 3P1Sbj say-Ipfv.3SgSbj if, [[í má:] â: Sùyò] wà [1Sg QuotSbj] LogoPlObj hit.Pfv] Quot 'The children \(n_{x}\) say that I hit-Past them \({ }_{x}\).'

In (611a), the logophoric is the possessor of an object NP within its clause. Since the clausemate subject is second person, there is no ambiguity as to what the antecedent is. However, (611b) is ambiguous, since the possessive á could be parsed either as a reflexive possessor coindexed to the immediate clausemate 3 Sg subject or as a logophoric possessor coindexed at a higher level to the attributed author.


'She \({ }_{x}\) says that Seydou \(_{\mathrm{y}}\) (man's name) chased her \(_{\mathrm{x}} /\) his \(_{\mathrm{y}}\) dog away.'
The notion of 'author' is stretched to cover examples of the type ' \(X\) knows that ...' and especially ' \(X\) heard that ...'. In the case of 'know', the propositional knowledge may be unconscious rather than articulated verbally (even as thought). With 'hear', the focus is on the hearer as one who processes propositions that originate with other speakers. We do get logophoric (or, arguably, reflexive) third person pronominals in such cases, under the same conditions as with quoted speech. In (612), note logophoric object á=ǹ or á.

\footnotetext{
a. [[í má:] á súyó-m̀ júwó-m̀
[[1Sg QuotSbj] LogoSgObj hit-Ipfv] know-Ipfv.3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) knows that I will hit him \(_{\mathrm{x}}\).'
}

My assistant did not use logophorics in (613), where the main-clause verb is témbí- 'find'. This verb suggests that one event (here, Amadou's arrival) happens to coincide with a situation (here, the fact that Seydou is looking for Amadou). Local French ça trouve/trouvait que ... is used in the same sense, and its impersonal ça captures the pragmatics. So both Amadou and Seydou are resumed by ordinary \(3 \mathrm{Sg} \varepsilon \varepsilon^{n} \varepsilon\) ह́ in (613). The phrasing is [A find S [S look for A]], with \(S\) and A pronominalized in the subordinated clause
```

á:mádù sěydù [Érń $\dot{\varepsilon}=n i ̀ ~ \varepsilon ́ r r^{n} \varepsilon ́ \quad$ lúgúró-ì̀=bày]
A $\mathrm{S} \quad[3 \mathrm{Sg}=\mathrm{Acc} \quad 3 \mathrm{SgSbj}$ look.for-Ipfv=Ppl.Past]
tèmbì̀ $\varnothing$
find.Pfv-3SgSbj
'Amadou ${ }_{x}$ found (= arrived to find) that Seydou was looking for him ${ }_{x}$.'

```

\subsection*{18.2.2 Non-logophoric topic-indexing function}

\subsection*{18.2.2.1 Nonreflexive resumptive pronouns for topicalized NP}

In some other Dogon languages, logophoric/reflexive pronouns are used to resume the referent of a preposed topical NP: 'As for Seydou, he-LogoSg/3ReflSg is going away.'

In elicitation, my Beni assistant treated the topical NP as part of the clause proper, even when marked by topic particle kày. Both the set-up cue with first person topic (614a) and that with the third person cue (614b) elicited this BenT structure. The cues were with quand même, which is usual in local French (e.g. Moi quand même, je pars à Béni).
```

a. [í kày] bê:n ló-ỳ
[1SgSbj Top] Beni go.Ipfv-1SgSbj
'As for me (Moi quand même), I'm going to Beni.'
b. [sěydù kày] bê:n ló-m̀m
[S Top] Beni go-Ipfv.3SgSbj
'As for Seydou, he's going to Beni.'

```

It was possible to elicit a topical resumptive pronoun in (615), where the topicalized NP is heavy (a conjunction of two NPs). Here the topical resumptive pronoun is ordinary (i.e. nonreflexive) 3Pl bû::
\begin{tabular}{llllll}
{\([[\) sěydù } & yà \(\rightarrow]\) & [á:mádù & yà \(\rightarrow]\) & bû: & ló-ì̀-n- \(\varepsilon\). \\
{\([[\mathrm{S}\)} & and \(]\) & {\([\mathrm{A}\)} & and \(]\) & 3Pl & go-Ipfv-Neg-3PlSbj
\end{tabular}

Seydou and Amadou, as for them, they will not go.'
18.2.2.2 Reflexive resumptive pronouns in headless perfective relatives

Although the construction with preposed topic NP and resumptive third person reflexive pronoun is not typical of BenT, we do find something similar in narrative sequences involving headless perfective relatives (verb-participle ending with inanimate \(-\hat{W}\) ), functionally equivalent to regular main clauses. This is rather common in texts. For example, in (616), the relative clause requires a preposed (preparticipial) subject pronoun, which takes third person reflexive form (3ReflPl â:) under coindexation with 'hyena and hare' in the preceding clause.
\begin{tabular}{|c|c|}
\hline [[tì-tă:-m yà \(\rightarrow\) ] & [jǒ: \({ }^{\text {n-m }}\)-m yá \(\rightarrow\) ]] \\
\hline [[Rdp-hyena-AnSg and] & [hare-AnSg and] \\
\hline [kú \({ }^{\text {HL }}\) Sérè] & \(s \grave{\varepsilon}\)-nÉ, \\
\hline [InanSg \({ }^{\text {HL }}\) awareness] & have-StatNeg.3P1Sbj, \\
\hline [ùsú tùwnô-m] sû:-m & â: jìye \\
\hline
\end{tabular}
[day one-AnSg] francolin-AnSg 3RefIPISbj kill.Pfv-Ppl.Inan
'Hyena and Hare were not aware of that. One day they (=Hyena and Hare) killed a francolin. ...' [2005.2a.06]

A similar example is (536) in \(\S 16.1 .2\).

\subsection*{18.2.3 Relative-clause reflexive subject coindexed to higher subject}

When a nonsubject relative clause has the same third person subject as the main clause, the relative-clause subject has reflexive/logophoric form (á, â:). In (617a), there is no coindexation between main and relative clauses. In (617b), Seydou (man's name) is subject of both clauses, and is expressed by á in the preverbal subject marker preceding the relativeclause participle. The head noun 'shoulderbag' plays no role in this anaphoric relation.
\[
\begin{align*}
& \text { a. [sě̌ydù ès }{ }^{\mathrm{L}}{ }^{\mathrm{L}} \text { dùwó-㐫 kù] yǐ-jê-ỳ }  \tag{617}\\
& \text { [S shoulderbag }{ }^{\text {L }} \text { leave.Pfv-Ppl.Inan Def] see-RecPf-1SgSbj } \\
& \text { 'I found the shoulderbag that Seydou left.' } \\
& \text { b. sěydù [Ès } \left.\grave{\varepsilon}^{\mathrm{L}} \text { á }{ }^{\mathrm{L}} \text { ànó-Ẁ } \quad \text { kù }\right] \\
& \text { S [shoulderbag }{ }^{L} \text { 3ReflSgSbj leave.Pfv-Ppl.Inan Def] } \\
& y \grave{-} j \hat{\varepsilon}:-\varnothing \\
& \text { see-RecPf-3SgSbj } \\
& \text { 'Seydou }{ }_{x} \text { has found the shoulderbag that he (himself) left.' }
\end{align*}
\]

Because some temporal and other adverbial clauses (sometimes merely indicating chronological event sequences) have relative-clause form, such third person reflexive pronouns are not uncommon as subjects in texts. Examples involving two headless relatives (i.e. with covert temporal or similar heads) are (526a) and (527) in §15.2.4.

\subsection*{18.3 Reciprocal}

\subsection*{18.3.1 Simple reciprocals (tǔ:)}

The reciprocal pronoun tǔ: is invariant in form (i.e. it does not agree with the antecedent in pronominal category). It is related to the ordinary noun tǔ-m 'companion, colleague', plural tǔ:.

In the typical case, tǔ: functions as direct object (618a-b), as the complement of a postposition (618c), or as possessor of a nonsubject NP (618d), in each case with the clausemate subject as antecedent. The clause is not detransitivized.
a. tǔ: yì-r-á

Recip see-PfvNeg-3P1Sbj
'They didn't see each other.'
b. [ǹjé gìn] tǔ: sùyò-Ẁ: :
[what? for] Recip hit.Pfv-2P1Sbj
'Why did you-Pl hit each other?'
c. [tǔ: mâ:] bú:dù ní-ỳ.:
[Recip Dat] money give.Ipfv-1PlSbj
'We give money to each other.'
d. [tǔ: HLónjò] jè-bó
[Recip HL younger.sibing.Pl] marry.Pfv-3PlSbj
'They (=two men) married each other's (younger) sisters.'
In direct-object function, accusative clitic \(=n i ̀(=\grave{n})\) is optionally added.
(619)
a. tǔ:(=nì)
sùyò-bó
\(\operatorname{Recip}(=A c c)\)
hit.Pfv-3PlSbj
'They hit each other.'
b. [ǹjé gìn] tǔ:( = nì) sùyò-bó
[what? for] \(\operatorname{Recip}(=A c c) \quad\) hit.Pfv-3PlSbj
'Why did they hit each other?'
c. [íyé \({ }^{\text {HL úsù kálà] tǔ: }=n i ̀ ~ d u ̀ w o ́-s o ̀-l o ́-y ̀ .: ~}\)
[today \({ }^{\mathrm{HL}}\) day even] Recip=Acc leave-Reslt-StatNeg-1PlSbj
'Even nowadays, we have not abandoned (the rites for) each other.' [2005.2a.09]
In (620), noun tǔ-m appears in possessed form with a reflexive possessor, but the sense is essentially reciprocal.

'then you-Sg will sow it close together, and they (=cow-pea plants) will spread out (as a vine) and will come and tangle with each other' [2005.1a.12]

\subsection*{18.4 Restrictions on reflexives}

The syntax of reflexives appears to be very close to that in Jamsay. For example, the possessor of a subject NP may not serve as antecedent, so in (621) we get the ordinary 3 Sg object pronominal even when it is coindexed to the subject possessor.
\begin{tabular}{|c|c|c|c|}
\hline \(\left[\varepsilon^{n}{ }^{n} \dot{\varepsilon}\right.\) & \({ }^{\mathrm{HL}}\) ínjè-m] & \(\varepsilon^{\prime} r^{n} \dot{\varepsilon}\) & kùwò- \(\varnothing\) \\
\hline [3SgPoss & \({ }^{\mathrm{HL}}\) dog-AnSg] & 3SgObj & bite.Pfv-3SgSbj \\
\hline \({ }^{\prime} \mathrm{His}_{\mathrm{x}}\) dog b or: 'His \({ }_{x}\) do & \[
\begin{align*}
& \text { it } \text { him }_{x} \cdot  \tag{621}\\
& \mathrm{~g} \text { bit her }{ }_{\mathrm{y}} \text {, }
\end{align*}
\] & & \\
\hline
\end{tabular}

A coordinand may not serve as antecedent with respect to the other coordinand. For example, in (622) there is no indication whether possessive \(\varepsilon r^{n} \dot{\varepsilon}\) 'his' in the right conjunct is coindexed with the left conjunct 'Amadou'.
\begin{tabular}{|c|c|c|c|c|c|}
\hline [á:mádù & \(y a ́ \rightarrow]\) & \(\left[\chi^{\prime}{ }^{n} \dot{\varepsilon}\right.\) & \({ }^{\text {HL }}\) bô: & \(y a ̀ m]\) & \(y \varepsilon\) ě:-r-à: \\
\hline [A & and] & [3SgPoss & \({ }^{\mathrm{HL}}\) father & and] & come-Pfv1a-3P1Sbj \\
\hline
\end{tabular}
'Amadou \({ }_{x}\) and his \(_{x}\) father came.'
or: 'Amadou \({ }_{x}\) and his/her \({ }_{\mathrm{y}}\) father came.'

As with logophorics, it is possible to extend the coindexation from the subject of one clause into the object of a complement clause if there is no intervening third person subject. Therefore the third person subject equivalent of (623a) is (623b), with a reflexive pronominal object in the lower clause.

b. \([a ́=i ̀ n ~ i ́ n ~ s u ̀ y-i ̂:] ~ h a ̀ d e ̀-~ \varnothing ~\) [3ReflSg=Acc 1 Sg Sbj hit-VblN] prevent.Pfv-3SgSbj \(\mathrm{He}_{\mathrm{x}}\) prevented me from hitting him \(_{\mathrm{x}}\).'

\section*{19 Grammatical pragmatics}

\subsection*{19.1 Topic}

\subsection*{19.1.1 Topic (kày, kày dè, bàndè, kǒy \({ }^{\text {tr }}\) )}

These particles may follow an NP or adverbial. kày is the common form. It may directly follow a nonpronominal topical NP (pronominal or otherwise) that is treated prosodically as clause-internal, as in (624a-b). kày usually occurs at a shift from one topical referent to another in the broader discourse.



Alternatively, the topical constituent may be uttered in isolation form as a pre-clausal phrase, followed (after a prosodic break) by an appositional independent pronoun with the topic particle.

When the topical phrase is postposed to the main clause, kày can be extended as kày dè (with de 'if'). Another form that can be used in this context is bàndè (which might be divided as bàn dè by analogy to kày dè, but which occurs as a frozen unit).
kúwó-ý wá [Ér \({ }^{n} \dot{\varepsilon}\) bàndè]
eat.meat-QuotImprt Quot [3Sg Top]
'(they said:) she should eat it, as for her.' [2005.2a.06]
\(k y^{n}{ }^{n}\) is attested in texts, e.g. (626), and appears to function like the more common kày.
(one speaker:)
\begin{tabular}{|c|c|c|c|}
\hline [dùrê: L & tòrò & tùwnó & ku] \\
\hline [D L & mountain & one & Def] \\
\hline [kú= \({ }^{\text {m }}\) & [ \([\) û: & & \({ }^{\text {L }}\) kj̀: \(\left.\left.\left.{ }^{n}\right]=\varnothing\right]\right\rceil\) \\
\hline [Inan=Fo & oc [[2PlP & & \({ }^{\text {L }}\) thing] \(=\) it.is]] \\
\hline
\end{tabular}
'Dure Mountain alone, that's what belongs to you-Pl?' (other speaker)
é:, \(\quad\left[k u ́ \quad k y^{n}{ }^{n}\right] \quad\left[\hat{i}: \quad{ }^{\mathrm{L}}\right.\) kj̀: \(\left.{ }^{n}=\varnothing\right]\)
yes, [Inan Top] [1PlPoss \({ }^{\text {L }}\) thing] \(=\) it.is]
'Yes, as for that, it belongs to us.' [2005.1a.07]
There are many examples in the sample text, e.g. line 2 of (655), and twice in line 2 of (660).

\subsection*{19.1.2 'Now' (núw \(\left.{ }^{n} \grave{\partial y}{ }^{n}, ~ n \varepsilon ́:\right)\)}

The most common 'now; at this time' adverb is \(n u w^{n} \grave{\partial} y^{n}\). It may be used by itself as in (627). Topicalized as \(n u ́ w^{n} \grave{\partial} y^{n}\) kày 'as for now', it can spill into discourse marker function ('now' referring to a point in the discourse rather than to the time of an eventuality).
a. núwn \({ }^{n} y^{n} \quad\) bíré
bíré-ỳ.:
work.Ipfv-1P1Sbj
'Now we will work(n)
'Now we will work.'
b. [núw \({ }^{n} \grave{\partial} y^{n}\) kày] ùsú dèr \({ }^{n} \varepsilon\) :-rè̀- \(\varnothing\)
[now Top] sun spend.daytime-Pfv1a-3SgSbj
'Now the day is over (= it's night).'
There are several examples of núwǹ̀ \(y^{n}\) kày in the sample text, e.g. in line 4 of (668).
There is also a morpheme né: (variant né: ~néy \({ }^{n}\) ) which tends to function as a topic marker. This 'now' is discourse-centered rather than temporal, as the center of attention shifts from one topical referent to another. It can combine with kày in the phrase né: kày, as in (628a) and in C's second turn in (656) in the sample text. Another combination is né: with a preceding personal pronoun as in (628b), or with an NP as in line 1 of (659) in the sample text.
```

a. [né: kày] dǒ:-rè-ỳ.:
[now Top] arrive-Pfv1a-1PlSbj

```
'Now we have arrived.'
b. ŋ̀gú-dá: \({ }^{\uparrow}\), [ú né:] [mò: \({ }^{\text {L }}\) j̀gú dá:]
aroundhere, [2Sg now] [mouth \({ }^{\mathrm{L}}\) Prox.Inan around]
[ú bú-Ẁ kù] pí:rní-tú-Ẁ dè,
[2Sg be-2SgSbj Def] open-Pfv \(1 \mathrm{~b}-2 \mathrm{SgSbj}\) if,
'Over here, you-Sg now, at the opening on this side, where you-Sg are, you'll open it (= apiary) up, ...'[2005.1a.09]

A shortened, L-toned nè following a constituent can be analysed as an encliticized form of \(n \varepsilon\) :. There are two examples at and near the end of (684) in the sample text.

\subsection*{19.1.3 'Also, even' (kálà, yà)}

The particle kálà can be translated as either 'also, too' or 'even'. In the sense 'also, too', something is added to a previously mentioned set (of entities, spatiotemporal coordinates, or eventualities). The sense 'even' is logically similar, but this time there is an element of surprise in the incremental addition.

The particle follows the constituent that differentiates the overall proposition from others already expressed or assumed. Even when it has logical scope over a VP (or entire clause), it is preferentially attached to a preverbal constituent, such as a cognate nominal. If there is no suitable nominal, it may follow the verb.

The unmarked sense 'also, too' with a clear connection to a specific constituent is exemplified in (629a-b). With clausal scope, the cognate-object type is (629c), while the postverbal type is ( 629 d ).
a. [í kálà] ló-ỳ
\([1 \mathrm{Sg}\) too] go.Ipfv-1SgSbj
'I too will go.'
b.
\begin{tabular}{|c|c|c|c|}
\hline [íyé & \multicolumn{2}{|c|}{bíré} & bíré-ỳ. \({ }^{\text {] }}\) \\
\hline [today & & & work.Ipfv-1P1Sbj] \\
\hline [ [ \(¢\) éy \({ }^{\text {n }}\) & dé] & kálà] & bíré-ỳ. \({ }^{\text {] }}\) \\
\hline [[[tomo & & too] & work.Ipfv-1P1Sbj] \\
\hline
\end{tabular}
c. [gìyé gíyé-m̀],
[dance(n) dance-Ipfv.3SgSbj],
[[nùW \({ }^{n}\) ó kálà] núwn \(n\) ó-m̀]
[[song too] sing-Ipfv. 3 SgSbj\(]\)
'He dances, and he sings too.'
(lit. "He dances dances, and songs too he sings.")
d. lé:térè tí-tî:-Ø, yì-yé-m̀ kálà
letter send-Pfv1b-3SgSbj, Rdp-come-Ipfv.3SgSbj too
'She sent a letter, (and) she is coming too.'

A free translation with the marked sense 'even' is appropriate in (630). In positive sentences, 'also, too' and 'even' have no sharp boundary, and free translation of textual examples is sometimes arbitrary. The sense 'even' lends itself well to negation ('not even'). In (630a), there is a clear focus on a constituent. In (630b), 'even' has clausal (or at least VP) scope but the particle is positioned after an NP.
a. [ámbírì-m
kálà] jìyé
jìyè- \(\varnothing\)
[chief-AnSg even] dance(n) dance.Pfv-3SgSbj
'Even the chief danced.'
b. [pǒ: kálà] pò:-lì-rí- Ø
[greeting even] greeting-Verb-PfvNeg-3SgSbj
'He/She did not even say hello.'
'Also, too' is also expressed by the particle yà, which is probably related to ya used in conjunctions of the type \(\left(X\right.\) ya \(\rightarrow^{\dagger}, Y\) ya \(\rightarrow^{\dagger}\) ), see \(\S 7.1\). Favorite combinations are those involving temporal sequences: lǎ-w yà 'another one' (as in 'tell us another one'), píníwní yà 'again'. That yà 'also' is distinct synchronically from the 'and' conjunctive particle is suggested by their co-occurrence in the first line of (663) in the sample text.

\subsection*{19.2 Presentential discourse markers}

\subsection*{19.2.1 'Well, ...' (háyà)}
háyà 'well, ...' is a preclausal discourse marker. It is used in all languages of the zone.
In BenT texts, it resembles English discourse marker well both in marking the beginning of a new narrative section, and in expressing mild disapproval. Both functions of háyà are evident in the passage whose free translation is (631).
(631) ... They asked, what kind of remedy will make him heal? They (=others) said, he will heal with the tail of a giraffe.

Well, one of the girls went out; she said, if her brother's foot was to be healed, she would go in order to pull off a giraffe's tail. One (other girl) replied, telling her (=first girl) not to go, (since) getting a giraffe's tail is difficult. She (first girl) said, if God consents, she would go. She (=second girl) said, well, if she insisted on going, she should go and come back in health. [2005.2a.02]

\subsection*{19.2.2 'But ...' (gà:)}
gà:, often with low pitch is another preclausal pragmatic marker. It occurs in most languages in the region. An example is near the end of C's first speaking turn in (655) in the sample text.

\subsection*{19.2.3 'Lo, ... (jákà)}

The preclausal particle jákà, which I gloss as ' \(10, \ldots\) ', is used in narrative preceding a clause denoting a surprising or key event. This is another regional particle found in most local languages.

\section*{19.3 'Only’ particles}

\subsection*{19.3.1 'Only’ (sǎy)}

The basic 'only X' phrase takes the form [ \(X\) sǎy]. In many contexts including prepausally, sǎy has low pitch, but I normalize transcription as sǎy and take the low pitch to be intonational rather than phonological.

In the examples below, sǎy follows a pronoun (632a), a nonpronominal NP (632b-c), an adverb (632d), and a PP (632e).
```

a. $\begin{array}{lll}{[2 S g P o s s} & \left.{ }^{\text {HL }} \text { help.Nom }\right] & \text { mì-rá-ỳ, } \\ \text { want-StatNeg-1SgSbj, }\end{array}$
[í sǎy] wárá-ỳ
[1Sg only] farm.Ipfv-1SgSbj
'I don't want your-Sg help, I'll do the farming alone (=by myself).'

```
b. [[nǎ: yèy] sǎy] sò-y
[[cow two] only] have- 1 SgSbj
'I have only two cows.'
c. [[nǎ: yěy] sǎy] \(b-\grave{\varepsilon}:^{n}\)
[[cow two] only] be-3PlSbj
'There are only two cows.'
d. [íyé
săy] bíré
bíré-m̀
[today only] work(n) work-Ipfv.3SgSbj
'He/She will work today only.'
e. bû: [[nŭ: yěy mâ:] sǎy] nì-bó

3Pl [[person two Dat] only] give.Pfv-3P1Sbj
'They gave (some) to two people only.'
When sǎy has logical scope over a VP (or clause), it is nonetheless preferentially attached to an NP. This may be a cognate nominal of the sort that abounds in Dogon languages (633a). If there is no suitable NP for sǎy to attach to, it may follow the verb (633b).
(633)
a. wóngóró
wárá-m̀-dó- \(\varnothing\),
farming farm(v)-Ipfv-Neg-3SgSbj,
[yǒ: sày] yŏ:-rà-w
[weeping only] weep-Ipfv-3SgSbj
'He doesn't do farm work, he just cries.'
b. yé-m̀̀- \(\varnothing\)
come-Ipfv-3SgSbj
sày
'She just comes.'

A clause-final particle nà \(\rightarrow\) can sometimes be translated as 'merely' or the like, but it is pragmatically more complex; see §19.3.4.

\subsection*{19.3.2 'Only (one)' (lók)}
lók is an intensifier for 'one', emphasizing that the quantity is not greater than one (perhaps against expectations). In some contexts, the free translation may include a disparaging adjective (e.g. 'one lousy ...').
\begin{tabular}{|c|c|c|c|}
\hline [nà: \({ }^{\text {L }}\) & tùwnó-m̀ & lók] & sò-y \\
\hline [cow \({ }^{\text {L }}\) & one-AnSg & mere] & have.Pfv-1 SgSbj \\
\hline 'I have & a single cow & & \\
\hline
\end{tabular}

\subsection*{19.3.3 'Only’ (tán)}

The Fulfulde particle tán 'only', which occurs widely in languages of the zone (especially in conditional antecedents 'if only' or 'as soon as', see \(\S 16.2 .2\) ), can be used in the sense 'only' in phrase-final (typically prepausal) position, as an alternative to sǎy.
a. [kú dò:-wôy] àrnà-bérù tán
[DiscDef all] help only
'All that is simply helping (someone).' [2005.2b.04]
b. [[ú \({ }^{\text {HL }}\) yí-tè: bû:] ló bíré-yè]
[[2SgPoss \({ }^{H L}\) children DefPl] go work.Ipfv-3P1Sbj]
[úrò bì-yé-Ẁ tán]
[house lie.down.Ipfv-2SgSbj only]
'Your children will go and work, you-Sg will just lie down at home.'
[2005.1a.13]
Clause-final tán is also used in a more complex discourse function, indicating a temporal and (usually) causal relationship between the clause in the question and a following clause. In this construction, tán can be glossed freely as 'if' or 'as soon as'.

\subsection*{19.3.4 Clause-final adverbial nà \(\rightarrow\) 'just'}

Clause-final adverbial nà \(\rightarrow\), with intonational prolongation, suggests a mild adversarial relationship between the clause containing it and the following clause (or a proposition negated by the following clause). The examples in (636) were given by my assistant, who was asked to formulate examples showing the typical function of the morpheme. 'Just' combined with an unstressed clause-final 'now' (pragmatic, not temporal) or 'mind you' in the free gloss seems to capture the flavor.

