# A Grammar of Ben Tey (Dogon of Beni)

Dogon language family Mali

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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 *kùmbŏy 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.

- 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 14 51.144 by W 02 56.785, 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 jìr<sup>n</sup>è kàlá* "Beni house new", archaic name *mà:-táŋà*), an offshoot of Beni proper; coordinates N 14° 51.248′ by W 02° 56.860′. 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 14 50.770′ by W 02 54.965′. 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 (*kùmbŏy*) 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 14 56.043 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 Jamsay-speaking 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 <sup>L</sup> or <sup>HL</sup>, 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 dying-quail intonation), which can be lexicalized, grammaticalized