> a. cèmnê: \(=\varnothing \quad\) nà \(\rightarrow\),
> amusement=it.is just,
> \(\left[k \grave{j}:{ }^{n \mathrm{~L}} \quad\right.\) lǎ-ẁ \(]=\varnothing=\) rá \(-\varnothing\)
> [thing \({ }^{\mathrm{L}} \quad\) other-Inan=it.is=StatNeg-3SgSbj
> 'It's just (for) fun now, it's not anything else.' (cèmné, lǎ-w)
b. tìyè-mánù nà \(\rightarrow\) jây \(=\varnothing=\) rá- \(\varnothing\)
cross.cousin-laughter just, fight(n)=it.is=StatNeg-3SgSbj
'It's just horseplay (among cross-cousins) mind you, it's not a (real) fight.' (jáy)
Textual examples are in (637).
a. [ìgú má:] sèsù-mánù wà nà \(\rightarrow\)
[Prox.Inan QuotSbj] grandparent-laughing Quot merely
'That was merely fun (=kidding) with the grandmother, it is said.' [2005.2a.06]
 [today 2PlSbj be.long.time-Pfv1a-2PlSbj merely]
\(\left[\left[\begin{array}{lll}\text { un: } & \left.{ }^{\mathrm{L}} k \grave{j}^{n}{ }^{n}\right]=\varnothing & k u ̀\end{array}\right]\right.\)
[[2PlPoss \({ }^{\text {L }}\) thing] \(=\) it.is Def]
Today, merely because you-Pl have been (here) for a long time, (you claim) it is your-Pl property.' [2005.1b.05]
c. [[[isisè: \({ }^{\mathrm{L}} \quad\) ग̀gú] \(\quad{ }^{\mathrm{HL}}\) kô: \(\left.{ }^{n}\right]=\varnothing \quad\) nà \(\rightarrow\) ]
\(\left[\left[\left[\right.\right.\right.\) village \(^{\mathrm{L}} \quad\) Prox.Inan \({ }^{\mathrm{HL}}\) thing] \(=\) it.is just]
[ [īsè: \({ }^{\mathrm{L}} \quad\) j̀gá] \(\quad{ }^{\mathrm{HL}}\) kồ: \(\left.{ }^{n}\right]=\varnothing=r a ́\)
[[village \({ }^{\text {L }}\) FarDist] \({ }^{\text {HL }}\) thing] \(=\) it.is=Neg
'It (=field) simply belongs to this village, it doesn’t belong to that village (over there)' [2005.1b.05]

See also the penultimate line in C's first turn in (660) in the sample text.
This particle nà \(\rightarrow\) might be related to the ending of nánánà: 'all, entirely' (§8.6.7.5). Indeed, nà \(\rightarrow\) is attested once in NP-final position in a context where 'just' or 'precisely' is a possible gloss; see C's third turn in (661) in the sample text.

\subsection*{19.4 Phrase-final emphatics}

In addition to the forms given below, see also já:tì 'exactly', confirming another speaker's statement, at the beginning of (682) in the sample text.

\subsection*{19.4.1 Clause-final kòy}
kòy is a common clause-final emphatic. It is occasionally heard as kǒy with rising pitch (perhaps intonational in nature). The particle is regional (Fulfulde, Dogon, Songhay, etc.). It is used in contexts like (638), where the answer to the question is a strong confirmation of the 'yes' answer to the question.

> Q: úrò nà \({ }^{\text {ná:-rè- } \varnothing \text { mà }}\)
> house be.ruined-Pfv1a-3SgSbj Q
> 'Was the house ruined?'

A: nàwá:-rè- \(\varnothing\) kòy
be.ruined-Pfv1a-3SgSbj Emph
'It sure (as hell) was ruined.'
Examples in the sample text: end of (661), end of C's turn in (663), line 5 of (670), beginning of (674), line 3 of (675), beginning of (682).

\subsection*{19.4.2 Clause-final de}

Clause-final de, another regional form, has an admonitive function. It is common in warnings, including admonitive imperatives (positive or negative). English unstressed clause-final
'now' (in pragmatic function rather than in a temporal deictic sense) is a reasonable free translation. The tone is carried over from the preceding word, but the pitch is subject to intonational modification.
a. yàyá-ré
dé
fall-ImprtNeg Emph
'Don't fall down, now!'
b. gùrú táykà dè
thief.Pl watch.out.Imprt Emph
'Watch out for thieves, now!'
There is one example in the sample text, see end of (654).

\subsection*{19.4.3 Clause-final yà:}

A clause-final particle yà: is used to emphasize the truth of an assertion, especially in the face of an expression of doubt from, or a contradicting assertion by, another party.
(640) térèw \(=\varnothing\) yà:
truth=it.is Emph
'It's definitely the truth!' [2005.1b.05]

\subsection*{19.4.4 Clause-final ga}

The tone of this emphatic particle is spread from the preceding word-final tone. Following a word ending in a, gá is often pronounced [रa], with spirantization suggesting that the morpheme is cliticized to the preceding word.

Among other things, the particle is found as a mild emphatic with (direct or quoted) hortatives, imperatives, and similar constructions. In (641), the original imperatives are reported (in quoted speech) as quoted imperative verb forms.
(641)
\begin{tabular}{llll} 
áywà & {\([[b \hat{1}:\)} & \({ }^{\text {L }}\) bèrrì-yì-m] & má: \(]]\) \\
well & {\([[3 P l P o s s\)} & \({ }^{\text {L }}\) goat-child-AnSg] \(]\) & QuotS
\end{tabular}
well [[3PlPoss \({ }^{\text {L }}\) goat-child-AnSg] QuotSbj]]
[[[kùlùrù̀ \({ }^{\text {L }}\) kú] \({ }^{\text {HL }}\) pírè̀ yá bú gá]
[[[small.house \({ }^{\text {L }}\) NearDist.Inan] \({ }^{\mathrm{HL}}\) inside] Exist be Emph]
[dó wò-ý] wá
[[arrive catch-QuotImprt] Quot
'She said (to Lion and Hare): well, their goat kid was in that shack over there, they should go to (the shack) and take (the goat kid).' [2005.2a.06]

In (642), a polite request (or suggestion) is phrased as an imperfective verb.
(642)

'The usefulness that we talked about. Ah, O [vocative], if you-Sg can add (anything), you will add a little.' [2005.1a.17]
ga can also be used with indicative verbs, though it is less common here than kǒy. In (643), ga seems to mark the building of suspense.
(643) ló bàngì-yí-Ẁ, Sí-yé-yè,
go hide-MP.Ipfv-2SgSbj, go.down-MP.Ipfv-3P1Sbj,
júwó-m̀-n-غ́ gá, íyà wó-ì,
know-Ipfv-Neg.3P1Sbj Emph, again catch.Ipfv-3SgSbj,
'You-Sg will go hide (yourself). They (=birds) will come down, they don't know (=are not wary), it (=trap) will catch (a bird) again.'

Examples in the sample text: C's turn in (663), and line 2 of (685)

\subsection*{19.4.5 Clause-final '(not) at all!' particles (péy, pés)}

The interjection-like '(not) at all!' particle at the end of a clause or phrase is péy, or its iteration péy-péy. It may occur at the end of a negative predication, or it may be used by itself as a negative answer to a yes/no question.
\(\begin{array}{lll}\text { a. bòlú } & \text { mìr }^{n} \dot{\varepsilon}-r^{n}{ }^{n}-\varnothing & \text { péy } \\ & \operatorname{rain}(\mathrm{n}) & \text { rain.fall-PfvNeg-3SgSbj }\end{array} \quad\) not.at.all
'It didn't rain (or: hasn't rained) at all.'
b. Q: [û: \({ }^{\mathrm{L}}\) mà: dá:] bòlú mìn \({ }^{n}\) - \({ }^{\text {W }}\)
[2Pl \({ }^{\mathrm{L}}\) Dat around] rain(n) rain.fall.Pfv-Stat. 3 SgSbj
'Has it rained in your-Pl area?'
A: péy-p \(\varepsilon\) y
not.at.all
'Not a bit.'
A variant pés is also in use. Cf. fés in Fulfulde.
One may also use the emphatic adverb sóy 'everything' with a negative predicate, as in


\subsection*{19.5 Greetings}

The general verb 'greet (someone)' is pó:-lí-, which ends in a transitive suffix that is also used as a causative and inchoative suffix allomorph. The noun 'greeting' is pǒ:. The verb phrase 'reply to a greeting' is pǒ: sá (with verb sá 'reply').

Time-of-day greetings and their responses are in (645). The -nì in the plural-addressee version of some greetings can be identified with plural imperative \(-n i ̀ \sim-n ̀\). The reply form \(\sigma . \therefore\) has protracted dying-quail intonation.
greeting (G) gloss
response (R)
a. náy \({ }^{n}\) 'good morning-Sg’ morning to 11 AM
náy \({ }^{n}\)-nì \(\quad\) 'good morning-Pl'
ná:-k̀̀ (reply, archaic)
ó: (reply preferred by younger speakers)
(náy \({ }^{n}\) is irregularly related to verb ná- 'spend night')
b. pǒ:
pǒ:-nì
'good day-Sg'
о́:
day-Pl
c. \(d \grave{\varepsilon} r^{n} \dot{\varepsilon}-\hat{y}^{n} \quad\) 'good evening-Sg' after sundown
\(d \grave{r} r^{n} \grave{\varepsilon}-y^{n}-n \grave{~} \quad\) 'good evening-Pl'
\(d \varepsilon ́ r^{n} u^{n}{ }^{n}\) â: (reply, archaic)
ó. \(\quad\) (reply preferred by younger speakers)
The stems náy \({ }^{n}\) (645a) and dèr \({ }^{n} \check{\varepsilon} y^{n}\) (645c) have a fairly clear (to native speakers) connection with the verbs ná- 'spend night' and \(d \grave{\varepsilon} r^{n} \dot{\varepsilon}\) 'spend the mid-day', respectively. The apparent \(-\dot{y}\) suffix here is most likely the quoted imperative suffix -y (§10.5.7), which is used in indirect commands. Given the time references, \((645 \mathrm{a}, \mathrm{c})\) are retrospective, referring to the time period already past.

Greetings of the 'good night!' variety (i.e. 'may you have a good night') are prospective.
jǐnjà [Èsú wó] î: ná:- \(W^{n i ̀-y}{ }^{n}\)
God [good in] 1PlObj spend.night-Caus-QuotImprt
'May God have us spend the night in goodness!'

The formal Arabic greeting, generally used among adult men, and in Muslim prayer, is àsàlá:mú-àléykùm (or variant). The response is wà-àléykùmmásàlâ:m (or variant). The verb phrase 'pronounce the Arabic greeting' is sàlâm sálmé (including the cognate nominal), sàlâm gǎy \({ }^{n}\) (with gǎy \({ }^{n}\) 'put'), or just sálmíné (the latter contains Fulfulde causative -in-). Other Arabic exclamations include àlhámdùrùlâ:y 'God be praised!', and the invitational expression bìsímílà ‘in God’s name’ (inviting someone to e.g. share a meal).

There are also some situation-specific greetings based on the location the addressee is in (if associated with a regular task or work), or is coming back from. The greeting phrse begins with the noun denoting the location ('well', 'fields', 'market', etc.).
\[
\begin{array}{llll} 
& \text { greeting } & \text { gloss } & \text { at or co }  \tag{647}\\
\text { a. òrnó: pǒ: } & \text { 'hello-Sg in the field' } & \text { field(s) } \\
\text { òrń: pǒ:-nì } & \text { 'hello-Pl in the field' } & \\
\text { ó.: } & \text { (reply) } &
\end{array}
\]
\begin{tabular}{|c|c|c|}
\hline \begin{tabular}{l}
b. tǎ: pǒ: \\
tă: pǒ:-nì ó:
\end{tabular} & 'hello-Sg at the well' 'hello-Pl at the well' (reply) & well \\
\hline \[
\begin{aligned}
& \text { c. dùyó-rnù pǒ: } \\
& \text { dùyó-r } r^{n} \text { ù pǒ:-nì } \\
& \text { ó. }
\end{aligned}
\] & 'hello-Sg at pounding' 'hello-Pl at pounding' (reply) & pounding place \\
\hline \begin{tabular}{l}
d. Éwá: pǒ: \\
ع́wá: pǒ:-nì о́:
\end{tabular} & 'hello-Sg at market' 'hello-Pl at market' (reply) & weekly market \\
\hline
\end{tabular}
ó \(\therefore\) (in all contexts) has a variant àwá \(\rightarrow\). In work contexts, bìrá \(\rightarrow\) is used by older speakers as a response to pǒ: greetings.

An alternative greeting to someone in a field is [ú yá \(\rightarrow\) ] [òr \({ }^{n}\) ó: yá \(\rightarrow\) ], literally 'you- Sg and (the) field(s)'. The plural-addressee equivalent replaces 2 Sg pronoun \(u\) with \(2 \mathrm{Pl} \hat{u}\) :. The greeting construction 'you and X ' that this illustrates is common in regional languages including Songhay. Another alternative in the same situation is pǒ: bìrà \(\rightarrow\).

The initial greeting and its response may be followed up by any of a variety of additional greeting formulae. Some of these are more current in, and probably borrowed from, other languages, like ǹsé: (Bambara), jâm 'peace' (Fulfulde and Jamsay), jâm sǎy 'only (= nothing but) peace' (Jamsay, the source of the language name). Another follow-up, not (to my knowledge) borrowed, is kánjá-kánjá 'peace'.
\(j a ̂ m\) 'peace' and \(s \varepsilon \rightarrow W\), another term vaguely meaning 'well-being' or the like and confined to greetings, occur in phrases like (648) in these greeting sequences. Those with jâm may be borrowings from Jamsay.
a. \(s \varepsilon ́ \rightarrow W \quad b u ́-W ̀\)
well.being be- 2 SgSbj
‘Are you well?’
b. jâm dèr \({ }^{n} \dot{\varepsilon}-\grave{W}^{n}\)
peace spend.day- 2 Sg Sbj
'Has your day been (spent) in peace?'
c. jâm ná- \(\grave{W}^{n}\)
peace spend.night-2SgSbj
'Did you spend the night in peace?' (= 'Did you sleep well?')

The reply to jâm ná-Ẁ \({ }^{n}\) is jám sày 'peace only!’.
'Excuse me!' (e.g. after accidentally bumping someone) is kǎwrù káy \({ }^{n}\) or just kǎwrù. Here káy \({ }^{n}\) 'do' is imperative. The response is kǎwrù bà-rí- \(\varnothing\).

On either of the two major Islamic holy days, and at marriages, the formulaic wish (649) is uttered.
\begin{tabular}{lllll} 
jǐnjè & [nàngírì & L jìrè] & \(\hat{1}:\) & ćé:rì̀-y \\
God & [next.year & \(\mathrm{L}^{\text {face }}\) & 1 PlObj & show-QuotImprt
\end{tabular}
'May God show us the face of next year!'

The formulaic A-B sequence in (650) is exchanged among persons who meet where condolences are offered to the bereaved survivors of a departed one.

A: [[jǐnjè \({ }^{\mathrm{L}}\) bìrè] \(\quad{ }^{\mathrm{L}}\) này \(\left.{ }^{n}\right]\) pǒ:-nì
[[God \({ }^{\mathrm{L}}\) work(n)] with] greeting-Imprt.2P1
'Greetings to you on the occasion of God's doing!'
B: ó.:
[reply]
A: màyní \(\varepsilon^{n}{ }^{n} \dot{\varepsilon} \quad\) yá:pà-ǹ
take.courage 3 SgObj pardon-Imprt. 2 Pl
'Take- 2 Pl heart and forgive him/her (the deceased)!'
B : yá:pย́-ỳ: [û: yà \(]\) ह́r \({ }^{n} \dot{\varepsilon}\) yá:pà-ǹ
pardon.Ipfv-1P1Sbj [2P1 and] 3 SgObj pardon-Imprt.2Pl
'We pardon (him/her). And you-Pl too, pardon-2Pl him/her!'
A: yá:pé-ỳ.:
pardon.Ipfv-1PISbj
'We pardon (him/her).'
Some other greetings are in (651). jâm 'peace, well-being' (< Fulfulde) is a common element in greetings in all local languages.
greeting gloss situation
a. jǐnjè ú jĕ:- \(\varnothing \quad\) 'God brought you-Sg!' arriving traveler
\(j i ̌ n j e ̀ ~ u ̂: ~ j e ̌:-\varnothing \quad ~ ' G o d ~ b r o u g h t ~ y o u-P l!' ~\)
ó:
(reply)
b. ló jâm dó 'go arrive-Sg in peace!' departing traveler
ló jâm dó-nì 'go arrive-Pl in peace!'
àmí:nà 'amen!’ (reply)
c. jǐnjè jâm ú dǒ:-lì-ỳ 'may God deliver you-Sg in peace!' (= b)
jǐnjè jâm û: dǒ:-lì-y 'may God deliver you-Sg in peace!'
àmí:nà 'amen!' (reply)
At a leave-taking, (652) may be uttered.
(652) jǐnjè jìrè-[yǐ-ỳ] pódé-ý

God eyeL-[see-VblN] God.bring.about-QuotImprt
'May God grant (= bring about) (our) seeing (each other again)!'

A representative greeting sequence occurs in (653) at the beginning of the sample text.

\section*{20 Text}

This is text 2005.2a.08, which like my other BenT texts was recorded in 2005. The live-burial sacrifice of Yasumoy (yà-sùmǒy" 'woman-...') is central to the ethnohistory of the village, and a shelter near her burial site and dedicated to her memory is still maintained (it was formerly the site of an annual celebration). The text includes some song segments in Jamsay. The beginning consists largely of a long greeting sequence. Speakers C and B were older men, \(S\) was a younger assistant who served as interviewer and animator. In each segment, the BenT text is organized into lines with interlinear translation underneath; each entire segment is followed by an italicized free translation (which however seeks to capture the phrasing of the original rather than idiomatic English), then in square brackets [] any relevant comments and/or references to grammar sections.

\section*{The founding of Beni and Yasumoy's sacrifice}
(653) S: û: bê:n àmây \({ }^{n}=\varnothing\) èw-yè
2Pl Beni how?=Foc sit-MP

C: hà: \(\quad B \quad d e ̀ r^{n} \dot{\varepsilon}-y^{n}{ }^{n}\)
well B spend.day-(greeting)
B: ér \(^{n}{ }^{n} w^{n a}\) â:
spend.day(greeting)
C: jâm dèr \({ }^{n} \dot{\varepsilon}-\grave{W}^{n}\)
peace spend.day.Pfv-2SgSbj
B: jâm sày peace only
C: hénjân dèr \({ }^{n} \dot{\text { è }} \grave{\grave{W}}^{n}\) greeting spend.night.Pfv-2SgSbj
B: jâm sày peace only
 [1PlPoss \({ }^{\text {L }}\) person.Pl] well.being spend.day.Pfv-3PISbj
B: àlhámdùrùllâ:y praise.to.God
C: [bà:s \(\left.{ }^{L} \quad k \hat{a}:{ }^{n}\right] \quad d e ̀ r^{n} \grave{\varepsilon}-r^{n} n_{i}^{\prime}-\varnothing\)
[trouble \({ }^{\mathrm{L}}\) any] spend.day-PfvNeg-3SgSbj
B: jâm sày
peace only
C: tà:ré:yò:
Fine
B: jâm dèr \({ }^{n} \dot{\varepsilon}-\grave{W}^{n}\) peace spend.day.Pfv-2SgSbj
C : jâm sày peace only

B: [ú
\({ }^{\text {HL }}\) kórò:jù \({ }^{\text {l }}\) jâm dèr \({ }^{n}\) ह̀-bà
[2SgPoss \({ }^{\text {HL }}\) family] peace spend.day.Pfv-3PISbj
C: jâm sày
peace only
B: [bà: \(\left.s^{\mathrm{L}} \quad k \hat{a}:{ }^{n}\right] \quad d e ̀ r^{n} \dot{\varepsilon}^{\mathrm{L}}-r^{n} \bar{i}-\varnothing\)
[trouble \({ }^{\mathrm{L}}\) any] spend.day-PfvNeg-3SgSbj
C: jâm sày
peace only
B: tà: \(\rightarrow\) ré
Fine
C : àwá:
Fine
S: You-Pl, how did Beni get settled?
\(C: B\) [vocative], good evening.
B: Good evening to you.
C: Are you spending the daytime in peace?
B: Only peace.
C: Have you spent the daytime in good health?
B: Only peace.
C: Have our people (=kin) spent the daytime safely?
B: Praise God.
C: Nothing bad has happened in the daytime?
B: Only peace.
C: Fine.
B: Are you spending the daytime in peace?
C: Only peace.
B: Did your-Sg family spend the daytime in peace?
C: Only peace.
B: Nothing bad has happened in the daytime?
C: Only peace.
B: Fine.
\(C\) : Fine.
[several greeting expressions are formulaic and the translations given are rough (e.g. "Fine"), see \(\S 19.5\) for general treatment; dér"úwnâ: and hénjân are archaic, no longer used by young people; 2 Sg dèr \(r^{n} \dot{\varepsilon}-\grave{W}^{n}\) 'spend night' used after jâm 'well-being' is perfective, but shows the lexical/LH/ melody, cf. §10.2.1.2; speakers B and C have distinct 3 Pl perfective suffix allomorphs -bà and -bj]

B: bisímílà
please
C: háyà wó:dì yà
well yes also
B: [úsúrí \(\quad\) wó]=ǹ \(\quad y\) ž:-rà-ỳ.:
[question in]=Acc come-Prog-1PlSbj
C: íhh̀̀
uh-huh
B: áywà \(\hat{1}: \quad\) bé:nì \(k \grave{u} \rightarrow, \quad\left[\grave{r} r^{n}{ }^{\mathrm{L}}{ }^{\mathrm{L}}\right.\), kà: \(\left.: n\right] g \check{o}=n i ́\),
well 1Pl B Def, [place \({ }^{\mathrm{L}}\) Rel] go.out=and.SS,
 here come=and.SS, [place \({ }^{\mathrm{L}}\) Rel] 1PlSbj sit-MP.Pfv-Ppl.Inan Def, [[kú \({ }^{\text {HL }} k\) kábà:r] [ú mâ:] bèrè̀-ỳ: \(\quad\) dè] jóró-ỳ.: [[InanPoss \({ }^{H L}\) news] [2Sg Dat] get.Pfv-1PlSbjif] want.Ipfv-1PlSbj
C: já:tì exactly
 2 Pl [person \({ }^{\mathrm{L}}\) big.Pl] [God \({ }^{\mathrm{L}}\) trust]=it.is Emph [2PlPoss \({ }^{\mathrm{L}}\) trust] \(=\mathrm{it}\).is
B: Please.
C: Well, all right.
B: We are coming on (=because of) a request.
C: Uh-huh.
B: Well, we (people of) Beni, the place that we left to come here, (and) the place that (=in which) we settled, we would like to have its story from you-Sg.
C: Exactly.
B: You-Pl the old people, it (=telling the story) is entrusted to God and it is entrusted to you-Pl.
[accusative \(=\grave{n}\) after nonsubject constituent other than direct object §8.2; relative morpheme kà: \({ }^{n} \S 14.1 .10 ;=n i ́ \sim=n ́ s a m e-s u b j e c t ~ s u b o r d i n a t o r ~ § 15.1 .8 ; ~ n u ̀ ~ º ~ d i ́ y n a ̀ ~ ' o l d ~\) people' in collective without adjectival animate plural \(-y \varepsilon ̀, \S 4.5 .1\); [jǐnjè \({ }^{\mathrm{L}}\) sàw] \(=\varnothing[\hat{u}:\) \({ }^{\mathrm{L}}\) sàw] \(=\varnothing\) is a common but somewhat opaque formulaic phrase, with noun sǎW 'trust, act of entrusting']
\[
\begin{align*}
& \text { C: [[ǰ̌njè ə̀̀ò-ná:m] } \left.\quad{ }^{H L}{ }_{\text {SâW }}\right]=\varnothing \text {, }  \tag{655}\\
& \text { [[God Almighty] }{ }^{\mathrm{HL}} \text { trust] }=\text { it.is, } \\
& \text { [bê:n }{ }^{\text {L }} \text { òrù-mbò: kú kày], } \\
& \text { [B L door Def Top], } \\
& {[j i ̌ n j e ̀ ~ \quad ~ \quad ~: ~ s a ̀ w] ~=~ \varnothing ~\left[\hat{u}: \quad ~ \quad{ }^{\mathrm{L}} \text { sàw] }=\varnothing\right. \text {, }} \\
& \text { [God }{ }^{\mathrm{L}} \text { trust] }=\text { it.is } \quad \text { [2Pl }{ }^{\mathrm{L}} \text { trust] }=\text { it.is, } \\
& \text { gà: dŏ:, màndé } \quad g o ̌=n i ́, \ldots \\
& \text { but Dogon, M go.out=and.SS, ... }
\end{align*}
\]

B: wó:dì
yes
\(\mathrm{C}: ~ . .\). búnúgóy yěy, [[mǎ: \({ }^{\mathrm{HL}}\) lós̀̀] dìmbì-yí-mù yà \(\rightarrow^{\uparrow}\) ]
... group two, [[dry \({ }^{H L}\) road] follow-MP.Ipfv-Ppl.AnPl and]
[[nî: \({ }^{\mathrm{L}}\) lòs̀̀] dìmbì-yí-mù yà \(\rightarrow\) ]
[[water \({ }^{\text {L road] follow-MP.Ipfv-Ppl.AnPl and] }}\)
B: wó:dì
yes
\(\mathrm{C}: ~\left[k u ́ \quad{ }^{\text {HL }}\right.\) búnùgòy yèy kú],
[DiscDef \({ }^{\text {HL group }}\) two Prox.Inan],
â: káwá-Ẁ kù
3ReflPISbj separate.Pfv-Ppl.Inan Def
B: wó:dì
Yes
C: It's entrusted to Great God. The opening ("doorway") of Beni, it is entrusted to God and it is entrusted to you-Pl. But the Dogon, leaving Mande...
B: Yes.

C: ... two groups, those who followed a dry route, and those who followed the water route (along the river).
B: Yes.
C: Those two groups, they separated.
B: Yes.
[dìmbì-yí-mù imperfective participle for animate plural (archaic allomorph, usually dìmbì-yú with zero suffix; â: 3Reflexive plural marking coindexation of relative-clause and main-clause subject \(\S 18.2 .3\); káwá-̀̀ perfective participle with inanimate head §14.1.6.1]


B : wó: \(\mathrm{dì}\)
yes
C: [né: kày] tă:n lá:té:-rè- \(\varnothing\),
[now Top] three become.real-Pfv \(1 \mathrm{a}-3 \mathrm{SgSbj}\),
áywà, áyí-m̀ áyí-m̀ yě=ní,
yes, take-Ipfv take-Ipfv come=and.SS,
[ú yì:-rà \({ }^{\mathrm{L}}\) ìgú] û: [bé:nì \({ }^{\mathrm{L}}\) nù:],
[2SgSbj see-Prog.Ppl \({ }^{\text {L }}\) Prox.Inan] 2Pl [B \({ }^{\text {L }}\) person.Pl],
[dày \({ }^{n \mathrm{~L}} \quad \hat{i}: \quad n u ́-\grave{W}^{n}\) ]
[way \({ }^{\mathrm{L}} \quad\) 1PlSbj go.in.Pfv-Ppl.Inan]
\(\begin{array}{ll}\text { [màndé } & \hat{a}: \\ {[\mathrm{M}} & 3 \mathrm{R}\end{array}\)
gǒ-⿰訁̀ \(]\),
go.out.Pfv-Ppl.Inan]
B: nâ:m
yes
\(\mathrm{C}:\) éw-yé-m̀ éw-yé-m̀ yě múnwîl
sit-MP-Ipfv sit-MP-Ipfv come M
B: múnwîl, wó:dì
M, yes
C: The ones who followed the water route, again they separated into two divisions.
B: Yes.
C: Now they had actually come to be three (groups). That went on. Eventually, this (village) that you-Sg see, you-Pl the people of Beni, how we came in (here), (how) they left (=came from) Mande.
B: Yes.
C: They settled, they settled (here and there), until they came to Munwil (village).
B: Munwil. Yes.
[áyí-m̀ áyí-m̀ (and éw-yé-m̀ éw-yé-m̀) backgrounded imperfective clause §15.2.1.4; ú yì:-rà \({ }^{\mathrm{L}}\) ŋ̀gú 'this that you see' with participle tone-dropped before demonstrative \(\grave{j} g u ́\) §14.1.9, participle here in animate plural form perhaps referring to population (of village); dày \({ }^{n}\) heading a manner adverbial clause §15.2.3; "Mande" refers to the Mande Empire of Sundiata in southern Mali]
\[
\begin{align*}
& \left.\mathrm{C}: \text { múnwîl, kú= ̀̀ } \quad n i ́, ~ n u ́ w^{n} \grave{m} y^{n} \text { [[bê:n }{ }^{\mathrm{L}} \text { tì:rà̀:] }{ }^{\mathrm{L}}{ }_{W o ̀}{ }^{\dagger}\right] \text {, }  \tag{657}\\
& \text { M, DiscDef=it.is and, now [[B }{ }^{\mathrm{L}} \text { family.name] }{ }^{\mathrm{L}} \text { in], }
\end{align*}
\]
kà:gǒy mòrògǒy, ká:-kùn-wà-nàm bà, Kagoy Morogoy, mouth-be.in-?-difficult Quot, sénér \({ }^{n}\) é-ìsé-bèrغ̀- \(\varnothing ~ w a ̀, ~\) S-village-get.Pfv-3SgSbj Quot,
[à-n=î: lòrò- \(\varnothing \quad\) mà]
[man-HumSg=Foc be.pregnant.Pfv-3SgSbj Q]
\([n \varepsilon-n=\hat{1}: \quad\) lòrò- \(\varnothing \quad\) mà \(]\)
[woman-HumSg=Foc be.pregnant.Pfv-3SgSbj Q]
\begin{tabular}{lll} 
lórú-lòrú-kúrê: & pǒ: & kù, \\
pregnant-pregnant-belly & knife & Def,
\end{tabular}
íyé múnwîl yá déyá-ẃ today M Exist be.set.down.Stat-3SgSbj
B: wó:dì
yes
C: Munwil. That was it. Now the patronomic family names of Beni, Kagoy (and) Morogoy. Difficult-to-come-out-of-the-mouth, Sengere-got-the-village, Is-it-a-boy-that-she-is-pregnant-with-or-Is-it-a-girl-that-she-is-pregnant-with? The pregnant-belly-rip knife is set down (=exists) even today in Munwil.
B: Yes.
[ní phrase-finally not after a verb is here glossed 'and'; patronymics kà:gǒy and mòrògǒy are common in Beni; kà:gǒy is here etymologized as Jamsay ká: 'mouth' plus gǒ-y 'going out'; other complex phrases here are traditional formulae uttered by griots, including Jamsay phrases; for ká:-kùn-wà-nàm cf. Jamsay ká: kùn 'it is in (the) mouth' and nǎm 'difficult'; stative yá déyá-w' 'it is set down' §10.2.1.10]


B: wó:dì
yes
C: íye

\begin{tabular}{|c|c|c|c|}
\hline \(\varepsilon \varepsilon^{n}{ }^{n} \dot{\varepsilon}=\grave{m}\) & púmbérè & & ló-m̀ \\
\hline \(3 \mathrm{Sg}=\mathrm{Foc}\) & ritual.ground & & go.Ipfv-3SgSbj \\
\hline \multicolumn{4}{|l|}{B: wó:dì} \\
\hline \multicolumn{4}{|l|}{yes} \\
\hline \(\mathrm{C}: k u ́=\grave{m}\) & lérílèrì-kúréyé & [pǒ: & \(k u ̀]=\grave{m}\) \\
\hline DiscDef=it.is & LLK & [knife & Def]=it.is \\
\hline
\end{tabular}

S: That Munwil, it's in the area of where (=in what area)?
C: That Munwil, if you-Sg have gone to Walo, you-Sg will go (on) to Munwil.
B: Yes, I understand.
C: Well, in that Munwil, even today, the knife is set down (=exists).
B: Yes.
C: Today in the house, who(-ever) is the last boy, when he goes to the ritual ground, even today when he carries the knife on his shoulder, it's he [focus] who goes to the ritual ground.
B: Yes.
C: That is the knife of Leri-Leri-Kure.
['ritual ground' is the area at the edge of the village where the population assembles during major holy days; the youngest boy from the founding family of the village carries the knife to the ritual ground; locative postposition wó H-toned after definite kù §8.4.2; ăm \(=\varnothing\) 'who/which is it?', i.e. ǎm plus 'it is' (=focus) clitic; dàrìyí-Ẁ dè clause with \(-\grave{W}\) dè §15.2.1.2]


B: So, those people of ours now, how did they separate? One settled in Kara, (the other) one settled in Youli.
C: Well, the one who left Kara, ...
B: Yes.
\(C\) : ... yes, and the one who came around here, ...
B: Yes.

C: ... one mother, one father (=they were full brothers).
B: Exactly.
[definite kù sometimes H-toned kú before an NP-final particle §6.7; gǎm ~ gàmbú 'certain one(s)' repeated to denote two parallel subsets §6.3.2; Kara and Youli were villages near Beni; perfective participle with -m̀ for animate singular head NP §14.1.6.1; ŋ̀gú-dá: ‘around here, this way' §4.4.2.1; NP conjunction with repeated ya \(\rightarrow\) §7.1.1]
\begin{tabular}{|c|c|c|c|c|c|}
\hline C: áywà yes & \[
\begin{align*}
& y \varepsilon ̌ ~  \tag{660}\\
& \text { cor }
\end{align*}
\] & & lò-ḿ go-Hort & bá, Quot, & \\
\hline [ \(\mathrm{m}^{\text {b a }}\) & kù & kày] & [[á & má: & kày] \\
\hline [FarDist.Sg & Def & Top] & [[3ReflSg & QuotSbj & Top] \\
\hline [ú & yì:-rà- & & & & \\
\hline [2SgSbj & see-Pro & -Ppl. & & \(x . I n a n]\) & \\
\hline kárá:-rè & & & nà \(\rightarrow\) ] & & \\
\hline be.indepen & ent-Pfv1 & 3 SgS & just] & & \\
\hline [[á & má: & kày] & ló & -ı̀̀-dó] & wá \\
\hline [[3ReflSg & QuotSb & Top] & go can & Ipfv-Neg] & Quot \\
\hline
\end{tabular}

B: \(x x x\)
[inaudible]
\(\mathrm{C}:\left[\right.\) l̀̀gú wó] [kú jây \({ }^{n}\) ] hèddè- \(\varnothing\)
[Prox.Inan in] [DiscDef Inst] remain.Pfv-3SgSbj
B: wó:dì
yes
\(\mathrm{C}: k u ́ \quad\) ér \({ }^{n} \dot{\varepsilon} \quad h \varepsilon ́ d d \varepsilon ́=n \varepsilon ̀\), DiscDef 3 Sg remain=and.SS,
[î: \({ }^{\text {L }}\) lòsù bé] [má:bà bè] \(\ldots\)
\(\left[1\right.\) PlPoss \(\left.{ }^{\text {L uncle }} \mathrm{Pl}\right] \quad[\mathrm{M} \quad \mathrm{Pl}] \ldots\)
B: wó:dì
yes
\(\mathrm{C}: \ldots\) yと̌ [[bû: \({ }^{\mathrm{HL}}\) dòsù] \({ }^{\mathrm{L}}\) Wò] è \(W\)-yè-bò
... come [[3PlPoss \({ }^{\text {HL }}\) beside] \(\left.{ }^{\mathrm{L}} \mathrm{in}\right]\) sit-MP.Pfv-3PlSbj
B: já:tì
exactly
C: Well, he said: come, let's go! As for the other, he said: as for himself, this one whom you-Sg see was stubborn (kárá:-rè), he couldn't go.
B: xxx [inaudible]
\(C\) : In that (place), with that he stayed put (=did not budge).
B: Yes.
\(C\) : When he stayed put there, our (maternal) uncles the Maba ...
B: Yes.
\(C: \ldots\) came and settled next to them.
B: Exactly.
['come' in simple stem form chained (§15.1) to following 'go' with hortative \(-m\) ' §10.5.6; far-distant animate singular demonstrative m̀bá \(\sim \grave{m}^{b}\) á in obviative indexical function §4.4.1; ú yì:-rà- \(\grave{W}^{\mathrm{L}} \grave{\eta} g u ́\) 'this one that you-Sg see' has inanimate-head perfective participial form, see \(\S 14.1 .6 .1\) and \(\S 14.1 .2\), here also L-toned before demonstrative \(\grave{\eta} g u ́ ;\) clause-final nà \(\rightarrow\) §19.3.4; quotative subject particle má: §17.1.1.1; verb bèré- 'get, obtain' meaning 'can, be able to' with a preceding chained VP §17.4.3.1; =nè variant of
\(=\) nì different-subject subordinator §15.1.10; plural bè \(\sim\) bé \(\S 6.6\); [ \(\left[X^{\mathrm{HL}} \text { dósù }\right]^{\mathrm{L}}\) wò \(]\) 'next to X ' 8.4.6]
(661)
\begin{tabular}{|c|c|c|c|c|}
\hline \[
\begin{gathered}
\text { C: áywà } \\
\text { yes }
\end{gathered}
\] & òr \({ }^{n} \grave{\text { ond }}\)-dánát, & \begin{tabular}{l}
[bê:n \\
[B
\end{tabular} & \begin{tabular}{l}
\({ }^{\mathrm{L}}\) nù:] \\
\({ }^{\text {L }}\) person.PI]
\end{tabular} & là:mè-bót, \\
\hline ǒ:, & [î: & \({ }^{\text {L }}\) lòsù \({ }^{\text {a }}\) bé] & \multicolumn{2}{|l|}{là:mè-boे,} \\
\hline uh, [1 & [1PlPoss & \({ }^{\text {Luncle }}\) Pl] & govern.P & PISbj, \\
\hline wó:dì & & & & \\
\hline yes & & & & \\
\hline hâl & [íyé & \({ }^{\text {HL }}\) úsù-dèr \({ }^{\text {n }}\) i: & ìgú], & \\
\hline until & [today & \({ }^{\mathrm{HL}}\) day & Prox.Inan & \\
\hline [î: & \({ }^{\text {L }}\) lòsù & \(b \hat{e}:]=\varnothing\) & \(\hat{0}:=\varnothing\)-bs & \\
\hline [1PlPoss & s \({ }^{\text {L uncle }}\) & \(\mathrm{Pl}]=\mathrm{Foc}\) & Hogon=it & -3PISbj \\
\hline
\end{tabular}

B: wó:dì
yes
C: [[ว̀rnò:-dáná yá \(\rightarrow\) ] [tëy \(\quad{ }^{\mathrm{L}}\) sàw yà \(\rightarrow\) ] ĉ̀m]
[[territory and] [language \({ }^{\text {L }}\) trust and] all]
[[[bê:n \({ }^{\mathrm{L}}\) nù̀:] nà \(\rightarrow\) ] wò] bù- \(\varnothing\)
\(\left[\left[\left[B \quad{ }^{\text {L }}\right.\right.\right.\) person.Pl] just] in] be-3SgSbj
B: já:tì, pá:mé-ỳ: kòy
exactly, understand.Ipfv-1PISbj Emph
C: Well, the people of Beni governed the territory, our (maternal) uncles commanded the chiefhood.
B: Yes.
C: Up until today, it's our (maternal) uncles [focus] who are chiefs.
B: Yes.
C: Both the territory and the entrusting of the words are in the hand(s) of the people of Beni.
B: Exactly. We understand.
[ \(\ldots \ldots\) bê: \(]=\varnothing\) focalized form of plural bè \(\S 6.6 ;=\varnothing\)-bó 'they are... ' §11.2.1.3; NP-final nà \(\rightarrow\), slightly emphatic ‘just’ §19.3.4]
(662)
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
C: [bê:n \\
[B
\end{tabular} & dá:] around] & \(y \check{z}:-r \dot{\varepsilon}-\varnothing\) come-Pfv1a-3SgSbj & \[
\begin{aligned}
& \text { dè, } \\
& \text { if, }
\end{aligned}
\] \\
\hline mòrògǒy \({ }^{\dagger}\), & kà:gǒy & kú \(=\grave{m}\) & - \(\varnothing\) \\
\hline M(name), & K(name) & DiscDef=it.is & -3Sg \\
\hline
\end{tabular}

B: wó:dì yes
C: [lwá:lè kù] wó, à:wàndút, mé:má [W Def] in, A, M
B: mǔ:
bè yěy
Prox.An Pl two
C: bû:=m̀ kásárút, j̀:dúró: yá \(3 \mathrm{Pl}=\) it.is \(\mathrm{K}, \quad \mathrm{O}\) and
B: wó:dì yes


C: When it came to Beni (village), Morogoy and Kagoy (patrononymics), that's what there was.
B: Yes.
C: In that Walo, Awandu and Mema (neighborhoods).
B: These two.
C: They are (=correspond to) Kasaru and Oduro (neighborhoods in Beni).
B: Yes.
C: As for me, this is my knowledge (=what I know).
[mǔ: bè 'these' §4.4.1, here followed by a numeral 'two'; jǔwô 1 Sg possessor form of júẁ̀ 'knowledge', whose basic possessed form is also júwò with overlaid HL tone]
\(\mathrm{B}: ~[[\grave{̀}: d u ́ r o ́: ~ k u ̀ ~ y a ̀ \rightarrow], ~[k a ́ s a ́ r u ́ ~ k u ̀ ~ y a ̀ ~ \rightarrow ~ y a ̀] ~\)
[[O Def and], [K Def and also]
[[nàrná tùwn \(\left.{ }^{n}{ }^{t}\right]\) [bǒ: tùwnó \(\left.]\right]\) gùy \({ }^{n}\)-bò
[[mother one] [father one] say.Pfv-3P1Sbj
bày [kú yà] à \(\hat{a}^{n} y^{n}=\grave{m}\) mà
so [DiscDef also] how=it.is Q
C : áywà, û: [bê:n \({ }^{\mathrm{L}}\) nù:] f́gòy bù-Ẁ.: gà, yes, 2 Pl [B \({ }^{\mathrm{L}}\) person.Pl] here's be-2PlSbj Emph, \(\begin{array}{llllll}{[k u ́} & k a ̀ y] & {[j i ̌ n j e ̀ ~} & \left.{ }^{\mathrm{L}}{ }_{\text {Sà } W^{\dagger}}{ }^{7}\right]=\varnothing & {[\hat{u}:} & { }^{\mathrm{L}} \text { sàW] }=\varnothing\end{array} \quad k o ̀ y\) [DiscDef Top] [God \({ }^{\mathrm{L}}\) trust]=it.is [2PlPoss \({ }^{\mathrm{L}}\) trust]=it.is Emph
\(\mathrm{B}:\left[i ́ 1\right.\) kálà dè] [kò: \({ }^{\mathrm{L}}\) yâ: í nǔ-Ẁ \({ }^{n}\) déy] [1Sg also if] [thing \({ }^{\mathrm{L}}\) there 1 SgSbj hear.Pfv-Ppl.Inan if]
B: That Oduro and that Kasaru too, (they have) one mother (and) one father, they said. So, that too, how is it?
C: Well, you the people of Beni, here you are. That (matter), it is entrusted to God and it is entrusted to you-Pl.
B: For my part, what I have heard there (=about that) (is ...).
[presentative \(̆\) Ǿgòy 'here's ...'; clause-final emphatics gà §19.4.4 and kòy §19.4.1; object relative (§14.3) with 'thing' as head and preverbal subject pronominal; final déy seems to be a variant of dè 'if' (sentence cut off)]

S: wâ:y, [[á má:] kárá:-rè nà \(\rightarrow\) ]
grandpa, [[3Sg QuotSbj] be.independent-Pfv1a just]
ló-m̀-dó- \(\varnothing\)
go-Ipfv-Neg-3SgSbj gù \(y^{n}-\varnothing\),
[[kárá:-rè
[[be.independent-Pfv1a ,
kù] \({ }^{\text {HL }}\) kórò ] ìjê: \(=\varnothing\)

C: kárá:-rè Def] \({ }^{H L}\) meaning]
what? \(=\) it.is
[be.independent-Pfv1a Def,
\(\left[\begin{array}{llll}{[1 i} & d e ̂:] & {[u ́} & \text { ỳ̀:-rà- } \grave{W}^{\mathrm{L}}\end{array}\right.\)
\(\left[\left[[1 \mathrm{Sg} \quad \text { Top }]_{\mathrm{HL}} \quad\left[2 \mathrm{SgSbj}\right.\right.\right.\) see-Prog-Ppl.InanSg \({ }^{\mathrm{L}}\) Prox.Inan]
\(\begin{array}{llll}\text { [ùrò-mb̌ǒ: } & { }^{\text {HL }} \text { pírè] } & \text { kárá:-rè] } & { }^{\text {HL }} \text { kórò] } \\ \text { [doorway } & \text { HL inside] } & \text { be.independent-Pfv1a] } & { }^{\text {HL }} \text { meaning] }\end{array}\)
[doorway \({ }^{\mathrm{HL}}\) inside] be.independent-Pfv1a] \({ }^{\mathrm{HL}}\) meaning]
\(n u ̌-j \varepsilon ́-\grave{~}\) tán,
hear-RecPf-2SgSbj if,
í [nù \({ }^{\mathrm{L}} \quad\) ǎw-sò-ló-m̀ \(]=m\)-ì:
\(1 \mathrm{Sg} \quad\left[\right.\) person \(^{\mathrm{L}}\) accept-Reslt-Neg-Ppl.AnSg]=it.is-1SgSbj

B: ár \({ }^{n}\) à-m tángí:-rè- \(\varnothing\)
man-AnSg become-Pfv1a-3SgSbj
C : [nǔ-m gù = náy \(\left.{ }^{n}\right]\) lǎ- \(W\) [kò: \(:^{\mathrm{L}}\) kâ: \(\left.{ }^{n}\right]\)
[person-AnSg for] other-Inan [thing \({ }^{\mathrm{L}}\) any]
[í ínjírí-m̀] bôy yâ: ìgó- \(\varnothing\),
[1SgSbj get.up.Ipfv-1SgSbj] all there not.be-3SgSbj,
kú=ì̀ kárá:-rè- \(\varnothing\),
Inan=it.is be.independent-Pfv1a-3SgSbj
B: pá:mé-W \(W^{n} u\) - \(\grave{W}^{n}\) understand-Pass-3SgSbj
C: ànhán
uh-huh
S: Grandpa, he said that he had kará-ed and he wouldn't go. What is the meaning of that (word) kárá?
C: That kárá, if you-Sg have only heard (=understood) the meaning of "I whom you see here have kárá-ed (=am independent) in a household (=family), I am a person who has not consented (=who has refused)."
B: He has become a man.
C: There is no longer anything of people saying "I will get up because of someone (else)."
\(B\) : Is it understood?
C: Uh-huh.
[wâ:y 'grandpa!' (vocative); the contextual sense of the verb kárá- (homophone and folk-etymological source of village name kárá) is explained to the younger speaker S , viz. '(man) become independent (e.g. of his parents)', i.e. after moving to his own household and no longer being required to take orders; (Topical?) particle dê: after a pronoun is typical of this speaker; noun kórò 'meaning' here is possessed by the preceding factive-quotative phrase; ǹjjê: \(=\varnothing\) 'it is what?' §13.2.3; pírè 'inside' §8.4.3; tán 'if' §16.2.2; -sò-ló- negative of resultative -sô- §11.5.1, here in participial form §14.1.6.3; lă-w is adverbial 'otherwise, further' (here, as often), §4.5.1; bôy for wôy 'all' after a nasal, §6.8..1; passive -wú-ẁ §9.3]

[gàm \({ }^{\mathrm{L}}\) kà: \({ }^{n}\) ] ínjírí-mà
[certain \({ }^{\mathrm{L}}\) Rel] get.up.Pfv-Ppl.AnPl
[[ònjǒ-m yá \(\rightarrow\) ] [dèrě-m yá \(\rightarrow\) ]
[[younger.sib-AnSg and] [elder.sib-AnSg and]
ínjírí-mà kù,
get.up.Pfv-Ppl.AnPl Def,
[[bû: \({ }^{\mathrm{L}}\) mà:] [yúlì \(\left.{ }^{\mathrm{L}} W o ̀\right]\) y 先 \(n\) ] èw-yè-bó wá
[[3P1 \({ }^{\mathrm{L}}\) QuotSbj] [Y \(\left.{ }^{\mathrm{L}} \mathrm{in}\right]\) come=and.SS] sit-MP-3PlSbj Quot
C: já:tì
exactly

B: For my part, what I have heard there (=about that) (is), in Kara, they left some (people) there. Some (others) who got up, the younger and elder brothers who got up, it is said that they came to Yuli and settled (there).
C: Exactly.
[relative morpheme kà: \({ }^{n}\) after tone-dropped head NP §14.1.10; perfective participle with suffix -mà for animate plural head NP §14.1.6.1; conjoined NP ' X and Y ' not tonedropped as relative head NP §14.1.3]


C: já:tì
B: When they came and settled at Yuli, well, he the elder brother, he was a hunter, it is said. The hunter kept going around. He got up and went down into the valley (=bottom) of Oloy, he went through the dense forest and emerged on the other side. He came and went up the rocky slope. When he looked down, (he saw) the place was pleasant, it was very good, the place (=land) for them to farm was good.
C: Exactly.
[yárá-m̀̀ repeated as background durative §15.2.1.4; ह́ndêm \(\rightarrow\) expressive adverbial §8.6.7; adjectival predicate with bû- 'be' §11.4.1; nonspecific 3 Pl subject -yغ̀ in compounds §5.1.9 and §14.1.6.2]

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á mǎ-\grave{W}}\mp@subsup{}{}{nt}\mathrm{ ,
3ReflSgSbj make.brick.Pfv-Ppl.Inan,
[[tàygày \}\mathrm{ \̀gú] wó] á dùwó-Ẁ kù`t
[[side }\mp@subsup{}{}{\textrm{L}}\mathrm{ Prox.Inan] in] 3ReflSgSbj leave.Pfv-Ppl.Inan Def,
ínjírí=ní, ló [á 'LLónjò-m] tèmbì-\varnothing,
get.up=and.SS, go [3ReflSgSbj HL}\mathrm{ younger.sib-AnSg] find.Pfv-3SgSbj,
[ònjǒ-m kù] á témbú-Ẁ kù,
[younger.sib-AnSg Def] 3ReflSgSbj find.Pfv-Ppl.Inan Def,
áywà térèw = \varnothing wà,
yes truth=it.is Quot,
[á má:] órǹ kú-dá: yá yì-sò-Ẁ wà,
[3ReflSg QuotSbj] place there.DiscDef Exist see-Reslt-Ppl.Inan Quot,
̀r }\mp@subsup{}{n}{\mp@code{L}}\mp@subsup{}{}{\textrm{L}
place }\mp@subsup{}{}{L}\mathrm{ sit-MP.Ipfv-3P1Sbj there.Def
yá yì-Sò-Ẁ wà,
Exist see-Reslt-Ppl.Inan Quot,

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B: On top too, an excellent place for them to settle. When that had taken place, well, he made (=molded) one brick there, he left it on this side. He got up and went, and found his younger brother. When he found his younger brother, he said: it's true, he had seen a place over there, he had seen a place for them to settle over there.
[jìy'́- elsewhere means 'kill' (or 'be noisy'), here it occurs at the end of a chain in a kind of emphatic function; kú-dá: 'around there (discourse-definite)' §4.4.2.1; \(y \grave{-s o ̀}-\grave{W}\) is an L-toned version of y̌̌-Só-Ẁ, participle based on resultative -sô- §14.1.6.5]
\(\mathrm{B}: \quad \varepsilon^{n} r^{n} \dot{\varepsilon} \quad g u ̌ y^{n}=n i ̀\), \(3 \mathrm{SgSbj} \quad \mathrm{say}=\mathrm{and} . \mathrm{DS}\),
[ònjǒ-m kù yà] á sá-Ẁ kù dè,
[younger.sib-AnSg Defalso] 3ReflSgSbj reply.Pfv-Ppl.Inan Def if,
[á \(\quad{ }^{\text {HL }}\) dérè] \(\quad{ }^{\text {L }}\) mà:,
[3ReflSgPoss \({ }^{\text {HL }}\) elder.sib] \({ }^{\mathrm{L}}\) Dat,
[núwn \({ }^{n} y^{n}\) kày] [á dùwó tì =náy \({ }^{n}\) ]
[now Top] [3ReflSgSbj leave Perf=then.SS]
ló-ré-ý wá, [ह́r \({ }^{n} \varepsilon ́ \quad\) mâ:] lèmdè- \(\varnothing\),
go-Hort.Neg.3rd Quot, [3Sg Dat] beg.Pfv-3SgSbj,
ó: wá, [bû: bú nè] [bû: bú nè] [bû: bú nè],
okay Quot, [3PlSbj be while] (repetitions)
[ònjǒ-m kù kálà] [ùsú tùwnô-m]
[younger.sib-AnSg Def also] [day one]
yárá-m̀ yárá-m̀ á yž-Ẁ kù dè,
walk.around-Ipfv [repetition] 3ReflSgSbj go.Pfv-Ppl.Inan Def if,

[3Sg also] [place Def] see.Pfv-3SgSbj,
\(s \varepsilon^{n} \rightarrow\) á tíní- \(\grave{W}^{n}\) kù,
direct.look 3ReflSgSbj look.Pfv-Ppl.Inan Def,
B: When he had spoken, the younger brother for his part replied, to his elder brother: now, he (=elder) should not go away, having left him (=younger) now. He pleaded with him. He (=elder) said, all right. They continued to be there. The younger brother
too, one day, when he was walking around and he came (there), he too saw the place, he had a good look at it.
[sá- 'reply', in context also 'speak up (in a conversation or debate)'; 'to his elder brother' is a postverbal PP, typical of afterthought additions; -Ẁ kù dè §16.1.2, perfective linker \(t^{\prime}\left(\right.\) here in \(\left.t i ̀=n a ́ y{ }^{\prime \prime}\right)\), §15.1.11; QuotImprt negative -ré-ý §10.5.7; bú nè, see end of §15.2.1.2]
```

B: [[á
[[3ReflSgPoss }\mp@subsup{}{}{HL}\mathrm{ elder.sib] }\mp@subsup{}{}{\textrm{L}}\mathrm{ Dat]
á sá-Ẁ kù dè,
3ReflSgSbj reply.Pfv-Ppl.Inan Def if,
[[\varepsilońrr`\varepsilon
[[3SgSbj QuotSbj] truth speak.Ipfv-3Sgs Quot]
[\grave{r n}\mp@subsup{}{}{n}\mp@subsup{}{}{\textrm{L}}\mathrm{ èw-yè }\mp@subsup{}{}{\textrm{L}}\quad\grave{\varepsilon}sú]
[place }\mp@subsup{}{}{\textrm{L}}\mathrm{ sit-MP }\mp@subsup{}{}{\textrm{L}}\mathrm{ good]
[\grave{rr}\mp@subsup{}{n}{\prime}\mp@subsup{}{}{\textrm{L}}\quad\mp@subsup{\varepsilon}{r}{}\mp@subsup{}{}{n}\dot{\varepsilon}
[place }\mp@subsup{}{}{\textrm{L}}3\textrm{SgSbj}\mathrm{ say-Prog-Ppl.Inan Def]
[á má: kálà] íyé yâ: dǒ-Ẁ wà,
[LogoSgSbj QuotSbj also] today there.Def arrive.Pfv-Ppl.Inan Quot,

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yes [Prox.Inan Inst], get.up=and.SS [day one],
[â: yěy] yâ: yè-bà,
[3ReflPl two] there.Def come.Pfv-3P1Sbj

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B: He said to his elder brother: he (=elder) was speaking the truth; the good place for settling, the place that he (=elder) had spoken of; he too (=younger) had arrived there this day. Well, with (=after) that, the two of them got up one day and came there.
[ \(\mathrm{r}^{n} \grave{\jmath}\) è èw-yè (tone-dropped by the following adjective) is probably haplologically elided from \(\grave{\partial r} r^{n} \grave{\text { é éw-yé-yè 'a place to sit (=settle)'; á occurs in this passage both in logophoric }}\) function \(\S 18.2 .1\) (lines \(1,4,6\), the latter plural to include the brother) and to express coindexation of the subject of a nonsubject relative clause with the main-clause subject §18.2.3 (line 2)]
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B: yâ: bû: y\varepsiloń-r\grave{\varepsilon}}\mp@subsup{}{}{\dagger}
there.Def 3P1Sbj come-before,
[[dèrě-m kù] [á NL S\varepsiloń:dè] dùwó-tî:- \varnothing]
[[elder.sib-AnSg Def] [3ReflSgPoss }\mp@subsup{}{}{HL}\mathrm{ marker] leave-Pfv1b-3SgSbj]
kú=\grave{m}\quad[kásárú}\quad\mp@subsup{}{}{HL}nû-m]=\varnothing kú=\grave{m}
Inan=it.is [K HL}\mathrm{ person-AnSg]=it.is Inan=it.is,
[\varepsilońrn}\mp@subsup{n}{}{n
[3SgPoss }\mp@subsup{}{}{HL}\mathrm{ marker Def] there find-Pass-3SgSbj,
[[lǒ-ỳ kù kòyn}] gán-m̀-dó-ý kòy]
[[go-VblN Def Top] put-Ipfv-Neg-1SgSbj Emph]
[\varepsilońrr}\mp@subsup{}{}{n}\varepsilon\mp@code{HL}\mp@subsup{}{\mathrm{ Ś́:}}{|
[3SgPoss }\mp@subsup{}{}{HL}\mathrm{ marker Def] there find-Pass-3SgSbj,
hà: [kú nây}\mp@subsup{}{}{nt}]
well [DiscDef Inst],

```


B: Before they came (=arrived) there, the elder brother left his marker. It's he who is the person of Kasaru (neighborhood). His marker was found there. I won't put (=recount) the going (away). His marker was found there. Well, with that he spoke up: that place, the sky is claimed, the earth is claimed. With that, he recuperated (=went back to) the place.
[-rè 'before' §15.2.1.6; -tî- perfective-1b §10.2.1.5; sé:d̀̀ 'marker' denotes a sign that lays claim to land; \(\grave{m}^{b}\) àyô: is a semantically obscure word (cf. \(\grave{m}^{b}\) á far-distant demonstrative) used in the context of claiming land]


B: They (=two brothers) went and gathered up their baggage over there (at Yuli). They got up, well, they came and built a house. They built a house and were (living) there.
Snakes were plentiful (there). Vipers, vipers (Echis spp.) were plentiful (there). If it (=viper) bites, there is no antidote. Hey, there is no way for that (place) to be suitable.
['overflow' is commonly used in the sense 'be/do a lot', §8.6.2; nì:-[tègìr-î:] 'antivenin, antidote (for snakebite)' is a somewhat frozen compound containing nî: 'water, liquid' and the verbal noun of tégirí' 'revive, breathe life back into (sb on the brink of death)']
\begin{tabular}{|c|c|c|c|c|}
\hline B: [kú & yà] & [â: & \({ }^{L}\) mà:] & \\
\hline [Inan & also] & [LogolP1 & \({ }^{\text {L }}\) QuotSbj] & \\
\hline dá:-wó & dòró & ̀̀gú-dá: & ùrò-ḿ & bá, \\
\hline a.little & move.over & this.way & go.up-Hort & Quot, \\
\hline [kú & \({ }^{\text {HL }}\) Wáyàtù & [kú & nây \({ }^{\text {n }}\), & \\
\hline [DiscDef & \({ }^{\text {HL }}\) time] & [Inan & Inst] & \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|c|c|c|}
\hline \(\left[\left[\grave{\grave{r a}}{ }^{n} \grave{j}^{\text {L }}\right.\right.\) & ŋ̀gú & & \({ }^{\text {HL }}\) náyànà:] [kùn & \multicolumn{2}{|l|}{[kùn-tàwrâ:] = ¢ sóy,} \\
\hline [[place \({ }^{\text {L }}\) & \multicolumn{2}{|l|}{Prox.Inan] \({ }^{\text {H }}\)} & \(\mathrm{HL}_{\text {entirely }}\) [rock & shelf] & \\
\hline sùmǒy & \multicolumn{2}{|r|}{ŋ̀gó- \(\varnothing\),} & & & \\
\hline land & \multicolumn{3}{|c|}{not.be-3SgSbj,} & & \\
\hline hà: [ & [kú & nây \({ }^{n}\) ] & [[kùn-tàwrá & kù] & wó], \\
\hline well [ & [Inan & Inst] & [rocky.shelf & Def] & in], \\
\hline \(y \varepsilon ̌=\check{n}\) & & yâ: & úrò & \multicolumn{2}{|l|}{\(c \varepsilon W^{n} \dot{\varepsilon}\)-bà,} \\
\hline come \(=\) an & nd.SS & there & e.Def house & & PlSbj \\
\hline \(c \underline{\varepsilon} W^{n} \dot{\varepsilon}=n\) & & bû: & bú & & \\
\hline build=an & nd.SS & 3P1Sb & Sbj be & & \\
\hline
\end{tabular}

B: That being the case, (they) said: let's move up a little this way (to the rocky shelf above the ravine). At that time, then, this whole area was just a flat rocky shelf. There was no soil. Well, at that time, they came and built a house there on the shelf. They built (it) and they were (living) there.
[logophoric plural including singular speaker and an addressee; nánànà: 'entirety' (possessed form) and sóy 'entirely’, §8.6.7.5]


B: (They) said: there too, well, necessarily, if they haven't performed the sacrifice, if they haven't performed the sacrifice, settling in that place is difficult (=dangerous).
Well, it went on like that. The one of (=from) Oduro (neighborhood) (=younger brother) spoke to the one from Kasaru (=elder brother).
[péyí pégé 'implant a post' here denotes a sacrificial ritual, described below; éw-yé 'sit' here functions as a noun and takes possessed-noun \(\{\mathrm{HL}\}\) tone overlay; \({ }^{\mathrm{L}}\) wò for [kú wó] 'in that' or the like; compound with 'owner' §5.1.7]

séllé-só-m̀,
be.healthy-Reslt-3SgSbj,

[á má:] [[péyí kù] \({ }^{\text {HL } d u ̂:] ~}\)
[3ReflSg QuotSbj] [[post Det] \({ }^{\mathrm{HL}}\) load]
dǔ-ĵ̂: wà,
carry.on.head-RecPf-3SgSbj Quot,
B: (Younger brother said:) He (=elder) [focus] would perform the sacrifice, because after (=since) he (=older) was the first to claim the place, he (=elder) [focus] would perform the sacrifice; a young woman whose breasts are fully going out (=developed), she was healthy. (Elder brother said:) well, now, that being the case, he (=elder) bore the burden (=responsibility) of performing the sacrifice.
[subject focus construction with invariant 3 Sg subject -ì̀ §13.1.1; sábù 'because' \(\S 17.5 .2 .1\); possessor relative 'a young woman whose ...', this passage discussed in §14.4; [ \(X^{\mathrm{HL}}\) túlù \({ }^{\mathrm{L}}{ }_{W o ̀}{ }^{\text {] 'after } \mathrm{X}^{\prime} \text { §8.4.8] }}\)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & [dǔ-jê & & & wà] & \(\varepsilon r^{n} \varepsilon\) & \(g u \check{y y}{ }^{n}=n \grave{\text { a }}\), \\
\hline & [carry & head & -RecPf & Quot] & 3 SgSbj & say=and.DS, \\
\hline [ & \(\grave{u}^{\text {L }}\) & díynà & [ánày \({ }^{n}\) & \({ }^{\text {L }}\) wò] & \(b e ̌:-r\) è- \(\varnothing\) & \\
\hline & erson \({ }^{\text {L }}\) & big.Pl] & [thus & \({ }^{\text {Lin] }}\) & rem & -3SgSbj \\
\hline
\end{tabular}
\(\left[\begin{array}{ll}{[j i ̀ y ̀ ̀} & =\text { ná }^{n} \\ & n i ̀]\end{array}\right.\) pégé \(-\grave{m}-n-\varepsilon ́ \quad\) wá kǒy \({ }^{\dagger}\),
\(\left[\right.\) kill \(^{\text {L }}=\) then.SS (?)] implant-Ipfv-Neg.3PlSbj Quot Emph,
[úw \({ }^{n}\) ó \({ }^{\mathrm{HL}}\) Wó] [ór \({ }^{n}\) ò gànjí-yè] wà
[life \({ }^{\text {HL }}\) in] [place put.Ipfv-3PlSbj] Quot
[hâl ló \(W^{n}\) ònù- \(\left.r^{n} u ́-m ̀ ̀\right]\) bà,
[until go deep-Inch.Ipfv-3SgSbj] Quot,
\(\varepsilon^{n} r^{n} \dot{\varepsilon}=n i ̀ \quad\) yâ: \(\quad g a^{n}-y^{n} \grave{\varepsilon} \quad\) wà,
3Sg=Acc there.Def put.Ipfv-3PlSbj Quot,
hâl [ìgú \({ }^{\mathrm{HL}}\) dây \(\left.{ }^{n}\right]\) dó-m̀̀ bà,
until [Prox.Inan HLway] reach.Ipfv-3SgSbj Quot,
bìy \({ }^{n}\) Iúwó-yè wà,
cover.up leave.Ipfv-3P1Sbj Quot,
\(\begin{array}{lllll}\text { [ìsê: } & \text { kù } & { }^{\text {L }} \text { mà:] } & \text { [á } & { }^{\text {HL }} \text { jâm] } \\ \text { [village } & \text { Def } & { }^{\text {L QuotSbj] }} & \text { [3ReflSgPoss } & { }^{\text {HL }}{ }_{\text {well.being] }}\end{array}\)
béré-m̀ bà
get.Ipfv-3SgSbj Quot
C: já:tì
exactly
B: When he said that he would bear (the burden), the old people said: if that was indeed the case, they wouldn't kill (the girl) (first) and then stick her in (the hole); (instead) in life (=while she was alive) they would dig the spot until it (=hole) became deep; they would put her there (=in the hole), until it reached this level, and they would cover (her) up; the village would get its well-being (back).
C: Exactly.
[clause-final nì with no clear grammatical function, §15.1.10]

B: èsú bû:- \(\varnothing\) wà, good be-3SgSbj Quot,
 [LogoSgPoss \({ }^{H L}\) father-house Prox.Inan] well.being bì-béré-m̀ dé wôy,
Rdp-get.Ipfv-3SgSbj if all,
[á kálà] [[kú kù] \({ }^{\text {HL }}\) kû:-dù:]
\(\left[\begin{array}{lll}\text { LogoSg also] [[Inan } & \text { Def] }{ }^{\text {HL }} \text { head-load] }\end{array}\right.\)
dǔ̆-ĵ̂:
wà,
carry.on.head-RecPf Quot
hà: [ìgú nây \({ }^{n}\) ], ér \({ }^{n}\) é kásárí \({ }^{\text {HL }}\) yá:-yì-m \(k u ̀=\grave{n}^{\dagger}\),
well [Prox.Inan Inst], \(3 \mathrm{Sg} \mathrm{K}{ }^{\mathrm{HL}}\) woman-child-AnSg Def=Acc,
[[yà-sùmǒy \({ }^{n} \quad{ }^{\text {HL }}\) tâ: \(y^{n} \quad\) kù] wó],
\(\left[\begin{array}{lll}{[\mathrm{Y}} & { }^{\mathrm{HL}} \text { shed } & \mathrm{Def}] \\ \text { in }]\end{array}\right.\)
\(y \hat{a}:=\grave{n} \quad\) ह́r \({ }^{n} \dot{\varepsilon} \quad\) pègè-bà
there.Def=Acc 3 SgObj implant.Pfv-3PISbj
C: já:tì
exactly
B: [kú nây \(\left.{ }^{n}=n i ̀\right]^{\uparrow}, \quad\) bé:nì bèré èw-yè- \(\varnothing\),
[Inan Inst=Acc], B get sit-MP.Pfv-3SgSbj,
[íyé \({ }^{\mathrm{HL}}\) úsù kálà] [kú \({ }^{\mathrm{HL}}{ }_{\text {wó }}\) bù̀-ỳ:
[today \({ }^{\text {HL }}\) day also] [Inan \({ }^{H L}\) in] be-1PISbj
C: já:ì̀
exactly
B: He (=older brother) said, fine; if this village of his father would get well-being, he would bear the burden (head-load) of that. After that, she the girl of Kasaru, in the Yasumoy shed, there [focus] they stuck her in.
C: Exactly.
B: It was after that [focus] that Beni was able to be settled. Even today, we are in it.
C: Exactly.
[ \(\mathfrak{y}\) reduced from j̀gú proximal inanimate demonstrative, §4.4.1; reduplicated imperfective §10.2.2.2; accusative \(=\grave{n}\) with direct object, then again with focused yâ: 'there' §8.2; bèré 'get' as nonfinal verb in chain means something like 'acquire (the means) to ...']

B: [ìgú gây \({ }^{n} \rightarrow\) nù̀-ỳn, [kú yà]
[Prox.Inan like] hear.Pfv-1 SgSbj , [Inan also]
[jīnjè \(\quad{ }^{\mathrm{L}}\) sàw] \(=\varnothing\) dé:] [ú \(\quad\) kálà] \(\quad\left[u ́ \quad{ }^{\mathrm{HL}}\right.\) sâw] \(=\varnothing\)
[God \({ }^{\text {L trust] }}=\mathrm{it}\). is if \(] \quad\left[2 \mathrm{Sg}\right.\) also] [2SgPoss \({ }^{\mathrm{HL}}\) trust] \(]=\) it.is

[[God Almighty] \({ }^{\text {HL }}\) trust.] \(=\) it.is, thus \(=\) it.is
B: nâ:m
yes
C: jǐnjè î: sú:rè-y
God 1PlObj preserve-QuotImprt
B: àmî:n
amen

D: [á
ná:- \(W^{n i ̀-y}{ }^{n}\)
kù] \(g \check{u}^{n}-\grave{W}^{n}\)
[LogoSgObj spend.night-Caus-QuotImprt Def] say.Pfv-Ppl.Inan
C: \(\grave{j}^{n} h \grave{o}^{n}\),
uh-huh, LogoSgObj spend.night-,
[á ná:- \(\left.W^{n} \grave{i}-\grave{y}^{n}\right]\)
[LogoSgObj spend.night-Caus-QuotImprt]
ह́r \({ }^{n} \dot{\varepsilon} \quad g \check{u}^{n}-\grave{W}^{n} \quad k u ̀\)
3SgSbj say.Pfv-Ppl.Inan Def
B : é: kú ǎy dò-bò
yes Inan take burn.Pfv-3P1Sbj
C : háyà, [á ná:- \(W^{n i} 1-\grave{y}^{n}\) ]
well, [LogoSgObj spend.night-Caus-QuotImprt]
ह́r \(r^{n} \dot{\varepsilon} \quad g \check{n}^{n}-\grave{W}^{n} \quad k u ̀\)
3 SgSbj say.Pfv-Ppl.Inan Def
B: já:tì exactly
C : háyà, kú \(\quad k u ́=i ̀ m\)
well, Inan Inan=it.is
B: já:tì
exactly
B: I learned (it) like this. That too, it is entrusted to God (and) it is entrusted to you-Sg.
\(C\) : It is entrusted to great God. It is thus.
B: Yes.
C: May God preserve us.
B: Amen.
\(D\) : She told them to visit her (i.e. pay respects at her burial site).
\(C\) : Uh-huh, the fact that she asked them to greet her.
B: Yes, they took and burned it.
\(C\) : Well, the fact that she asked them to greet her.
B: Exactly.
C: Well, that is it.
B: Exactly.
['burned (=roasted) it' may refer to a later animal sacrifice; QuotImprt -ỳ §10.5.7; verb ná:- \(W^{n} 1\) '- is morphologically the causative of ná:- 'spend the night', but its normal sense is 'say good-morning to, greet (sb) in the morning', and by extension 'pay respects to (deceased person)', i.e. at their burial location, perhaps annually]
(678)

C: [tù \({ }^{n} \hat{\jmath}-m \quad k u ̀ \quad{ }^{\text {L }}\) mà: \(\left.{ }^{\dagger}\right]\) [one-AnSg Def \({ }^{\text {L }}\) QuotSbj]
[ú yì:-rà-ホ̀ \({ }^{\mathrm{L}}\) ŋ̀gú]
[2SgSbj see-Prog-Ppl.Inan \({ }^{\text {L }}\) Prox.Inan]
[kú tégé-ì kù \({ }^{\text {L mà:] }}\)
[Inan speak.Pfv-Ppl.AnSg Def \({ }^{\text {L }}\) QuotSbj]
B: wó:dì
yes
\(\mathrm{C}:\) jòngú-m̀ \(=\varnothing \quad\) bà
heal.Agent-AnSg=it.is Quot

B: jòngú-ı̀ \(=\varnothing\)
heal.Agent- \(\mathrm{AnSg}=\mathrm{it}\).is
C: jòngú-m
heal.Agent-AnSg
B: wó:dì
yes
C: One person, this (thing) that you-Sg see, the one who (had) said that.
B: Yes.
C: He said, he was a healer.
B: He was a healer.
\(C\) : A healer.
B: Yes.
[jòngú-m 'healer', uncompounded agentive §4.2.4]
\(\mathrm{C}:\left[\varepsilon ́ r^{n} \dot{\varepsilon}=\grave{m}=n i ̀\right] \quad\) kárá:kíndế: \(\quad k u ́=\grave{m}\)
\([3 \mathrm{Sg}=\mathrm{Foc}=\mathrm{Acc}] \quad \mathrm{K} \quad\) Inan=it.is

B: kárá:kìrí: kú=ì, \(\varepsilon r^{n} \dot{\varepsilon}=\grave{m}\) jòngú-ı̀̀ = \(\varnothing\) \(\mathrm{K} \quad\) Inan=it.is, \(3 \mathrm{Sg}=\mathrm{Foc}\) healer- \(\mathrm{AnSg}=\) it.is
C : é \(\rightarrow\) yes
B: wó:dì, wó:dì yes, yes
C : àm \({ }^{b}\) á kù \(\quad\) yà-sùmǒy \({ }^{n}=\grave{m}\), FarDist.Sg Def \(\quad \mathrm{Y}=\mathrm{it}\). is
háyà [yǎr kóró:-rè- \(\varnothing\) tán]
well [sky dry.up-Pfv1a-3SgSbj if]
[á ná:- \(W^{n} 1 \grave{1} \grave{y}^{n}\) ] wà
[LogoSgObj spend.night-Caus-QuotImprt] Quot
B: wó:dì
yes
C: It's he [focus] who was Karakinde [name].
B: Karakiri, that was it, it's he [focus] who was the healer.
C: Yes.
B: Yes, yes.
C: The other one was Yasumoy. She (=girl) had said (before being buried): as soon as the rains ended (=after the harvest), they should greet (=pay respects to) her.
B: Yes.
[ \(\varepsilon^{n} r^{n} \dot{\varepsilon}=\grave{m}=n i ̀ ~ w i t h ~ f o c u s ~=~ \grave{m}\) plus, apparently, accusative =nì in focalizing function; focalized subject (topic) of 'it is' predicate, end of §13.1.1; yàrú 'sky (esp. cloudy, rainy weather)' occurs in collocations denoting seasonal transitions, §11.1.4]

\begin{tabular}{lllll} 
[song:] & \begin{tabular}{ll} 
íyé & yà-sùmǒy \\
& úngúró \\
today & Y
\end{tabular} & wá \\
& get.up.Imprt & Quot
\end{tabular}

B: já:tì
C: Because of that (request) that they greet her, today if (the time for) that matter (=paying respects) has come. What is that?
[song] Today, Yasumoy, get up!
B: Exactly.
[this song fragment and the following longer song excerpt are in Jamsay; the final quotative wá, here and below, is arguably external to the song proper]
(681) C :
[song:] kárá:kìndé: úngúró wá,
[yá yă:-ỳ] [yá yèré-ỳ]
kárá:kìndé: úறgúró wá
yà-sùmǒy \({ }^{n}\) hà:hây wà
yà-sùmǒy \({ }^{n}\) hà:hây
pùlò-kòmó lè: [bǒn lè] sá: kómò wà
C:
[song] Karakinde, get up!
We are going, we are coming.
Karakinde, get up!
Yasumoy, hah-hey!
Yasumoy, hah-hey!
In the war of the Fulbe, the reply is by tomtoms.
\(\mathrm{B}:\) já:tì, té \(\rightarrow \quad\) ánà \(y^{n}=\grave{m}\) kòy,
exactly, exactly thus=it.is Emph,

[[Prox.Inan like exactly] hear.Pfv-1PISbj]
\(\left[\begin{array}{llll}{\left[n u ̀{ }^{\mathrm{L}}\right.} & d i ́ y \\ & \text { à } & k u ̀\end{array} \mathrm{HL}^{\mathrm{HL}} \mathrm{m}^{b} \hat{o}:\right] \quad k u ́=i ̀ ̀\)
[[person \({ }^{\text {L }}\) big.Pl Def] \({ }^{\text {HL }}\) mouth] Inan=Acc
\(\mathrm{C}:\) [ŋ̀gú gây \({ }^{n} \rightarrow\) ] gìy \({ }^{n}\)-bò
[Prox.Inan like] say.Pfv-3P1Sbj
B: ìnšá:lâ:W Ér \({ }^{n} \dot{\varepsilon} \quad\) jìyغ̀-ń \(\quad\left[n u ́ w^{n} \grave{m} y^{n}\right.\) kày]
if.God.wills 3 SgSbj kill \({ }^{\mathrm{L}}\)-Hort [now Top]
 matter \(^{\mathrm{L}}\) short-Inan, matter \(^{\mathrm{L}}\) short-Inan
B: nâ:m
yes
B: Exactly. It's just like that. We heard (it) just like that, (from) the mouth(s) of the old people.
C: They said (it) like that.
B: If God wills, let him (=the linguist) kill (i.e. turn off the tape recorder) now.
\(D\) : A short matter, a short matter.
B: Yes.
[kú= ǹ might alternatively be analysed as definite and bracketed with the preceding NP; já:tì and té \(\rightarrow\) are both glossed 'exactly' but já:tì is often a one-word utterance that confirms the truth of another speaker's statement, while té \(\rightarrow\) emphasizes the preciseness
of an identity, measure, etc., and may co-occur with the relevant NP, §8.6.3.3; hortative -m with third-person subject §10.5.6]
(683)
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & [mégé & gé & , & kù] dòq́ & \(\varepsilon \varepsilon^{n}{ }^{n}=n \grave{1}\) \\
\hline & [more & more & [woman-An & Def] abject & \(3 \mathrm{Sg}=\mathrm{Ac}\) \\
\hline L & kà: \({ }^{\text {] }}\) & tággú-ẁ] & & [yà-sùmǒy \({ }^{n}\) & kù], \\
\hline [way \({ }^{\text {L }}\) & Rel] & bec & -Ppl.Inan] & [Y & Def] \\
\hline
\end{tabular}

B: wó:dì
yes
D: áywà, nǔ-m yâ: nú:-rè- \(\varnothing\) dè, yes, person-AnSg there go.in-Pfv1a-3SgSbj if, [àwá kù] kùwò-[jìy-î:], [snake Def] bite \({ }^{\mathrm{L}}\)-[kill-VblN], kú núm-dó:-rè- \(\varnothing\) nì Inan difficult-Inch-Pfv1a-3SgSbj (?)
B: wó:dì yes
D: Well, the way the woman came to be more abject, (namely) Yasumoy.
B: Yes.
D: Well, if a person goes in there (=Beni), the snake's biting and killing, that (=living) became difficult (=intolerable).
B: Yes.
[dう̀̀ó denotes an impoverished (abject, miserable) and socially very low status; kùwò-[jiy-î:] consists of the simple verbal noun jìy-î: 'killing' with a preceding chained verb stem kúwó- 'bite' in \(\{\mathrm{L}\}\)-toned compound initial form, see §15.1.1; núm-dó- 'become difficult/expensive' is pronounced [númndó] or even [númn \({ }^{\text {dó] }}\); another case of clause-final nì with no clear function, §15.1.10]
(684)


D: Well, it's true, they (=you) say that the village belongs to them; it was they who reserved (=first claimed it); again, they in the villages, they aren't performing the sacrifice now; (therefore) the snakes are biting and killing people; various things (snakes etc.) are wearing (the) people out; they (=people from other villages) are mocking (them); if they go to a pond (to draw water), they (=others) are constantly mocking (them); they (=others) are mocking (them) at the grain-pounding place (at the edge of the village); they are constantly making a hubbub (=gossiping).
[This passage is from the point of view of visitors, complaining to the local people (at the time) about the latters' failure to make a sacrifice; -m nè clause (with 'laugh/mock'), \(\S 15.2 .1 .2\); perfective ló-mà 'they went' \(\S 10.2 .1 .2\); the 'pounding place' is a spot at the edge of the village where women congregate to pound millet grain spikes with oversized mortars and pestles]
\(\mathrm{D}:\left[k u ́ \quad\right.\) nây \(\left.{ }^{n}\right]=n i ̀ \quad\) [[á \(\left.\quad{ }^{\mathrm{HL}} b \hat{\text { ô: }}\right] \quad{ }^{\mathrm{L}}\) mà::]
\(\left[\begin{array}{llll}\text { DiscDef } & \text { Inst] } & =\text { Acc } & \text { [[3ReflSgPoss } \\ { }^{H L} & \text { father] }\end{array}{ }^{\mathrm{L}}\right.\) Dat]
dò \(\gamma \hat{0}:=\varnothing \quad\) gà \(]\)
abjectness \(=\) it.is Emph
 [[LogoSgPoss \({ }^{\mathrm{HL}}\) head] \({ }^{\mathrm{L}}\) in] implant-QuotImprt Quot, yǎr gǒ:-rغ̀- \(\varnothing\) dé wôy,
sky go.out-Pfv1-3SgSbj if all,
[[á \({ }^{\text {HL }}\) tíwè kù] yò-ý wá]
[[LogoSgPoss \({ }^{\mathrm{HL}}\) death Def] weep-QuotImprt Quot]
[ìré-ré-ý wá],
[forget-NegImprt-QuotImprt Quot]
[ह́r \({ }^{n} \dot{\varepsilon}\) má:] ánày \({ }^{n}\) gùy \({ }^{n}\) wà \({ }\),
[3Sg QuotSbj] thus say.Pfv Quot,
B: já:tì já:tì pá:mé- \(W^{n} u ́-\grave{W}^{n}\),
exactly exactly understand-Pass.Pfv-3SgSbj,
\(t e ́ \rightarrow \quad\) ápày \({ }^{n}\) sèllè- \(\varnothing\),
exactly thus be.healthy.Pfv-3SgSbj

[now Top] 3SgSbj kill proceed-Hort
\(\mathrm{D}: k u ́=\grave{m}\)
Inan=it.is
D: It was in that (situation) that she (=girl) said to her father, it's an abject situation; they should implant her on her head (=bury her alive as a sacrifice); (later) when the rainy season was over, they should weep for her death; they must not forget. She said (=spoke) like that.
B: Exactly, exactly. It (=what you say) has been understood, it is healthy (=valid) exactly like that. Now, let him (=the linguist) proceed to turn it off.
D: That is it.
[jùwn' 'do first' in a chain with the sense 'proceed to' §15.1.13]

\section*{Abbreviations and symbols}
\begin{tabular}{|c|c|c|}
\hline \multicolumn{2}{|l|}{Abbreviations} & \begin{tabular}{l}
Hort \\
Imprt
\end{tabular} \\
\hline & & Inan \\
\hline Acc & accusative (in 1 SgAcc ), §6.7) & Inch \\
\hline Adj & adjective & Inst \\
\hline Agent & agentive nominal & Ipfv \\
\hline An & animate & Iter \\
\hline ATR & advanced tongue root (vowel feature) & L \\
\hline BenT & Ben Tey language & Loc \\
\hline C & consonant (in e.g. CvCv ) & Logo \\
\hline Caus & causative, §9.2 & MP \\
\hline Char & characteristic (nominal derivative) & \[
\begin{aligned}
& \mathrm{N} \\
& (\mathrm{n})
\end{aligned}
\] \\
\hline Dat & dative, §8.3 & \\
\hline Def & definite, §4.4.3 & Neg \\
\hline Dem & demonstrative & Nom \\
\hline \multirow[t]{2}{*}{Det} & determiner (demonstrative & NP \\
\hline & or definite) & Num \\
\hline \multirow[t]{2}{*}{DF} & discourse-functional & Obj \\
\hline & elements & Pass \\
\hline Dimin & diminutive, §4.2.3 & Pf \\
\hline \multirow[t]{2}{*}{DiscDef} & (strong) discourse- & Pfv \\
\hline & definite, §4.4.2 & Pl \\
\hline Dist & distant, in NearDist and FarDist (demonstratives) & Poss \\
\hline DS & different-subject & PP \\
\hline \multirow[t]{2}{*}{EA} & expressive adverbial, & Ppl \\
\hline & §8.4.5 & Pss \\
\hline \multirow[t]{2}{*}{Emph} & emphatic (clause-final & Prog \\
\hline & particle), §19.4 & Pron \\
\hline \multirow[t]{2}{*}{Exist} & existential particle, & Prox \\
\hline & §11.1.1.1 & Proh \\
\hline \multirow[t]{2}{*}{ExpPrf} & experiential perfect, & Purp \\
\hline & §10.1.1.4 & Q \\
\hline \multirow[t]{3}{*}{Fact} & factitive ('cause to & QTop \\
\hline & become' with adjective), & \\
\hline & §9.5 & Quot \\
\hline Foc & focus & QuotSbj \\
\hline Fut & (delayed) future, §10.2.2.4 & \\
\hline H & high (tone) & Rdp \\
\hline
\end{tabular}
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logophoric
mediopassive
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noun (in interlinearl
glosses)
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numeral
object
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perfective
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quotative subject particle, §17.1.4
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\hline Refl & reflexive, §18.1 & & §11.2-4 (lexical) \\
\hline Rel & relative clause (verb & Top & topic \\
\hline & participle) & Tr & transitive, §9.3 \\
\hline Rev & reversive (verb derivation, §9.1 & & (derivational suffix), §10.1.3.1 (děn) \\
\hline Sbj & subject (in e.g. & V & verb (in e.g. S-O-V) \\
\hline & "2PlSbjbj") & (v) & verb (as part of a gloss) \\
\hline SFoc & subject-focus & v & vowel (in e.g. CvCv ) \\
\hline Sg & singular & VblN & verbal noun \\
\hline SS & same subject (subordinator) & VP & verb phrase \\
\hline
\end{tabular}

\section*{Symbols}
\begin{tabular}{|c|c|}
\hline * & reconstructed \\
\hline \# & ungrammatical, unacceptable, unattested \\
\hline á, à, â, ǎ, â & tones on vowels (or syllables), §3.7 \\
\hline \(\overline{\mathrm{x}}\), x̀, x́, \(\hat{\mathrm{x}}^{\text {, }}{ }^{\mathrm{x}}\) & tone changes on stem in compounds, chapter 5 \\
\hline <...> & \begin{tabular}{l}
a) contour tones on a single syllable, e.g. \(<\mathrm{HL}>\) and \(<\mathrm{LH}>\) \\
b) false starts in texts (omitted from translations), e.g. (665)
\end{tabular} \\
\hline /.../ & \begin{tabular}{l}
a) lexical tone melody, e.g. /LH/, /H/ \\
b) underlying or lexical representation, e.g. /gàrá/
\end{tabular} \\
\hline \(\{\ldots\}\) & \begin{tabular}{l}
a) tone overlay, e.g. \(\{\mathrm{HL}\},\{\mathrm{H}\},\{\mathrm{L}\}\) \\
b) enclosing any set, e.g. \(\left\{\begin{array}{l}u \\ a\end{array}\right\}\)
\end{tabular} \\
\hline [...] & a) phonetic (IPA) representation, e.g. [bǔ:] downstep \\
\hline [...] \({ }^{\text {L }}\) & \(\{\mathrm{L}\}\) tone overlay controlled by an element to the right, §6.1.4 \\
\hline ...] \({ }^{\text {L+H }}\) & like preceding but with extra H-tone on final syllable/mora \\
\hline [...], \({ }^{\text {H }}\) [...] & \(\{\mathrm{H}\}\) or \(\{\mathrm{HL}\}\) tone overlay controlled by a possessor to the left, §6.2.1 \\
\hline [...] & \(\{\mathrm{L}\}\) on demonstrative or numeral in certain combinations, §3.7.3.5, §4.6.1.4 \\
\hline \(\rightarrow\) & "intonational" prolongation of final vowel or sonorant, §3.8.3 \\
\hline \(\therefore\) & dying-quail terminal intonation effect, §3.8.4 \\
\hline \(=\) & clitic boundary, §3.6 \\
\hline \& & conjunction (in interlinears, e.g. X.\& Y.\& ' X and Y ') \\
\hline
\end{tabular}

\section*{Index}
sections:
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2) Ben Tey morphemes
3) grammatical terms

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[^0]:    a. íyé dùw 0 ó:-rà = rá- $\varnothing$
    today leave-Prog=StatNeg-3SgSbj
    'Nowadays it (=water) doesn't cease (=run out).' [2005.1a.04]

[^1]:    a. with gǎyn 'put'
    sé:njè: gǎy ${ }^{n} \quad$ 'tell a story (tale)'
    álbàtárà gǎy ${ }^{n} \quad$ 'tell a riddle'

[^2]:    a. ú ${ }^{\mathrm{HL}}$ [nâ: bàr ${ }^{n a ̀}$ kùròy] bû: 2SgPoss ${ }^{H L}$ [cow.AnPl red.Pl six] Def.AnPl 'your-Sg six brown cows'
    b. ú ${ }^{\mathrm{HL}}$ [nâ: bàrnà kùròy]

    2SgPoss ${ }^{\mathrm{HL}}$ [cow.AnPl red.Pl six]
    í $\varepsilon$ ह́Wé-mà bû:
    1 SgSbj buy.Pfv-Ppl.AnPl Def.AnPl
    'your-Sg six brown cows that I bought'
    not:
    

    | d. | [[ù | lèsù $]^{\text {L }}$ | mòsí-yè] | pèrù $]^{\text {L }}$ |
    | :---: | :---: | :---: | :---: | :---: |
    | or: | [ù | lèsù | mòsì-yè | pèrù ${ }^{\text {L }}$ |
    |  | [2SgPoss | uncle | bad-Pl | ten] |
    |  | í | súyó-mà | kù |  |
    |  | 1SgObj | hit.Pfv-P | AnPl |  |
    |  | 'your-Sg ten bad (nasty) uncles who hit-Past me' |  |  |  |

    

    ### 14.1.2 Restrictions on the head noun in a relative clause

    A pronoun may not function directly as internal head of a relative. Instead, it is preposed to the clause, its place as internal head within the clause taken by tone-dropped nù ' 'person'.

    | ú | [nù $^{\mathrm{L}}$ | yàyá-Só-ì̀ | kù] |
    | :--- | :--- | :--- | :--- |
    | 2 SgSbj | [person $^{\mathrm{L}}$ | fall-Reslt-AnSg | Def] |

    'you-Sg who fell' (lit. "you-Sg, the person who fell")
    'I, whom you see (here)' is expressed by a construction that could be parsed literally as 'I, this (thing) that you see', with the participle pointing to an implicit inanimate rather than animate singular head noun; see ú yì:-rà-ฟ̀ ŋ̀gú $\rightarrow$ in C's first turns in (660) and (664) in the sample text.

    ### 14.1.3 Relative clause with conjoined NP as head

    Conjoined NPs are uncommon as heads of relative clauses, since the preferred construction is parallel relative clauses ('the boys who swim and the girls who swim'). However, conjoined NPs are possible as relative heads. In my limited data, the conjoined NP keeps its regular prosody, i.e. it is not tone-dropped under the influence of the relative-clause participle. In other words, conjoined NPs behave as tonosyntactic islands, impervious to syntactically controlled prosodic processes.
    (428) is an elicited example involving $b e \rightarrow$ as conjunctive particle (§7.1.2).

    | [ ${ }^{\text {ár }}{ }^{n}$ à | $b e ̀ \rightarrow]$ | [yă: | $b e ́ \rightarrow$ ] |
    | :---: | :---: | :---: | :---: |
    | [[man.AnPl | 1 and] | [woman.AnPl | and] |
    | jáy | jàyá-mà | kù] |  |
    | fight(n) | fight.Pfv- | pl.AnPl Def] |  |
    | án-dá: $\quad b-\varepsilon \grave{c}^{n}{ }^{n}$ |  |  |  |
    | where? be-3PlSbj |  |  |  |
    | 'Where are | [the men and | omen] who qua |  |

    A similar example with $y a \rightarrow$ as the conjunctive particle is in lines 5-6 of (665) in the sample text.

    ### 14.1.4 Headless relative clause

    Headless relatives are not typical when the referent is a person, animal, or object. Even when referentially vague (e.g. 'anyone who ...'), a semantically light noun such as nù ${ }^{L}$ 'a person (who ...)' or kò: ${ }^{\mathrm{L}}$ 'a thing (that ...)' is most often present. However, especially when the (potential) head NP is a semantically light noun meaning something like 'time', 'place', or 'manner', it may be omitted, resulting in a headless relative that functions as a spatiotemporal or manner clause. The omitted head NP may be even more abstract than these glosses suggest (e.g. 'situation'). For examples and discussion, see §15.2.4.

    ### 14.1.5 Preparticipial subject pronominal in nonsubject relative clause

    (429), to be read vertically from top to bottom, shows preparticipial subject pronominals in the second row. They have their usual independent form. They immediately precede the verbparticiple, and are required when the subject of a nonsubject relative is pronominal. The interlinear word glosses are to the right.

    | $\grave{i n j} \grave{\varepsilon}^{\text {L }}$ | $\operatorname{dog}^{\text {L }}$ |
    | :---: | :---: |
    |  | (pronominal subject) |
    | làrú-m̀ | chase.Pfv-Ppl.AnSg |
    | kù | Def |
    | 'the dog that I/we/you-Sg/you | ey/LogoSg/LogoPl |

    Examples occur throughout this chapter, for example in the object relatives in $\S 14.3$ below.

    ### 14.1.6 Participialized verb in relative clause

    Relative clauses have participles instead of regular verbs inflected for pronominal subject category. In a relative, the participle agrees in number and animacy with the head noun, not the subject. The categories are therefore (animate) singular, (animate) plural, and inanimate. The morphology of the suffixes will now be described.

    ### 14.1.6.1 Participles of unsuffixed perfective verbs (-m, - mà, $-\grave{W}$ )

    In the perfective positive, the bare stem (segmentally equivalent to the unsuffixed perfective, but with lexical tones) is directly followed by the participial suffixes. The suffixally marked perfectives (perfective- $1 \mathrm{a} / 1 \mathrm{~b}$, resultative) do not normally occur with participial suffixes. For the occasional participle based on other suffixally marked categories from the perfective positive system (recent perfect, experiential perfect), see $\S 14.1 .6 .5$, below.

    The stem has its lexical vocalism and tone (e.g. bisyllabic H.H or L.H). In particular, it does not drop tones as does the unsuffixed perfective in main clauses (where this stem expresses defocalization). Thus yàyá- 'fall' and tíwé- 'die' have their regular lexical forms in such perfective participles as (animate) singular yà yá-m̀ and tíwé-m̀.

    The perfective participial suffixes are in (430). (Animate) singular $-\grave{m}$ and inanimate $-\grave{W}$ also occur with modifying adjectives, while (animate) plural -mà is idiosyncratic.

    Perfective (positive) participial suffixes (after bare stem)

    | (animate) singular | $-\grave{m}$ |
    | :--- | :--- |
    | (animate) plural | - mà |
    | inanimate | $-\grave{W}$ |

    For $C v$ - verbs with rising tone melody, the rising tone appears in the participles with $-\grave{m}$ and $-\grave{W}$, whose heavy syllables allow expression of $<\mathrm{LHL}>$ tone. Thus, for 'come', yદ̌-m̀ and $y \varepsilon ̌-\grave{W}$. In plural yદ̌-mà, the H-tone element may spill into the first part of the second syllable, in which case a phonetic transcription [jěmâ] approximates its pronunciation.

    Some perfective participle examples are in (431).
    a. ùrò ${ }^{\mathrm{L}}$ yàyá-Ẁ house $^{\mathrm{L}}$ fall.Pfv-Ppl.Inan
    'the house that fell'
    b. ùrò ${ }^{\mathrm{L}} \quad b \hat{u}: \quad d \grave{\text { on}}{ }^{\text {-Ẁ }}$ kù
    house $^{\text {L }}$ 3P1Sbj burn.Pfv-Ppl.Inan Def
    'the house that they burned'
    c. $a_{r} r^{n a}{ }^{\mathrm{L}} \quad$ ló-m̀
    $\operatorname{man}^{\mathrm{L}} \quad$ go.Pfv-Ppl.AnSg
    'the man who went'
    d. yì-tè: ${ }^{\mathrm{L}} \quad$ tíwé-mà
    child. $\mathrm{Pl}^{\mathrm{L}} \quad$ die.Pfv-Ppl.AnPI
    'the children who died'
    The participles ending in $-\grave{W}$ (animate singular) and -mà (animate plural) are indistinguishable from the 3 Sg and 3 Pl forms (respectively) of an alternative unsuffixed perfective form that is common in narrative (§10.2.1.2).

    ### 14.1.6.2 Participles of unsuffixed imperfective $(-m,-\varnothing,-\grave{m},-y \grave{\varepsilon})$

    In relative clauses based on (positive) unsuffixed imperfective verbs, there is a set of participles that are used in subject relatives and optionally in nonsubject relatives. Nonsubject relatives are also attested with a distinct participial construction. We begin with the first, most general type.

    In the unsuffixed imperfective positive, which is optionally reduplicated in the animate participles as it is in the regular inflected form, when the head NP is the subject of its clause, the inanimate participle is identical to the 3 Sg form of the inflected paradigm, with suffix -m̀ (L-toned).

    The animate forms have singular $-m$ and plural zero, in either case with final-syllable H-tone. These forms are typical of agentive nominals (§4.2.4, §5.1.3). For animate plural, an archaic variant -mù is attested, see dìmbì-yí-mù in (655) in the sample text.

    Consistent with this agentive connection, a nonmonosyllabic verb stem shifts its final vowel to $u$ (varying with $i$ in some contexts, notably in the singular after $y$ ) in the two animate participles. Also consistent with agentive morphology is the $\{\mathrm{LH}\}$ tone overlay on animate participles.
    (432) Imperfective (positive) participles
    (primary type, required in subject relatives, optional in others)
    a. agentive nominal form (final vowel shifts to $u,\{\mathrm{LH}\}$ overlay)

    ```
    (animate) aingular -m
    (animate) plural -\varnothing (archaic -mù)
    ```

    b. based directly on unsuffixed imperfective stem inanimate
    -ìm
    In addition, a direct object in the form of a noun without a following determiner or external quantifier takes L-toned form, see (466a-c) in $\S 14.2 .1$ below. This matches the (incorporated-object) $\{\mathrm{L}\}$-toned nominal compound initials that occur with most agentives (§5.1.3). However, in the imperfective participles, the initial reduplication is optionally present. Representative participial paradigms are in (433).

    Ipfv participles

    | gloss | stem | Sg (animate) | Pl (animate) | Inanima |
    | :---: | :---: | :---: | :---: | :---: |
    | 'fall' | yà á- $^{\text {l }}$ | (yì) yàgú-m | (yì) yàgú | yáyá-m̀ |
    | 'go down' | sí-yé- | (sì)sìyí-m | (sì)sì-yú | sí-yé-m̀ |
    | 'go up' | ùró- | (ù-)? ùrú-m $^{\text {a }}$ | (ù-) 2 ùrú | úř́-m̀ |
    | 'hurt' | bármé- | (bì-)bàrmú-m | (bì-)bàrmú | bármé-m̀ |
    | 'shout' | píyé- | (pì)pìyí-m | (pì)pìyú | píyé-m̀ |
    | 'go' | ló- | ( $1 \mathrm{i}-)$ ) $\grave{o}-\mathrm{m}$ | (lì)lǒ: | ló-m̀ |
    | 'come' | yと̌- | (yì) y と̌-m |  | yé-m̀ |
    | 'bring' | $j \varepsilon ̌:-$ | (ji-) $) \mathrm{c}$ - $-m$ |  | jé-m̀ |

    Examples involving subject relatives are in (434). In the interlinear glosses for the participles, I favor syntactic over morphological analysis (see above), so for example the animate imperfective participles are glossed with Ppl (i.e. participle) rather than as agentives.
    a. ùrò ${ }^{\mathrm{L}}$ (yì-)yáyá-m̀
    house $^{\mathrm{L}} \quad$ (Rdp-)fall.Ipfv-Ppl.Inan
    'the house that will fall'
    b. àr $^{n a}{ }^{\mathrm{L}} \quad(\mathrm{li}-) l \check{o}-\mathrm{o}-\mathrm{m}$
    man $^{L}$ (Rdp-)go.Ipfv-Ppl.AnSg
    'the man who will go'
    c. $y i^{\mathrm{L}}$ tìwú-m kù
    child $^{L}$ die.Ipfv-Ppl.AnSg Def
    'the child who will die'
    d. $y i^{\mathrm{L}}$ yàgú-m kù
    child $^{\mathrm{L}}$ fall.Ipfv-Ppl.AnSg Def
    'the child who will fall'
    e. yìtet: ${ }^{\mathrm{L}}$ (tì)tìwú
    child.P1 (Rdp-)die.Ipfv.Ppl.AnPI
    'the children who will die'
    

    The same participles are also used in nonsubject relatives. The object relatives below have participles agreeing with object head NPs that are, respectively, inanimate (435a), animate singular (435b), and animate plural (435c). The participles belong to the type described and exemplified above for subject relatives. (435d) is a textual example with inanimate head.
    
    b. $p \grave{r} \hat{\varepsilon}^{\mathrm{L}} \quad \hat{i}: \quad \quad \grave{\varepsilon} W^{n} u ́-m$
    sheep $^{\mathrm{L}} \quad 1 \mathrm{PlSbj}$ slaughter.Ipfv-Ppl.AnSg
    'the sheep-Sg that we will slaughter'
    c. $p \grave{\varepsilon} \hat{\varepsilon}^{\mathrm{L}} \quad \hat{i}: \quad \quad$ 文W ${ }^{n} u ́$
    sheep ${ }^{\mathrm{L}} \quad$ 1PlSbj slaughter.Ipfv.Ppl.AnPl
    'the sheep-Pl that we will slaughter'
    d. [[tòy ${ }^{\mathrm{L}}$ mă:] òr ${ }^{n} \grave{o}^{\mathrm{L}}$ ú tó-m̀ $] \quad{ }^{\mathrm{L}}$ dày ${ }^{n}$ [[sowing ${ }^{\mathrm{L}}$ dry] place ${ }^{\mathrm{L}} 2 \mathrm{SgSbj}$ sow.Ipfv-Ppl.Inan] ${ }^{\mathrm{L}}$ boundary 'at the boundary of the place (=part of the field) where you are doing the drysowing' [2005.1a.10]

    However, the texts also include examples like (436), where the participle (agreeing with animate plural head NP , not with the 2 Sg subject) has a suffix $-y \varepsilon ̀$ that could be (mis-)parsed as a 3 Pl -subject main-clause imperfective form. In other words, in another context jóró-yè can also mean 'they like/want'.

    ```
    \(\left[\left[\left[n \grave{u}{ }^{\mathrm{L}} \quad \grave{\varepsilon} s i ̀-y \grave{̀}\right]^{\mathrm{L}}\right.\right.\)
    [[[person \({ }^{\mathrm{L}}\) good-Pl] \({ }^{\mathrm{L}}\)
    ú jóró-yè] \(\quad{ }^{\mathrm{L}}\) mà:] ní- \(\grave{W}^{n}\)
    2 SgSbj like.Ipfv-Ppl.AnPI] \({ }^{\mathrm{L}}\) Dat] give.Ipfv-2SgSbj
    ```

    'You-Sg will give (honey) to the good people that you love.' [2005.1a.09]

    The option of using -yè instead of the agentive-like participle described above is limited to animate plural subjects. An example with nonspecific 'they' is (422b) in §13.2.11. Participial -yè is also required in instrumental compounds of the type 'drinking water, water for drinking', phrased as 'water that (they) drink', with understood nonspecific 'they' as subject (not head NP); see §5.1.9 for discussion and examples.

    ### 14.1.6.3 Participles of bù- 'be' and só- 'have'

    Quasi-verbs bù- 'be' and só- 'have' have similar participles (437). They are based on Htoned variants bú- and só-, which also occur after existential yá (§11.2.2.3, §11.5.1).

    Including suffixes, the participles are $<\mathrm{HL}>$-toned. The plural participles are identical segmentally to the corresponding 3Pl inflected forms, which are irregular. Inanimate bú-ẁ is homophonous with bû:- $\varnothing$ 'he/she/it is' (with predicative adjective) and with 3 Pl pronoun bû: 'them', but I transcribe them differently to bring out their morphological structure.

    | category | 'be' | 'have' |
    | :--- | :--- | :--- |
    | singular | $b \hat{u}-m$ | $S \hat{-}-m$ |
    | plural | $b-\hat{\varepsilon} \cdot{ }^{n}$ | $S-\hat{\varepsilon}:^{n}$ |
    | inanimate | $b u ́-\grave{W}$ | $S o ́-\grave{W}$ |

    A participial form of negative sò-ló- 'not have' occurs at the end of C's long turn in (664) in the sample text.

    ### 14.1.6.4 Participles of stative verbs

    Participles can also be formed from statives derived from active verbs. Statives do not distinguish perfective from imperfective, but have morphological affinities to the perfective system, and they use perfective participial suffixes. The participles have $\{H L\}$ tones, as in the 1 Sg form of the unreduplicated stative paradigm (§10.2.1.10) and as in the entire reduplicated stative paradigm (§10.2.1.11). Reduplication itself is absent from the participles.
    a. $\quad t i ̀ W^{n} \dot{\varepsilon} y^{n \mathrm{~L}}$
    à $ク a ́-d a ́: \quad$ íyà-Ẁ
    íyà-Ẁ kù tree ${ }^{\mathrm{L}}$ over.there stand-Ppl.Inan Def
    'the tree that is standing over there.'
    b. nù ${ }^{\text {L àyá-dá: íyà-m kù }}$
    person ${ }^{\mathrm{L}}$ over.there stand.Stat-Ppl.AnSg Def
    'the person who is standing over there.'
    c. nù ${ }^{\mathrm{L}}$ àyá-dá: íyà-mà bû:
    person ${ }^{\mathrm{L}}$ over.there stand.Stat-Ppl.AnPl DefPl
    'the people who are standing over there.'
    14.1.6.5 Participles with positive perfective-system suffix

    As noted above, perfective (positive) participles are normally built on the simple bare stem, rather than on a suffixally characterized form from the perfective system of AN categories. Perfective-1a :-rغ̀- does not occur in participles in my data. Perfective-1b -tî- is attested in a participle (439), but the combination is infrequent.

    | [dògùrù ${ }^{\text {L }}$ | kà: ${ }^{n}$ ] | yěy | bû: | $g a ̌ y^{n}-t u ́-W$ | wôy |
    | :---: | :---: | :---: | :---: | :---: | :---: |
    | [time ${ }^{\text {L }}$ | Rel] | honey | 3PlSbj | put-Pfv1b-Ppl.Inan | all |
    | 'When they (=bees) have made honey, ...' [2005.1a.09] |  |  |  |  |  |

    It was possible to elicit participles including recent perfect $-j \hat{\varepsilon}$ - (440a-c), experiential perfect $-t \hat{a}-(440 \mathrm{~d}-\mathrm{f})$, and resultative - sô- ( $440 \mathrm{~g}-\mathrm{i}$ ). The endings for the recent perfect and experiential perfect are those found in perfective participles (for animates, singular $-m$ and plural -mà ; for inanimates, - $\grave{W}$ ). The resultative likewise has (animate) singular $-m$ (hence $-s \hat{o}-m$ ) and inanimate $-\grave{W}$ (in $-s o ́-\grave{W}$ ), but the (animate) plural is $-s-\hat{\varepsilon} \hat{e}^{n}$, like the 3 Pl inflected form.
    (440) Participles of recent perfect, experiential perfect, resultative

    Recent perfect
    a. nù ${ }^{\mathrm{L}} \quad n \varepsilon \check{y^{n}} \quad n \varepsilon ́-j \hat{\varepsilon}-m$
    person ${ }^{\text {L }}$ meal eat-RecPf-Ppl.AnSg
    'a person who has (already) eaten'
    
    person ${ }^{\mathrm{L}}$ meal eat-RecPf-Ppl.AnP1
    'people who have (already) eaten'
    
    stone ${ }^{\mathrm{L}}$ fall-RecPf-Ppl.Inan
    'a stone that has already fallen'
    Experiential perfect
    d. nù ${ }^{\mathrm{L}}$ ìgú-rù $y \check{u}-t \hat{a}-m$
    person ${ }^{\mathrm{L}}$ here come-ExpPf-Ppl.AnSg
    'a person who has (ever) come here'
    e. nù ${ }^{\mathrm{L}}$ ग̀gú-rù y -̌átá-mà
    person $^{\mathrm{L}}$ here come-ExpPf-Ppl.AnP1
    'people who have (ever) come here'
    f. kùr ${ }^{n}{ }^{\mathrm{L}}$ yà ${ }^{\text {áátá-ì }}$
    stone $^{\mathrm{L}}$ fall-ExpPf-Ppl.Inan
    'a stone that has (ever) fallen'

    Resultative
    g. $n u{ }^{\mathrm{L}}$ sǒ-m ùró-só-m̀
    person $^{\mathrm{L}}$ horse-AnSg go.up-Reslt-Ppl.AnSg
    'a person who has mounted ( $=$ is mounted on) a horse'
    h. nù ${ }^{\mathrm{L}}$ sǒ: ùró-s- $\hat{\varepsilon}:^{n}$
    person ${ }^{\mathrm{L}}$ horse-Pl go.up-Reslt-Ppl.AnPl
    'people who have mounted (= are mounted on) horses'
    i. kò: ${ }^{n \mathrm{~L}}$ sǒ-m ùró-só- $\grave{\text { L }}$
    thing ${ }^{\mathrm{L}}$ horse go.up-Reslt-Ppl.Inan
    'a thing that has mounted (= is mounted on) a horse'

    A preparticipial subject pronoun may intervene between the verb stem and a marked perfective-system suffix participle. In this construction, the "suffix" behaves more like an auxiliary verb (§10.1.1). This is seen with resultative $s \hat{o}-(441 \mathrm{a})$, Experiential perfect tâ(441b), recent perfect $j \hat{\varepsilon}$ - (441c), and perfective-1b tî- (441d). An assistant rejected a similar separation of verb and inflectional suffix/auxiliary in the case of perfective-1a -:rè-.
    a. mò:-nè $y^{n \mathrm{~L}}$
    gǎy ${ }^{n} \quad$ ú
    Só-Ẁ
    kù
    mouth-food $^{\text {L }}$ put 2SgSbj Resit-Ppl.Inan Def
    'the food that you-Sg have put down (there)' [2005.1b.02]
    b. yǐ-tá-yè
    [[kú tû-m]
    $k \grave{:^{n}}{ }^{\mathrm{L}}$ see-ExpPf-3P1Sbj [[InanPoss companion-AnSg] thing ${ }^{\text {L }}$ yǐ bû: tá-ẁ] see 3PISbj ExpPf-Ppl.InanSg] yá bê:- $\varnothing$ Exist be.Past-3SgSbj
    'They have (at some point) seen, there used to be something that they had (at some point) seen of that sort' [2005.1b.01]
    c. nàw ${ }^{n}$ à: ${ }^{\text {L }}$ kúwó ú jé-̀̀ kù meat ${ }^{\mathrm{L}}$ eat.meat 2 SgSbj RecPf-Ppl.Inan Def 'the meat that you-Sg have (just) finished eating'
    d. ùsù ${ }^{\mathrm{L}}$ [sèngû: kù] ǎy
    day ${ }^{\mathrm{L}}$ [waterjar Def] take
    sí-lé ú tí-Ẁ
    go.down-Caus $2 \mathrm{SgSbj} \quad$ Perf1b-Ppl.Inan
    'the day you-Sg took and brought down the waterjar' [adapted from textual example (497)]

    ### 14.1.6.6 Participles with positive imperfective-system suffix

    The progressive suffix :-rà- is attested in participial form, with ordinary nominal suffixes for animates (singular -m, plural zero), and with (adjective-like) - $\grave{W}$ for inanimates.
    a. àr $r^{n}{ }^{\mathrm{L}}$ yòyó:-rà
    bû:
    $\operatorname{man}^{\mathrm{L}}$ run-Prog DefPl
    'the men who run'
    b. àr ${ }^{n a ̀ ~}{ }^{\mathrm{L}}$ yòyó:-rà-m̀ kù
    $\operatorname{man}^{\mathrm{L}}$ run-Prog-AnSg Def
    'the man who runs'
    
    'There are some people who draw it (water) from time to time.' [2005.1a.05]
    d. jáy û: jàyá:-rà-Ẁ kù
    fight(n) 2PlSbj fight-Prog-Ppl.Inan Def
    'when you-Pl have a fight' [2005.1b.05] (headless relative)

    ### 14.1.6.7 Participles of negative verbs

    Perfective negative -rí- occurs in relatives with the paradigm in (443). The stem has the same $\{\mathrm{L}\}$-toned version of the bare stem as before -rí- in its inflected forms. The morphology of the participial suffixes is not transparent. All three participles have falling tone on the suffix complex. Adding a final L-tone element directly to the 3 Pl and $3 \mathrm{Sg} / \mathrm{In}$ an inflected forms would account for the plural and inanimate participles. However, the singular ends in -ì, which could be taken as the regular nominal and adjectival (animate) singular suffix.
    (443) Perfective negative participles

    | (animate) singular | -rú-ŋ̀ |
    | :--- | :--- |
    | (animate) plural | $-r$-â: |
    | inanimate | $-r \hat{1}:$ |

    Examples are in (444).
    a. yì ${ }^{\mathrm{L}}$ yòỳ̀-rú-m̀ kù
    child $^{\mathrm{L}}$ run-PfvNeg-Ppl.AnSg Def
    'the child who did not run' (yí-m)
    b. yì-tè: ${ }^{\mathrm{L}}$ yò̀̀̀-r-â: bû:
    children ${ }^{\mathrm{L}}$ run-PfvNeg-Ppl.AnPl DefPl
    'the children who did not run' (yì-tě:)
    c. kùr ${ }^{n} \grave{u}^{\text {L }}$ yàyà-rî: kù
    stone ${ }^{\mathrm{L}}$ fall-PfvNeg-Ppl.Inan Def
    'the stone that didn't fall' (kúr $\left.{ }^{n} \grave{u}\right)$
    imperfective negative -m̀-dó- has the participial forms in (445). The stem has the same segmental form and tone pattern as in the inflected paradigm. In the participial suffixes, we have the same pattern as with the perfective negative, namely, the plural and inanimate participles are identical to the corresponding inflected forms except that a final L-tone is added at the right edge (hence the final falling tone), while the singular ends in $-m$ (also with falling tone).
    (445) Imperfective negative participles

    | (animate) singular | $-\grave{m}-d o ́-\grave{m}$ | $(<-\grave{m}-d o ́-L-m)$ |
    | :--- | :--- | :--- |
    | (animate) plural | $-\grave{m}-n-\hat{\varepsilon}:$ | $(<-\grave{m}-n-\dot{\varepsilon}-L)$ |
    | inanimate | $-\grave{m}-d-\hat{o}:$ | $(<-\grave{m}-d o ́-L)$ |

    Examples of imperfective negative participles are in (446).
    a. $y i{ }^{\mathrm{L}}$
    уо́чо́-ற̀-dó-m̀
    kù
    child $^{\text {L }} \quad$ run-Ipfv-Neg-Ppl.AnSg Def
    'the child who does not run' (yí-m)
    b. yì-tè: ${ }^{\mathrm{L}}$ yóyó-m̀-n- $\hat{\varepsilon}$ : bû:
    children $^{\mathrm{L}}$ run-Ipfv-Neg-Ppl.AnPl
    DefPl
    'the children who do not run' (yì-tť:)
    c. kùr ${ }^{n} \grave{u}^{\mathrm{L}}$ yáyá-m̀- $d-o ̂$. kù
    stone $^{\mathrm{L}} \quad$ fall-Ipfv-Neg-Ppl.Inan Def
    'the stone that didn't fall' (kúr $\left.{ }^{n} \grave{u}\right)$

    Stative negative clitic = rá-, which is used in stative negative verbs (§10.2.3.4) and with various nominal and adjectival predicates (§11.2.1.4, §11.4.4), has the participial forms in (447). The (animate) plural form is homophonous to the inanimate form, probably by accident (underlying / = râ-à/ versus / = râ-L/ or the like).
    (447) Stative negative participles

    $$
    \begin{array}{ll}
    \text { (animate) singular } & =r a ́-\grave{̀} \\
    \text { (animate) plural } & =r-\hat{a}: \\
    \text { inanimate } & \\
    =r-\hat{a}:
    \end{array}
    $$

    Examples are in (448), cf. inflected stative è $w-y e ̀-w=r a ́-~ \varnothing ~ ' h e / s h e ~ i s ~ n o t ~ s i t t i n g ' . ~$
    (448)
    a. $n \grave{u}^{\mathrm{L}}$
    è $w-y$ è $-W=$ rá - m̀
    person ${ }^{\mathrm{L}}$ sit-MP-Stat=StatNeg-Ppl.AnSg
    'a person who is not sitting'
    b. $n \grave{u}^{\mathrm{L}} \quad$ è $w-y e ̀-w=r$-â:
    person ${ }^{\text {L }}$ sit-MP-Stat=StatNeg-Ppl.AnPl
    'people who are not sitting'
    c. kò: $:^{\mathrm{L}} \quad$ è $w-y$ è- $W=r-a ̂$ :
    thing ${ }^{\text {L }}$ sit-MP-Stat=StatNeg-Ppl.Inan
    'a thing that is not sitting'

    ### 14.1.6.8 Relative-clause participle including past clitic $=b \grave{\varepsilon}$ -

    For regular inflected forms including the past clitic, see $\S 10.4$.1. The participles have the suffix combinations in (449), regardless of the final tone of the preceding verb form. In other words, the participles are all based on the falling-toned variant $=b \hat{\varepsilon}$-. Except for the 3 Pl , the suffixes $(-\grave{m},-\grave{W})$ are those of perfective participles.
    (449) Participles of past $=b \hat{\varepsilon}$ -

    | (animate) singular | $=b \check{\varepsilon}-\grave{m}$ |
    | :--- | :--- |
    | (animate) plural | $=b-a ̆:$ |
    | inanimate | $=b \check{\varepsilon}-\grave{W}$ |

    These suffixes are also used in the negative versions of the participles, since the negation is expressed on the preceding verb form rather than in the past clitic.

    Participles corresponding to the past unsuffixed imperfective, as in bíré bíré-ì̀ $=b \grave{\varepsilon}-\varnothing$ 'he/she was working', are in (450). As usual for this category, the verb form preceding the clitic has imperfective -r̀-.
    a. nù ${ }^{\mathrm{L}} \quad$ bír $\varepsilon \quad$ bíŕ́- $\quad \grave{m}=b \check{\varepsilon}-\grave{m}$ person ${ }^{\mathrm{L}} \quad$ work(n) work-Ipfv=Past-Ppl.AnSg 'a person who was working'
    b. nù ${ }^{\text {L }}$ bíré bíŕ́- $\grave{m}=b$-ă:
    person ${ }^{\mathrm{L}} \quad$ work(n) work-Ipfv=Past-Ppl.AnPl
    'people who were working'
    c. $k \grave{j}:{ }^{n \mathrm{~L}} \quad$ bír $\varepsilon \quad$ bír $\varepsilon$ - $\grave{m}=b \varepsilon ̌-\grave{W}$
    thing ${ }^{\mathrm{L}} \quad$ work(n) work-Ipfv=Past-Ppl.Inan
    'a thing that was working'
    d. kùyó: bû: kán ${ }^{n}-\grave{m}=b \varepsilon ̌-\grave{W} \quad k u ̀$
    first 3P1Sbj do-Ipfv=Past-Ppl.Inan Def
    'What they used to do formerly (was ...)' [2005.1b.01] (headless)
    Negative counterparts have -ゅ̀-dó- before the clitic: nù ${ }^{\mathrm{L}}$ bíré bíré-m-dó $=b \varepsilon ̌-m \grave{m}$ 'a person who was not working'.

    See also wárá-m̀ = bě-ஸ̀ in (507) in §15.2.1.3.
    Participles corresponding to the past stative, e.g. (ì-?)éw-yé-ẃ $=b \hat{\varepsilon}:-\varnothing$ 'he/she was sitting’ (§ 10.4.1.2), are in (451).
    a. $n \grave{u}^{\mathrm{L}}$
    éw-yé- $-{ }^{\prime}=b \varepsilon ̌-\grave{m}$
    person ${ }^{\text {L }}$ sit-MP-Ipfv=Past-Ppl.AnSg
    'a person who was sitting'
    b. $n \grave{u}^{\mathrm{L}}$
    éw-yé- ${ }^{\prime}=b-a ̃$ :
    person ${ }^{\text {L }} \quad$ sit-MP-Ipfv=Past-Ppl.AnPl
    'people who were sitting'
    
    Negative counterparts are of the type $n \grave{u}{ }^{L}$ èw-yè = rá-bě-m 'a person who was not sitting', with stative negative $=$ rá- .

    Participles corresponding to the past perfect (i.e. the past form of the morphological perfective), cf. $y \varepsilon$ - $\grave{W}=b \grave{\varepsilon}-\varnothing$ 'he/she had come', are in (452). In elicitation, my assistant produced (animate) singular and inanimate participles with the past clitic added directly to the bare stem of the verb, but (animate) plural participles with a plural morpheme -mà- before the clitic. This can be identified as the (animate) plural suffix in simple perfective participles (e.g. nù yと̌-mà 'people who came').
    a. $n \grave{u}{ }^{\mathrm{L}} \quad y \varepsilon ́=b \check{\varepsilon}-\grave{m}$
    person ${ }^{\text {L }} \quad$ come $=$ Past-Ppl.AnSg
    'a person who had come'
    b. nù ${ }^{\mathrm{L}} \quad y \varepsilon$-mà $=b-a ̆:$
    person ${ }^{\mathrm{L}} \quad$ come- $\mathrm{Pl}=\mathrm{Past}-\mathrm{Ppl} . \mathrm{AnPl}$
    'people who had come'
    c. kò: ${ }^{n \mathrm{~L}} \quad y \varepsilon ́=b \check{\varepsilon}-\grave{W} \quad\left(\right.$ or: $\left.y \varepsilon ́-W^{\prime}=b \varepsilon ̌-\grave{W}\right)$
    thing ${ }^{\mathrm{L}} \quad$ come $=$ Past-Ppl.Inan
    'a thing that had come'

    In other examples, the same assistant again used -mà $=b$-ă: in plural participles, but used $-m=b \varepsilon \check{\varepsilon}-\grave{m}$ (in form, identical to the past unsuffixed imperfective participle) for the (animate) singular. See plural bármémà=b-ă: 'who-Pl had been hurt' and singular bármé-m̀ $=b \check{\varepsilon}-\grave{m}$ 'who-Sg had been hurt' in (469a-b) in §14.4. This suggests that the pattern with $=b \varepsilon$ - added directly to the unsuffixed bare stem, as in (452a) and (452c), above, is unstable. In the inflected past perfect, the 3 Sg form has suffix $-\grave{W}$ - before L-toned $=b \grave{\varepsilon}$-, and is therefore distinguished only by tones from the past stative, on which see §10.4.1.2.

    Negative counterparts: nù ${ }^{\mathrm{L}} y \grave{\varepsilon}-r i ́=b \check{~}-\grave{m}$ 'a person who had not come', plural nù ${ }^{\mathrm{L}}$
     come'.

    A participle of the past form of 'have' is in (453).

    | $\left[\left[n \grave{u}{ }^{\text {L }}\right.\right.$ | kà: ${ }^{n}$ ] | j̀gá-dá: | [ú | ${ }^{\mathrm{HL}} k \hat{0} \mathrm{n}^{\text {n] }}$ |
    | :---: | :---: | :---: | :---: | :---: |
    | [[person ${ }^{\text {L }}$ | Rel] | around.there | [2SgPoss | ${ }^{\mathrm{HL}}$ thing] |
    | [kàrwá | Só-m̀ | $b \check{\varepsilon}-\mathfrak{m}$ | kù] |  |
    | [trust | have-S | at=Past-Ppl.A | Def] |  |

    'the person there who had (the use of) your-Sg thing (=land) entrusted to him' [2005.1b.05]

    ### 14.1.7 Relative clause involving direct verb chain

    There is no difficulty forming relatives from chains of verbs (or VP's). For example, the combination of ǎy (from /àyí/) 'pick up' and jò-ló- 'convey, take (somewhere)' in the simple sentence (454a) corresponds to the relative clause in (454b). The nonfinal chained verb occurs in the simple bare stem in both cases. The pre-participial pronominal subject in (454b) intervenes between the two chained verbs.

    ```
    a. sèngû: ǎy jò-ló-tí-y
    waterjar pick.up convey-Caus-Pfv1b-1SgSbj
    'I picked up and took (conveyed) the waterjar.'
    ```

    

    In nonsubject relatives like this, the position just before the final verb of the subject pronominal allows us to identify direct verb chains in otherwise ambiguous constructions. See the discussion of marked perfective elements (suffixes or chained auxiliaries) in §10.1.1.

    Another example, this time with a subject relative, is (455b) from the simple main clause (455a). The verbs are péré 'jump' and sí-yé- 'go down'.
    a. péré sì-yè- $\varnothing$
    jump go.down-MP.Pfv-3SgSbj
    'He/She jumped down.'
    $\begin{array}{llll}\text { b. } & \text { nù } & \text { L } & \text { péré } \\ & \text { person }\end{array}$
    'the person who jumped down'

    In textual example (456), the L-toned head kj: ${ }^{n}$ 'thing' is logically the object of 'get water' in the initial clause, which is chained (by = náy ${ }^{\prime \prime}$ ) to the following negated main clause. Here, however, the speaker changed the syntax in mid-stream, beginning with a relative construction (note the $\{\mathrm{L}\}$-toned kj: ${ }^{\mathrm{L}}$ 'thing') but ending with a regular inflected verb.

    ```
    [kj̀: \({ }^{n \mathrm{~L}} \quad\) kòwò \(=\) náy \(^{n}\) ]
    [thing \({ }^{\mathrm{L}}\) get.water=then.SS]
    [kù-tógórò \({ }^{\mathrm{L}}\) này \({ }^{n}\) ] dù-rú-Ẃ
    [head with] carry-PfvNeg-2SgSbj
    ```

    'something that (you-Sg) take and (so) you-Sg don't (have to) carry (water) on the head' (i.e. an alternative way to transport water) [2005.1a.05]

    ### 14.1.8 Final morphemes added to relative clause (non-tone-dropping)

    Definite morphemes, plural bè, and the 'each/all' quantifier wôy, follow the relative clause, though they have semantic scope over the head NP.

    These morphemes do not induce tonal changes on a preceding word when they occur at the end of regular, main-clause NPs. As we would expect, they likewise have no tonal interactions with the preceding word in a relative clause, which is normally the participle. The examples in (457) involve participles that end in an L-tone.
    a. nà: ${ }^{\text {L }}$ yàyá-m̀
    kù
    cow $^{\text {L }}$ fall.Pfv-Ppl.AnSg Def
    'the cow that fell'
    b. nà: ${ }^{\mathrm{L}}$ yàyá-mà bû:
    $\operatorname{cow}^{\mathrm{L}}$ fall.Pfv-Ppl.AnPl Def.Pl
    'the cows that fell'
    $\begin{array}{lll}\text { c. nà: }{ }^{\text {L }} & \text { yàyá-mà } & \text { Wôy } \\ & \operatorname{cow}^{\mathrm{L}} & \text { fall.Pfv-Ppl.AnP1 }\end{array}$
    'all the cows that fell'
    d. kùr ${ }^{n} \grave{u}^{\mathrm{L}}$ yàyá-Ẁ bè
    stone ${ }^{\mathrm{L}}$ fall.Pfv-Ppl.Inan Pl
    '(some) stones that fell'
    e. kùr ${ }^{n}{ }^{\mathrm{L}}$ yáyá-m̀ bè
    stone ${ }^{\mathrm{L}}$ fall.Ipfv-Ppl.Inan Pl
    '(some) stones that fall'

    The examples in (458) involve participles that end in an H-tone.
    (458)
    a. nà: ${ }^{\mathrm{L}}$ yàgú-m kù
    cow $^{\mathrm{L}}$ fall.Ipfv-Ppl.AnSg Def
    'the cow who falls'
    b. nà: ${ }^{\mathrm{L}}$ yàgú bû:
    cow $^{\mathrm{L}} \quad$ fall.Ipfv.Ppl.AnPl Def.Pl
    'the cows who fall'
    c. nà: ${ }^{\mathrm{L}}$ yàgú wôy
    cow $^{\mathrm{L}}$ fall.Ipfv.Ppl.AnPl all
    'all the cows that fall'

    ### 14.1.9 Final morphemes added to relative clause (tone-dropping)

    Demonstrative pronouns force tone-dropping on preceding words (final word of core NP, plus any cardinal numeral) within a regular NP. In relative clauses, where demonstrative pronouns immediately follow the participle, they force tone-dropping on this participle. In addition, mǔ: 'this' has the same ability to lop off a final animate singular -m suffix as it does with preceding nouns. Therefore in (459a), the singular perfective participle yàyá-m̀ appears
    as $\{\mathrm{L}\}$-toned, suffixless yà ${ }^{\mathrm{L}}{ }^{\mathrm{L}}$ before mǔ:. In (459b), the plural counterpart yàyá-mà drops its tones to yàyà-mà ${ }^{\mathrm{L}}$ before the demonstrative.
    a. nà: ${ }^{\mathrm{L}}$ yàyà ${ }^{\mathrm{L}}$ mǔ:
    $\operatorname{cow}^{\mathrm{L}} \quad$ fall.Pfv ${ }^{\mathrm{L}} \quad$ Prox.An
    'this cow that fell' (yàgá-ì̀)
    b. nà: ${ }^{\mathrm{L}}$ yàyà-mà ${ }^{\mathrm{L}}$ mǔ: bè
    cow $^{\mathrm{L}} \quad$ fall.Pfv-Ppl.AnP1 ${ }^{\mathrm{L}} \quad$ Prox.An Pl
    'these cows that fell' (yàyá-mà)

    ### 14.1.10 Relative morpheme (kà:")

    There is often no relative pronoun or other relative morpheme, other than the participial form of the verb. However, a relative morpheme kà: ${ }^{n}$, immediately following the head NP, does occur in several textual passages, especially those spoken in deliberate or formal styles. In (460a), the fact that the speaker paused at this point in the clause may be significant. Another example is (460b), from the (rather formal) interview-style question leading into a text about the history of Beni.
    
    'She said: it was true; the whole herd of goats that, he (=Lion) had left in her hand(s), ...' [2005.2a.06]
    b. $\quad\left[\grave{\partial} r^{n} \grave{\partial}^{\mathrm{L}}\right.$
    kà: $\left.{ }^{n}\right] \quad g o ́=n i ́, \quad$ ŋ̀gú-rù $y \varepsilon ̌=n ́$,
    [place Rel] go.out=and.SS, here come=and.SS,
    [ว̀r ${ }^{n}{ }^{\mathrm{L}}{ }^{\mathrm{L}}$ kà: $\left.{ }^{n}\right]$ î: éw-yé-ẁ kù,
    [place ${ }^{\mathrm{L}}$ Rel] 1PlSbj sit-MP.Pfv-Ppl.Inan Def
    [[kú ${ }^{\text {HL }} k$ kábà:r] [ú mâ:] bèré-ỳ.: dè]
    [[InanPoss ${ }^{\mathrm{HL}}$ news] [2Sg Dat] get.Pfv-1PlSbj if]
    jóró-ỳ.:
    want.Ipfv-1PlSbj
    'The place that we left to come here, (and) the place that (=in which) we settled, we would like to have its story from you-Sg.' [2005.2a.08]

    Further examples of kà: ${ }^{n}$ are in (461).
    (461)
    
    torch
    tie.Pfv-2SgSbj if,
    'When(-ever) they (=bees) have made honey, you-Sg yourself, at night you-Sg will go and tie a straw torch, (and ...)' [2005-1a.09]
    b. $\quad\left[\left[n u ̀{ }^{\mathrm{L}}\right.\right.$
    kà: $\left.{ }^{n}\right]$
    [[person. $\mathrm{Pl}^{\mathrm{L}}$
    [â: hà:] hà
    [3ReflPlPoss ${ }^{\text {L }}$ cow.Pl] watch.over.Ppl.Ipfv.AnPl]
    [[kú ${ }^{\mathrm{HL}}$ nî:] ${ }^{\mathrm{L}}$ Wò] [nǎ: kù] dìmbà-ゆ̀-bò
    [[DiscDef ${ }^{\mathrm{HL}}$ cause] $\left.{ }^{\mathrm{L}} \mathrm{in}\right] \quad$ [cow.Pl Def] follow-Stative-3P1Sbj
    '(The/any) people who watch over their (own) cows, it's for that reason [focus] that they follow (=tend) their cows.' [2005-1a.15]
    c. $\left[k \grave{\partial}: r^{n} \grave{j}^{\mathrm{L}}\right.$ kà: $\left.{ }^{n}\right]$ â: nù:-rà- $\grave{W}^{\mathrm{L}}$ ग̀gú,
    $\left[\operatorname{roar}(\mathrm{n})^{\mathrm{L}}\right.$ Rel] 3LogoP1Sbj hear-Progr-Ppl.Inan ${ }^{\mathrm{L}}$ Prox.Inan,
    jà $W^{n} \hat{a}: \quad\left[k \grave{:}:^{.{ }^{\mathrm{L}}} \quad\left[\right.\right.$ ह́r $^{n} \dot{\varepsilon} \quad$ nây $\left.{ }^{n}\right]$ jàyá-m̀ $]=d a ́$
    crowd [thing ${ }^{\text {L }}$ [3Sg with] fight(v).Ipfv-Ppl.AnSg]=not.be
    wá dé
    Quot Emph
    '(he said:) (in view of) this roar that they were hearing, a crowd (of people) was not what would fight with it (=lion).' [2005-2b.05]
    d. ú [[nù ${ }^{\mathrm{L}}$ kà: $\left.{ }^{n}\right]\left[\left[k \hat{0}: \quad\right.\right.$ yà $\rightarrow$ ] [nì-ǹ̀r ${ }^{n} u ́$ yá $\left.\left.\rightarrow\right]\right]$

    2 Sg [[person ${ }^{\mathrm{L}}$ Rel] [hunger and] [thirst and]
    [nù ${ }^{\mathrm{L}}$ kà: $\left.{ }^{n}\right]$ dá-m̀]
    [person ${ }^{\text {L }}$ Rel] endure.Ipfv-Ppl.AnSg
    'you-Sg (as) a person who (can) endure hunger and thirst' [2005-1b.10]
    d. [gǎm kù] yâ: dùwò-bò,
    [some Def] there leave.Pfv-3PlSbjbj,
    [[gàm ${ }^{\mathrm{L}}$ kà: ${ }^{\text {n }}$ ] ínjírí-mà]
    [[some ${ }^{\text {L }} \quad$ Rel] get.up- Ppl.Pfv.AnPl]
    [ònjǒ-m yá $\rightarrow$ ] [dèrě-m ya $\rightarrow$ ] ínjííímà kù,
    [y.sib-Sg and] [e.sib and] get.up-Ppl.Pfv.AnPl Def,
    [[bû: ${ }^{\mathrm{L}}$ mà:] [yúlì ${ }^{\mathrm{L}}$ Wò] y º́n]
    [[3Pl ${ }^{\mathrm{L}}$ QuotSbj] [Yuli $\left.{ }^{\mathrm{L}} \mathrm{Loc}\right]$ come=and.SameSubj
    èw-yè-bó wá
    sit-MP.Pfv-3PISbjbj Quot
    'They left some (people) there. Some (=the others) who got up, the younger brother and the elder brother who got up, it is said that they came to Yuli and settled (there).' [2005-2a.08]
    e. nàw ${ }^{n}$ â: [dògùrù ${ }^{\text {L }}$ kà: ${ }^{n}$ ] gǒ:-rè-Ẁ Wôy
    meat [time ${ }^{\mathrm{L}}$ Rel] go.out-Pfv1a-Ppl.Inan all 'any time (=whenever) meat (=a game animal) comes out' (< dógúrú)

    $$
    \text { f. } \quad\left[[p \grave{r} r \bar{\varepsilon} \quad \text { tà:nù }]^{\mathrm{L}} \quad \text { kà: }{ }^{n}\right] \hat{1}: \quad \text { k̀̀ } W^{n} u \check{ }-m \quad \text { kù }
    $$

    [[sheep three] ${ }^{\mathrm{L}}$ Rel] 1PlSbj slaughter.Ipfv-Ppl.AnPl Def 'the three sheep-Pl that we will slaughter'

    A synchronic connection between relative kà: ${ }^{n}$ and the compound-final-like quantifier $k \hat{a}:{ }^{n}$ '(not) any' is initially suggestive. The tonal difference could be attributed to tone-dropping on kà: ${ }^{n}$ as part of a relative head. kâ: ${ }^{n}$ '(not) any' has an animate singular form kâ: ${ }^{n}-m$ that has no counterpart with relative kà: ${ }^{n}$, but this too could be explained as a morphological consequence of being a relative head (we noted above that simple head nouns do not allow $-m$ ).

    However, relative kà: ${ }^{n}$ occurs freely in positive as well as negative contexts and with any noun, N -Adj, or N-Num combination. By contrast, kâ: ${ }^{n}$ '(not) any' is attested only in negative clauses and semantically similar contexts, and it is occurs chiefly in a few high-frequency combinations. Overall, the examples with relative kà: ${ }^{n}$ do not require a maximalized reading ('any X that...'). A maximalized reading can be forced by adding wôy 'all' as in (461a,e), but some other examples clearly have specific readings.

    A diachronic connection between relative kà: ${ }^{n}$ and the quantifier kâ: ${ }^{n}$ '(not) any' is possible but uncertain. The only known cognate relative marker is Toro Tegu kà: ~kà:n. The BenT quantifier kâ:n '(not) any' has cognates like Yanda Dom kámà and Nanga kámâ that point to an etymon *kámà.

    ### 14.2 Subject relative clause

    We have already seen the component features of relative clauses that are relevant: tonedropping of head NP, participial suffix, relocation of determiners and external quantifiers to postparticipial position. In subject relatives there are no pre-participial subject pronominals since the subject is always the head NP.

    Simple perfective subject relatives (without objects) are illustrated in (462). imperfectives are exemplified later in this section.
    a. yéngù yà ${ }^{\mathrm{L}} \quad y \varepsilon ̌-m \grave{m}$
    kù
    yesterday woman ${ }^{\mathrm{L}}$ come.Pfv-Ppl.AnSg Def
    'the woman who came yesterday'
    [linear order also: yéngù yà ${ }^{\mathrm{L}}$ yě-m̀̀ kù]
    b. yà ${ }^{\mathrm{L}} \quad y$ -$-m a ̀ ~ b u ̂: ~$
    woman ${ }^{\mathrm{L}}$ come.Pfv-Ppl.AnPl DefPl
    'the women who came'
    c. yì ${ }^{\mathrm{L}}$ yàyá-m̀ kù
    child $^{\mathrm{L}}$ fall.Pfv-Ppl.AnSg Def
    'the child who fell'
    d. yì-tè: ${ }^{\mathrm{L}}$ yà yá-mà bû:
    child.P1 ${ }^{\text {L }}$ fall.Pfv-Ppl.AnPl DefPl
    'the children who fell'
    e. kùrnù ${ }^{\text {L }}$ yàyá-Ẁ kù
    stone $^{\mathrm{L}}$ fall.Pfv-Ppl.Inan Def 'the stone that fell'

    Nonpronominal direct object NPs in a subject relative have the same form as in main clauses. The optional accusative clitic can appear with human objects (463c).
    a. ya

    | yà | ह́léy | tíyé-ì̀ | kù |
    | :--- | :--- | :--- | :--- |
    | woman | peanuts | sell.Pfv-Ppl.AnSg | Def |
    | 'the woman who sold (the) peanuts' |  |  |  |

    b. yì ${ }^{\mathrm{L}}$ ìnjě-m súyó-m̀ kù child ${ }^{\text {L }}$ dog-AnSg hit.Pfv-Ppl.AnSg Def
    'the child who hit the dog'
    'the child who hit the dog'
     'the child who hit his/her (own) father'

    A pronominal direct object in a subject relative clause has its normal main-clause form, often with the accusative clitic (464).
    (464)
    a. $\quad \begin{aligned} & \text { yì } \\ & \text { chil }\end{aligned}$
    í=nì
    súyó-m̀
    kù child $^{\mathrm{L}} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Pfv-Ppl.AnSg Def
    'the child who struck me'
    $\begin{array}{lll}\mathrm{b} . & y i ̀ ~ \\ & \text { L } & \text { nì } \\ \text { sùyú-m } & \text { kù }\end{array}$
    child $^{\mathrm{L}} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Ipfv-Ppl.AnSg Def
    'the child who hits me'
    c. yì-tè: ${ }^{\text {L }} \quad$ í=nì sùyú- $\varnothing \quad$ kù child.P1 $^{\mathrm{L}} \quad 1 \mathrm{Sg}=\mathrm{Acc} \quad$ hit.Ipfv-Ppl.AnPl Def
    'the children who hit-Present me'
    d. kùr ${ }^{n} \grave{u}^{\mathrm{L}} \quad$ í=nì dònjó-Ẁ $k u ̀$
    stone $^{\mathrm{L}} \quad 1 \mathrm{Sg}=$ Acc bump.Pfv-Ppl.Inan Def 'the stone that bumped me (=that I stubbed my toe on)'

    Relative clauses with quasi-verbs bù- 'be' and só- 'have' are in (465).
    (465)
    a.
    $\begin{array}{lll}{\left[\text { àr }^{n a}{ }^{\mathrm{L}}\right.} & \text { ŋ̀gú-rù } & b-\hat{\varepsilon}^{:^{n}} \\ {\left[\operatorname{man}^{\mathrm{L}}\right.} & \text { here } & \text { be- }\end{array}$
    bû:] júwó-ỳ [man ${ }^{\mathrm{L}}$ here be-Ppl.AnPl DefPl] know.Ipfv-1SgSbj 'I know the men who live here.'
    $\begin{array}{lllll}\text { b. [yà } & \text { nǎ:-m } & \text { só-m̀̀ } & \text { kù }] & \text { júwó-ỳ } \\ \text { [woman } & \text { cow-AnSg } & \text { have-Ppl.AnSg } & \text { Def] } & \text { know.Ipfv-1SgSbj } \\ \text { 'I know the woman who has a cow.' } & \end{array}$

    In an imperfective subject relative, a nonpronominal NP object not followed by a determiner or an external quantifier appears with L-tone. This suggests that the object NP here is a compound initial before the participle, which makes sense since the participle has the form of an agentive nominal. A modifying adjective, like 'good' in (466c), also drops its tones, so a core NP (noun plus adjective) as a whole can function here as a compound initial. Such compound initials are generic in reference. When the object NP contains a demonstrative like ŋ̀gú 'this' (inanimate) in (466d), a cardinal numeral as in (466e), or other external quanfifier, a generic interpretation is not possible, and the object NP takes its normal form, with no tonedropping or other evidence of compounding.
    
    'the women who sell peanuts'
    b. yà ${ }^{\mathrm{L}} \quad \grave{\text { èlè } y^{\mathrm{L}}-[t i ̀ y i ́-m] ~ k u ̀ ~}$ woman $^{\mathrm{L}}$ peanuts ${ }^{\mathrm{L}}$-[sell.Ipfv-Ppl.AnSg] Def 'the woman who sells peanuts'
    c. $y$ à $^{\mathrm{L}} \quad[\text { èlèy-èsù }]^{\mathrm{L}}$-tìyú $\quad b \hat{1}:$ woman $^{\mathrm{L}} \quad$ [peanuts ${ }^{\mathrm{L}}$-good] ${ }^{\mathrm{L}}$-sell.Ipfv.Ppl.AnPl DefPl
    'the women who sell good peanuts'
    d. yà ${ }^{\mathrm{L}}$ [غ̀lèy ${ }^{\mathrm{L}}$ ग̀gú] tìyú bû: woman $^{\text {L }}$ [peanuts ${ }^{\text {L }}$ Prox.Inan] sell.Ipfv.Ppl.AnPl DefPl 'the women who sell these peanuts'
    e. yà ${ }^{\mathrm{L}}$ [màngórò pérú] tìyí-m kù woman $^{\text {L }}$ [mango ten] sell.Ipfv-Ppl.AnSg Def 'the woman who sells ten mangoes.'

    ### 14.3 Object relative clause

    The main difference between object relatives and the subject relatives illustrated just above is that object relatives (like all nonsubject relatives) may have a pronominal subject, which if present is expressed as a pre-participial independent pronoun. As in other kinds of relatives, the head NP is tone-dropped, the verb takes participial form agreeing with the head NP, and determiners and non-numeral quantifiers are in postparticipial position.

    Of interest is the fact that accusative $=n i ̀ \sim=n ̀$, which is optional for direct objects in main clauses, is not allowed in object relatives. For example, in (467b), yì-t $\grave{\varepsilon}$ : ${ }^{\text {L }}$ 'children (who...)' cannot be followed by =nì $\sim=\grave{n}$, although in the corresponding main clause yì-tě: bû: $(=\grave{n})]$ 'the children' has optional accusative marking. There are two possible explanations. One is that, for nonpronominal NPs, overt accusative marking is associated in main clauses with at least some degree of focus, and focalization is not possible in relatives (even subject relatives including objects). The other explanation is that the accusative is subject to the same prohibition that applies to postpositions in connection with relative head NPs.

    Simple perfective examples are in (467).
    
    meat $^{\mathrm{L}} \quad 1 \mathrm{PlSbj}$ eat.Pfv-Ppl.Inan Def
    'the meat that we ate'
    b. yì-tè: ${ }^{\mathrm{L}}$ ú yǐ-mà bû:
    child. Pl $^{\text {L }} \quad 2 \mathrm{SgSbj}$ see.Pfv-Ppl.AnPl Def.AnPl
    'the children who(m) you-Sg saw'
    [cf. main clause [yì-tě̆: bû: $(=\grave{n})]$ yí-Ẃ $=b \grave{\varepsilon}-\grave{W}$ 'you had seen the children']
    c. nà: ${ }^{\text {L }}$ í pájá-m̀ kù
    $\operatorname{cow}^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ tie.Pfv-Ppl.AnSg Def
    'the cow that I tied up'
    d. kùr ${ }^{n} \grave{u}^{\mathrm{L}} \quad$ í jìsé-Ẁ kù
    stone $^{\mathrm{L}} \quad 1 \mathrm{SgSbj}$ throw.Pfv-Ppl.Inan Def
    'the stone that I threw'
    e. yéngù yì-tè: ${ }^{\mathrm{L}}$ ú yǐ-mà bû:
    yesterday child.PI ${ }^{\mathrm{L}} 2 \mathrm{SgSbj}$ see.Pfv-Ppl.AnPl DefPl
    'the children who(m) you-Sg saw yesterday' (< yì-tt: )
    f. yéngù sěydù yì-tc̀: ${ }^{\mathrm{L}}$ yǐ-mà kù bè yesterday Seydou child.Pl ${ }^{\mathrm{L}}$ see.Pfv-Ppl.AnPl Def Pl 'the children who(m) Seydou saw yesterday' (< yìtte::)

    Imperfective examples are in (468).
    (468)
    a. nàwnà: ${ }^{\mathrm{L}}$ í:
    kúwó-ì kù
    meat $^{\mathrm{L}}$ 1P1Sbj eat.Ipfv-Ppl.Inan Def
    'the meat that we will eat'
    b. yì-tè: ${ }^{\mathrm{L}}$ ú yǐ: bû:
    child. $\mathrm{Pl}^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ see.Ipfv.Ppl.AnPl DefPl
    'the children who(m) you-Sg will see'
    c. kùr ${ }^{n} \grave{u}^{\mathrm{L}}$ ú jísé-m̀ kù
    stone $^{\mathrm{L}} \quad 2 \mathrm{SgSbj}$ throw.Ipfv-Ppl.Inan Def
    'the stone that you will throw (away)'

    In all nonsubject relative clauses, including object relatives, if the relative-clause subject is coindexed with a third-person main-clause subject ('Seydou ${ }_{x}$ has found [the shoulderbag that $h_{\mathrm{x}}$ left]'), the relative-clause subject is expressed by a reflexive pronoun. See $\S 18.2 .3$ for examples and discussion.

    ### 14.4 Possessor relative clause

    The possessor is positioned to the left of the possessed NP. In elicited examples, there is a resumptive pronoun coindexed with this possessor NP, functioning as (local) possessor of the possessed noun, which therefore takes possessed-noun tone overlay. The possessor NP to the left is tone-dropped, as head NP. A postparticipial definite morpheme, if present, agrees with the head NP (469a-c), though we sometimes find singular kù where plural bû: would have been possible (469d).

    In general, the participle agrees in nominal features with the possessor NP rather than with the possessed NP. This is observed in the examples in (469) below, except that when both possessor and possessed NPs are human there is some fluctuation in participial agreement. For example, in (469b) my main assistant unexpectedly had the participle agree with the adjacent possessed noun 'children' rather than at a distance with the relativized-on possessor 'man'. (469b) was checked with another speaker, who produced the expected possessor agreement. When the possessor is human and the possessed NP inanimate, participial agreement was always with the possessor, as in (469d-f). I conclude that cases like (469b) are aberrant and reflect elicitation difficulties combined with adjacency effects.

    $$
    \begin{align*}
    & \text { [man }{ }^{\mathrm{L}} \text { [3SgPoss }{ }^{\mathrm{HL}} \text { child-AnSg] be.hurt-Ipfv=Past-Ppl.AnSg Def] } \tag{469}
    \end{align*}
    $$

    tèmbì-rí-ỳ
    find-PfvNeg-1SgSbj
    'I didn't (= couldn't) find the man whose child had been hurt.'
    [for slippage between past perfect and past imperfective participles, see discussion following (452) in §14.1.6.8]
    b. [àr ${ }^{n}{ }^{\mathrm{L}}{ }^{\mathrm{L}}$ [Ér $r^{n} \dot{\varepsilon} \quad{ }^{\mathrm{HL}}$ yí-tè:] bármé-mà $=b$-ầ: kù]
    [man ${ }^{\mathrm{L}}$ [3SgPoss ${ }^{\mathrm{HL}}$ child-Pl] be.hurt.Pfv-Ppl.AnPl=Past-3PlSbj Def]
    tèmbì-rí-ỳ
    find-PfvNeg-1SgSbj
    'I didn't (= couldn't) find the man whose children had been hurt.'
    [given by another informant with bármé-m̀ = bě-m̀ as in (469a)]
    c. [àr ${ }^{n}{ }_{a}^{\mathrm{L}}$ [bû: ${ }^{\mathrm{L}}$ yì-tè:] bármé-mà bû:]
    [man ${ }^{\mathrm{L}}$ [3P1Poss ${ }^{\mathrm{L}}$ child-Pl] be.hurt.Pfv-Ppl.AnPl Def.Pl]
    tèmbì-rí-ỳ
    find-PfvNeg-1 Sg Sbj
    'I didn't (=couldn't) find the men whose children were hurt.'
    d. [yì-tè: ${ }^{\mathrm{L}}$ [bû: ${ }^{\mathrm{L}}$ kù: bármé-mà kù]
    [child ${ }^{\mathrm{L}}$ [3P1Poss ${ }^{\mathrm{L}}$ head be.hurt.Pfv-Ppl.AnPl Def]
    súsó:-r-à:
    heal-Pfv1a-3PlSbj
    'The children whose heads were hurt have healed.'
     [person ${ }^{\mathrm{L}}$ [3SgPoss ${ }^{\mathrm{HL}}$ sheep.Pl] 1 SgSbj buy-Pfv1b-Ppl.AnSg all]
    [érñ ${ }^{n}$ mâ:] élé-ré-m
    [3Sg Dat] be.sweet-Inch-Ipfv.3SgSbj
    'Anyone ${ }_{x}$ whose $_{x}$ sheep-Pl I buy, he/she ${ }_{x}$ will be pleased.'
    f. [nù ${ }^{\mathrm{L}}$ [bû: ${ }^{\mathrm{L}}$ ùrò] gồ: tángú-mà kù]
    [person ${ }^{\mathrm{L}}$ [3P1Poss ${ }^{\text {L house] fire be.lit.Pfv-Ppl.AnPl Def] }}$
    bǎrà
    help.Imprt
    'Help-2Sg the people whose house burned (down)!'
    g. [àr ${ }^{n a}{ }^{\mathrm{L}} \quad\left[\begin{array}{c} \\ r^{n} \dot{\varepsilon}\end{array}{ }^{\text {HL }}\right.$ yí-tè:] yàrìy-rá: ló-mà kù] [man ${ }^{\mathrm{L}}$ [3SgPoss ${ }^{\mathrm{HL}}$ child.Pl] go.around-Purp go.Pfv-Ppl.AnPl Def]
    [á sày] wárá-m̀
    [3ReflSg only] do.farm.work-Ipfv.3SgSbj
    'A man whose children have gone away (to seek their fortune) does farm work by himself.'

    In line 4 of (674) in the sample text, translated 'a young woman whose breasts are fully going out (=developed)', relative marker kà: ${ }^{n}$ appears instead of a resumptive pronoun. The possessed noun írù 'breast' is /HL/ toned lexically, and follow-up elicitation with other nouns indicated that the noun in this context retains its lexical tones rather than having the possessed-noun $\{\mathrm{HL}\}$ or $\{\mathrm{L}\}$ overlay.

    ### 14.5 PP relative clause

    In elicitation, my main assistant consistently omitted the postposition. The head NP in (470a-b) corresponds to a dative in unrelativized counterparts (§11.1.1). The head noun in (470c) is logically instrumental, while that in (470d) is logically locative. The alternative, preferred by another speaker who was checked on this point but probably less common, is to add the postposition to a resumptive third person pronoun. Compare (470a) to this other speaker's version (470e). One suspects that the type with resumptive pronoun is favored by elicitation using cues from French, where the postposition is overt (l'homme auquel j'ai...).
    a. $a^{n}{ }^{n a ̀}{ }^{\mathrm{L}}$
    bú:dù í
    ní-m̀
    kù
    $\operatorname{man}^{\mathrm{L}} \quad$ money 1 SgSbj give.Pfv-Ppl.AnSg Def
    'the man to whom I gave the money'
    b. tì $w^{n} \varepsilon y^{n}{ }^{\mathrm{L}}$ kònjǒy bû: gĭn-m̀ kù
    tree ${ }^{\mathrm{L}}$ balanzan 3P1Sbj say-Ipfv.Ppl.Inan Def 'the tree that they call "balanzan".'
     stick $^{\mathrm{L}} \quad 3 \mathrm{Sg}=$ Acc 1 SgSbj hit.Pfv-Ppl.Inan Def 'the stick with which I hit-Past it'
    d. [jèmbè ${ }^{\text {L }}$ súkórò í $\quad g$ án$^{n}-\grave{W}^{n} \quad$ kù $]$ [sack ${ }^{\mathrm{L}}$ sugar 1 SgSbj put.Pfv-Ppl.Inan Def] án-dá: bù where? be- 3 SgSbj 'Where is the sack in which I put-Past the sugar?'
    e. àr $n^{n a}{ }^{\mathrm{L}}$ [ह́ré mâ:] bú:dù í ní-m̀ kù $\operatorname{man}^{\mathrm{L}} \quad[3 \mathrm{Sg} \quad \mathrm{Dat}]$ money 1 SgSbj give.Pfv-Ppl.AnSg Def 'the man to whom I gave the money' [from a different speaker]

    ## 15 Verb (VP) chaining and adverbial clauses

    ### 15.1 Chaining

    In the purest form of verb or VP chain, which I call direct chains, the nonfinal verb appears in the simple bare stem. The final verb has whatever inflected or other form it would have without the chained verbs. In direct chains, the nonfinal verbs are often directly adjacent to the final verb, but this is not obligatory. Direct chains may be partially lexicalized, and some verb-verb combinations might be described as compounds.

    Direct chaining suggests conceptual integration of the co-eventualities denoted by the individual verbs. It is understood that the subjects of the verbs are identical (coindexed). The free translation is generally based on a conjoined VP with a shared subject or on a phrasal verb.
    a. éw-yé $\quad\left[n \varepsilon ̌ y y^{n} \quad л \varepsilon ́-\grave{y}^{n} . \therefore\right]$
    sit-MP [meal eat.Ipfv-1P1Sbj]
    'We will sit down and eat.'
    b. péré sí-yé:-rè- $\varnothing$
    jump go.down-MP-Pfv1a-3SgSbj
    'He/She jumped down.'
    There is also a type with $\{\mathrm{HL}\}$ tone overlay on the nonfinal verb (§15.1.2.2).
    In loose chains, which can often be translated with 'and', the nonfinal clause or VP ends with an overt subordinating morpheme. The VPs or clauses are less tightly integrated, prosodically or conceptually, and the respective verbs may be widely separated. There are same-subject (SS) and different-subject (DS) subordinators.

    For purposive clauses, which are not always easily distinguished from chains denoting sequences of actions (cf. 'go and eat' versus 'go to eat'), see §17.5.1.

    ### 15.1.1 Verbal noun of directly chained verbs

    A verbal noun may be formed from a direct verb chain. The final verb has its usual verbal noun form in $-\hat{1}: \sim-y$ ( $\S 4.2 .2$ ). The nonfinal verbs (usually just one) appear as L-toned compound initials.
    a. péré sí-yé-
    jump go.down-MP-
    'jump down'
    b. pèrè ${ }^{\mathrm{L}}-[s i \grave{-y}-\hat{1}:]$
    jump ${ }^{\mathrm{L}}$-[go.down-MP-VblN]
    '(act of) jumping down'

    Such a verb-VblN compound may also be possessed (e.g. by the logical subject NP), in which case the overlaid possessed-noun $\{\mathrm{HL}\}$ overlay overrides the compound tone pattern. This happens to $1 \grave{o}^{\mathrm{L}}-[d \check{-}-\bar{y}]$ 'going and coming' (ló-, dǒ-) in (473).

    | [ùwó | tǎ:n] | ${ }^{\mathrm{HL}}$ ló-[dò-y] |
    | :--- | :--- | :--- |
    | [month | three] | ${ }^{\mathrm{HL}}$ go.[arrive-VblN] |

    '(upon) three month's going and arriving (=elapsing)' [2005.1a.09]
    15.1.2 Tone overlay of nonfinal verb stem in chain

    ### 15.1.2.1 Medial chained verb occasionally with $\{L\}$ tone overlay

    There is no distinctive tonal treatment for medial chained verbs, i.e. those sandwiched between the initial and final verbs. However, $\{\mathrm{L}\}$ overlay is sometimes observed in medial chained verbs, including iterations of the same initial verb. This seems to be a basically metrical process, with relaxed articulation of the medial verb.

    $$
    \begin{array}{llllll}
    \text { gà: núw }{ }^{n} \grave{y} y^{n} \text { yà:-yî: yòyó } & { }^{\text {L }} \text { yòỳ̀ } & \text { yá } & \text { ló-yè }  \tag{474}\\
    \text { but now woman-child run } & \text { run } & \text { Exist } \\
    \text { go.Ipfv-3PISbj } \\
    \text { 'But now girls keep running away.' } & {[2005.1 \mathrm{~b} .06]}
    \end{array}
    $$

    ### 15.1.2.2 Nonfinal chained verb with $\{\mathrm{HL}\}$ tone overlay

    In this construction, the uninflected nonfinal verb has $\{\mathbf{H L}\}$ tone overlay, while the final verb has its regular tone and inflection. This construction is attested with combinations containing a verb of conveyance ('take/convey', 'bring') as first element. A direct object (if present) precedes the two verbs.
    a. jémbé
    HL jó-lò
    ${ }^{H L}$ convey-Caus
    $d \varepsilon ̌ y-t i ́-\grave{y}$ bag ${ }^{\text {HL convey-Caus put.down-Pfv1b-1SgSbj }}$
    'I took (there) and put down the bag.' (jò-ló)
    b. Sǒ-m
    $c \varepsilon$ c̀rì̀- $\varnothing$
    horse-AnSg
    ${ }^{\text {HL }}$ convey-Caus show.Pfv-3SgSbj
    'He took (there) and showed the horse.' (jò-ló)
    c. nà $W^{n}$ â:
    
    kùwò- $\varnothing$
    meat ${ }^{\text {HL }}$ bring eat.meat.Pfv-3SgSbj
    'He/She brought and ate the meat.' ( $j \check{\varepsilon}:)$
    d. nà ${ }^{n} \hat{a}: \quad{ }^{H L} j \hat{\varepsilon}: \quad$ kúWó-m̀ meat ${ }^{\text {HL }}$ bring eat.meat-Ipfv. 3 SgSbj 'He/She will bring and eat the meat.' ( $j \check{\varepsilon}:$ :)

    A possible connection is with the $\{H L\}$-toned alternative perfective verb form (§10.2.1.3).

    ### 15.1.3 Direct chains including a time-of-day verb

    Verbs like ná- 'spend the night' and dèr ${ }^{n} \dot{\varepsilon}$ - 'spend the (mid-)day' may be chained to a preceding VP denoting a prolonged activity.
    a. jìyé
    jìyé
    nà-bó
    dance(n) dance(v) spend.night.Pfv-3PlSbj
    'They danced all night.'
    b. tê: Sírí $\quad d \varepsilon r^{n} \dot{\varepsilon}-y \varepsilon ̀$
    tea boil spend.day.Ipfv-3PlSbj
    'They spend the day boiling (= making) tea.'
    15.1.4 Direct chains ending in dùwó- 'leave'

    This verb is often directly chained to a preceding VP that denotes an act of placing something. It can often be omitted in a free English translation.
    $\begin{array}{llll}\text { a. } & {[j \varepsilon ́ m b \varepsilon ́} & \text { kù }] & d \varepsilon ̌ y \\ {[\text { bag }} & \text { Def] } & \text { put.down } & \text { dùẁ̀- } \varnothing \\ \text { leave.Pfv-3SgSbj }\end{array}$
    'He/She put the bag down and left it.'
    b. nă:-m páyá dúwó-ỳ
    cow- AnSg tie leave. $\mathrm{Ipfv}-1 \mathrm{SgSbj}$
    'I will tie up and leave the cow.'
    15.1.5 Direct and loose chains with 'go' and 'come'

    The linear order of 'go' and 'come' is iconic, matching the chronology of motion events. For the very common 'go and come (back)', a direct chain including the bare stem ló 'go' is used (478a). For the less uncommon 'come and go', a same-subject subordinated form of 'come' occurs (478b).
    a. ló yé-ỳ
    go come.Ipfv-1SgSbj
    'I will go and come (back).'
    b. $y \grave{\varepsilon}=\check{n}$
    ló:-rغ̀- $\varnothing$
    come=and.SS
    go-Pfv1a-3SgSbj
    'He/She came and went.'
    Most other instances of 'go and VP' or 'come and VP' are expressed suffix -rá: ~ -ré: on the final non-motion verb, a construction that I classify as purposive (§17.5.1.1).

    ### 15.1.6 Chains including mò:lú- 'be/do/put together'

    The intransitive verb mò:lú- 'come together, assemble' can be directly chained to a following verb or VP in the sense '(do) together'. The linear order of the two verbs makes sense, since coming together normally occurs before the activity itself. For example, 'work together' is logically 'get together and (then) work' rather than 'work and (then) get together' (479a). That a direct chain is a kind of verb-verb compound is suggested by the fact that mò:lú is adjacent to the second verb even when this means that it follows complements of that verb, such as a direct object (479d) or cognate nominal (479c). In other words, the direct chain "inherits" the argument structure of the second verb. The chronology can also be made explicit by an overt subordinator, see (486a-b) in $\S 15.1 .9$ below.
    a. mò:lú bìré:-rà-ỳ:
    come.together
    work-Prog-1P1Sbj
    'We work together.'
    b. [dŏ: bè $\rightarrow$ ] [púlǒ: bé $\rightarrow$ ]
    [Dogon.Pl and] [Fulbe.Pl and]
    mò:lú
    $b-\varepsilon \varepsilon^{n}=b-\hat{a}$ :
    come.together be-3PlSbj=Past-3P1Sbj
    'Dogon and Fulbe (ethnicities) used to be (=live) together.'
    c. [yǎ: bé $\rightarrow$ ] [árnà bè $\rightarrow$ ]
    [woman.Pl and] [man.Pl and]
    jìyé mò:lú jíyé-yè
    dance(n) come.together dance.Ipfv-3PlSbj
    'Women and men will dance together.'
    d. $[i ́$ yá $\rightarrow$ ] [sěydù yà $\rightarrow$ ]
    $[1 \mathrm{Sg}$ and] [Seydou and]
    L+HL Ǐr $n$ à mò:lú wárá-ỳ:
    1 SgPoss. ${ }^{\mathrm{HL}}$ field come.together farm.Ipfv-1PlSbj
    'Seydou and I will farm my field together.'
    mò:lú- can also be transitive 'bring/put together, assemble (them)'. It can therefore be chained with a transitive verb, indicating that the objects (not subjects) are together (480).
    a. [sá:kù yèy kú] mò:lú dèyì-ỳ
    [sack two Def] put.together put.Pfv-1 SgSbj
    'I put down the two sacks together.' (yěy)
    $\begin{array}{llll}\text { b. } & {\left[\begin{array}{ll}{[\text { àwǎ-m }} & \text { yá } \rightarrow]\end{array}\right.} & {[\hat{o}-m} & y a ̀ \rightarrow] \\ & {[\text { snake-AnSg }} & \text { and }]\end{array} \quad\left[\right.$ mouse-AnSg $\begin{array}{ll}\text { and }]\end{array}$
    mò:lú dùwò-ỳ
    put.together leave. $\mathrm{Pfv}-1 \mathrm{SgSbj}$
    'I left the snake and the mouse together.'

    ### 15.1.7 Negation of verb chains

    If the chain denotes essentially a single complex event, as usual with direct chains, negating the final inflected verb suffices to negate the entire chain, or any part of it.
    nà $W^{n}$ â:
    meat
    ${ }^{H L}{ }_{j} \hat{\varepsilon}:$
    ${ }^{H L}$ bring
    $k u ̀ w o ̀ ~ L ~-r i ́-\varnothing ~$
    meat bring eat ${ }^{\text {L }}$-PfvNeg-3SgSbj
    'He/She will not bring and eat the meat.'
    15.1.8 VP-chaining with same-subject past sequential $=n i ́ \sim=n ́$

    A common device for linking two clauses with the same subject is to put the verb of the first clause in a form ending with $=n$ í, often reduced to $=n$, following the bare stem (with its lexical tone). The interlinear gloss is "and.SS." The tone distinguishes this clitic from the segmentally homophonous different-subject clitic $=n i ̀=$ ǹ, on which see $\S 15.1 .10$.
    $=n i ́ \sim=n$ is added to the bare stem of the verb. For $C V$ verb stems, such tonal distinctions as that between nú- 'go in' and nǔ- 'hear' were audible (482c), though not consistently. The one $<\mathrm{LHL}>$ monosyllabic, 'bring', is heard with $<\mathrm{LH}>$-tone plus downstep of the H-tone of the clitic (482d). Representative data are in (482).

    $$
    \begin{equation*}
    \text { gloss } \quad \text { bare stem } \quad \text { with }=n i ́ \tag{482}
    \end{equation*}
    $$

    a. $C \hat{v}=n i ́$

    $$
    \begin{array}{lll}
    \text { 'go' } & \text { ló } & \text { ló=ní } \\
    \text { 'spend night } & \text { ná } & \text { ná=ní } \\
    \text { 'shoot' } & \text { tá } & t a ́=n i ́ ~
    \end{array}
    $$

    b. $C \check{v}=n i ́$

    $$
    \begin{array}{lll}
    \text { 'come' } & y \check{\varepsilon} & y \check{\varepsilon}=n i ́ \\
    \text { 'arrive' } & d \grave{ } & d \check{l}=n i ́
    \end{array}
    $$

    c. 'hear' and 'go in' distinguished (though not easily)

    | 'hear' | $n u ̌$ | $n u ̌=n i ́$ |
    | :--- | :--- | :--- |
    | 'go in' | $n u ́$ | $n u ́=n i ́$ |

    d. 'bring' ( $<$ LHL $>$ tone preserved)
    'bring' $\quad j \varepsilon ̌: \quad j \varepsilon ̌:={ }^{\downarrow} n i ́$
    e. $C v y^{n}$
    'put' gǎy ${ }^{n} \quad$ gǎy ${ }^{n}=n i ́$
    'do’ káy ${ }^{n} \quad$ ká ${ }^{n}=n i ́$
    irregular
    'say' $\quad g u ̌ y^{n} \quad g u ̀=n i ́ ~$
    f. bisyllabic
    'tie’ páyá páyá=ní
    'take out' gò-ló gò-ló=ní
    'leave' dùwó dùwó=ní
    g. trisyllabic
    'poke' dùsùró dùsùró = ní
    Some examples are in (483).
    a. [yă-m
    ìsê: $\quad g o \check{o}=$ и́ $]$
    $y \check{\text { č:-rı̀- } \varnothing}$
    [woman-AnSg village go.out=and.SS]
    come-Pfv1a-3SgSbj
    'A woman left the village and came (here).'
    b. [wárà ăy=ní] òrñ: ló:-rè- $\varnothing$
    [daba pick.up=and.SS] outback go-Pfv1a-3SgSbj
    'He took a daba (hoe) and went to the bush (= fields).'
    My assistant used this subordinator consistently for past-time event sequences with the same subject NP. In future (and generalized) time contexts,, he used $=$ náy ${ }^{n}$ (see the following section) for similar same-subject sequential events.

    There is also a phrase $k u ́=\grave{m} n i ́ i n t h e ~ t e x t s, ~ c o n s i s t i n g ~ o f ~ k u ́=\grave{m}$ 'it is that' (i.e. 'that's it') plus a ní that might be equated morphemically with same-subject $=n i ́$, but that merely resumes the situation established by preceding discourse. $k u ́=\grave{m} n i ́$ is set off prosodically from preceding and following material. An example is at the beginning of (657) in the sample text. $k u ́=m ̀$ without $n i ́ i ~ i s ~ e v e n ~ m o r e ~ c o m m o n . ~$

    ### 15.1.9 VP-chaining with same-subject future sequential $=$ ná $^{n}{ }^{n}$

    This clitic is attached to an uninflected verb stem that drops its tones to $\{\mathrm{L}\}$. This tonedropping does not occur with other clause-final particles. The exception to tone-dropping is that the only <LHL>-toned monosyllabic stem, 'bring', retains its tones; the final L is expressed as downstep $\left(^{\downarrow}\right)$, i.e. as partial pitch-lowering of an H -tone, on $=$ náy ${ }^{n}(484 \mathrm{~d})$.

    $$
    \begin{equation*}
    \text { gloss } \quad \text { bare stem } \tag{484}
    \end{equation*}
    $$

    $$
    \text { with }=\text { náy }{ }^{n}
    $$

    a. $C \bar{v}=$ náa $^{n}$
    'go' ló lò = náy ${ }^{n}$
    'spend night ná nà = náy ${ }^{n}$
    'shoot' tá tà = náy ${ }^{n}$
    b. $C \bar{V}=$ náy $^{n}{ }^{n}$

    $$
    \begin{array}{lll}
    \text { 'come' } & y \check{y} & y \grave{\varepsilon}=\text { ná }{ }^{n} \\
    \text { 'arrive' } & d \check{o} & d \grave{o}=\text { náy }
    \end{array}
    $$

    c. 'hear' and 'go in' merged
    'hear' nǔ nù = náy ${ }^{n}$
    'go in' nú nù=náy $n$
    d. 'bring' (<LHL> tone preserved but final L expressed as downstep)
    'bring’ $\quad j \check{\text { en. }} \quad j \varepsilon ̌:={ }^{\downarrow}$ náy ${ }^{n}$
    e. bisyllabic

    | 'tie' | páyá | pàyà $=$ ná ${ }^{n}$ |
    | :--- | :--- | :--- |
    | 'take out' | gò-ló | gò-lò $=$ ná ${ }^{n}$ |
    | 'leave' | dùwó | dùwò $=$ náy ${ }^{n}$ |

    f. trisyllabic
    'poke' dùsùró dùsùrò = ná ${ }^{n}$
    My assistant regularly used = náy ${ }^{n}$ to link two same-subject clauses denoting future (including imperative) and generalized-time (gnomic) event sequences. He rejected $=$ ná $^{n}$ in reports of similar same-subject event sequences in the past, using $=n i ́$ (preceding section) instead. For example, = náy ${ }^{n}$ was regular in future-time lò = náy ${ }^{n}$ yé-y 'I will go and come [back]' and in imperative $l o ̀=$ náy $^{n}$ yá 'go and come[back]!'), but it was replaced with $=n i ́ ~ i n ~ p a s t-t i m e ~ l o ́=n i ́ ~ y e ̀-y ~ ' I ~ w e n t ~ a n d ~ c a m e ~[b a c k] ' . ~$

    Textual examples like those in (485) generally bear out the future or generalized-time context. The interlinear gloss is "then.SS."
    a. $\quad\left[u ̀ r \grave{̀}{ }^{L}=\right.$ ná $\left.^{n}\right]$
    [â:
    ${ }^{\mathrm{L}}$ dìy ${ }^{n a ̀}$
    [go.up ${ }^{\mathrm{L}}=$ then.SS] $\quad$ [LogoPlPoss $\quad{ }^{\mathrm{L}}$ desire with]
    ló-yè wà,
    go.Ipfv-3PlSbj Quot
    (They said:) they (two) could mount (it) and go at their pleasure' [2005.2a.06]
    b. [ìgú-rù $\quad g o o^{\mathrm{L}}=$ ná $^{n}$ ]
    [here go.out ${ }^{\mathrm{L}}=$ then.SS]
    [à: $m^{b}$ á: ${ }^{\mathrm{HL}}$ tûm] ló béré-m̀-dó- $\varnothing$
    [Amba ${ }^{H L}$ mate] go can-Ipfv-Neg-3SgSbj
    ${ }^{L}$ nà $y^{n}$ ]
    '... he could not walk (a distance) on the order of leaving here (= Beni) and going to Amba (village)' [2005.2b.02]
    c. [nù ${ }^{\mathrm{L}}$ díynà] [ánày ${ }^{n}{ }^{\mathrm{L}}$ Wò] bě:-rè- $\varnothing$ dè, [person ${ }^{\mathrm{L}}$ big.Pl] [like.that ${ }^{\mathrm{L}} \mathrm{in}$ ] remain-Pfv1a-3SgSbj if,
    $\left[j i ̀ y \grave{~}{ }^{\mathrm{L}}=\right.$ náy $^{n}$ nì] pégé-m̀-n- $\varepsilon \quad$ wá kǒy ${ }^{\uparrow}$
    [kill ${ }^{\text {L }}=$ then.SS Emph] put.in-Ipfv-Neg-3P1Sbj Quot Emph
    'the old people said: if that was indeed the case, they wouldn't kill (the girl) (first) and then stick her in (the hole)' [2005.2a.08]
    d. [[tà: $\left.\left.{ }^{\mathrm{L}} \quad k a ̀:\right]^{n}\right]^{\mathrm{L}} \quad b \hat{u}: \quad g \grave{a}^{n}{ }^{\mathrm{L}}=$ náy $\left.^{n}\right], \quad\left[l o ̀=n a ́ y{ }^{n}\right]$,
    [[shoe ${ }^{\mathrm{L}}$ any] ${ }^{\mathrm{L}} \quad 3 \mathrm{PlSbj}$ put ${ }^{\mathrm{L}}=$ then.SS], $\quad\left[\mathrm{go}^{\mathrm{L}}=\right.$ then.SS]
    [ìsê: gòクgùrú] bû: láwá-m̀ kù
    [village go.around] 3PlSbj go.past.Ipfv-Ppl.Inan Def 'whatever shoe they put on and go around the village and keep going' [2005.2b.04]
    e. $\quad\left[\left[\left[k \hat{u}: \quad{ }^{\mathrm{L}}\right.\right.\right.$ này $\left.{ }^{n}\right] \quad$ dìu ${ }^{\mathrm{L}}=$ ná $\left.\left.^{n}\right] \quad y \check{\varepsilon}-\grave{y}\right]$
    [[[head with] carry ${ }^{\mathrm{L}}=$ and.then $] \quad$ come-VblN]
    wǎ:w bû:- $\varnothing$
    distant be-3SgSbj
    '(For) carrying (water) with (= on) the head and coming (back), it's far away.' [2005.1a.05]
    f. [[kì-kà: ${ }^{\mathrm{L}} \quad$ kísíyé- $\left.m\right] \quad$ nây ${ }^{n} \rightarrow \quad y \grave{\varepsilon}^{\mathrm{L}}=$ ná $\left.^{n}\right]$
    [[grasshopper ${ }^{\mathrm{L}}$ flying-AnSg] thus come $^{\mathrm{L}}=$ then.SS]
    [yû: kù-kúwó-m̀ mâ:-màrná:]
    [millet Rdp-eat.Ipfv-Ppl.Inan amazingly]
    yì-tà $\left.{ }^{\mathrm{L}}-1 i ́-y ̀ . \therefore\right]$
    see ${ }^{\mathrm{L}}$-ExpPf ${ }^{\mathrm{L}}$-PfvNeg-1P1Sbj
    'We had never seen flying grasshoppers come like that and amazingly eat up the millet.' [2005.1a.08]
    g. [kú màyná:-rè- $\varnothing \quad m a ̀:] ~$
    [Inan dry-Pfv1a-3SgSbj before]
    $\left[\left[p a ̀ l=\right.\right.$ ná $\left.\left.^{n}\right] \quad n \varepsilon ́-\grave{y}^{n} . \therefore\right]$
    [[pick ${ }^{\mathrm{L}}=$ then.SS] eat.Ipfv-1PlSbj
    'Before they (=cow-peas) dry (=ripen fully), we pick (them) and eat (them).' [2005.1a.12]

    The combination of $=$ ná $y^{n}$ with mò:lú 'assemble, get together' is common. Compare English get together and (VP), where the assembling temporally precedes the joint action. The alternative is a direct chain with mò:lú preceding the other verb (§15.1.6 above).
    (486)
    a. [[ùsú
    súy $\left.{ }^{n}{ }^{n} y^{n}\right]$
    $d o ̌:-r \varepsilon ̀-\varnothing$
    dè]
    [[day seven] arrive-Pfv1a-3SgSbj if]
    [mò:lù $=$ ná $\left.^{n}\right] \quad$ ìnìr ${ }^{n} 1$ î: gán$-\grave{y} .:$
    [assemble ${ }^{\mathrm{L}}=$ then.SS] name put.Ipfv-1PlSbj
    'When seven days have arrived (=elapsed), having assembled, we give the name.' [2005.1a.02]
    b. $\quad\left[m o ̀: 1=\right.$ ná $\left.^{n}\right]$
    [assemble ${ }^{\mathrm{L}}=$ then.SS]

    | [ìsê: | wôy] | [[póngú | yěy] | mò:lú |
    | :--- | :--- | :--- | :--- | :--- |
    | [village | all] | [[neighborhood | two] | assemble |

    bǒy bàrná-ẁ.: dè] [ló gànjí-yè]
    bell beat-Ipfv.2P1Sbj if] [go dig.Ipfv-3P1Sbj]
    'Having gathered together, when two neighborhoods in each village would assemble and you-Pl would strike the bell, they would go and dig (for water).' [2005.1a.04]

    The temporal-sequence element is apparently challenged by (487). English speakers would understand 'help' and 'put roof on' as temporally coextensive. However, in Dogon languages 'help' is just a contextual sense of a verb whose core meaning is 'add, increase'. Therefore 'help you do the roofing' is really 'add (oneself, i.e. join) you, (and then) do the roofing', so a sequential reading is reasonable.

    ```
    y\varepsiloň [ú bàr=náyn] dèmbí-yè
    come [2SgObj help```

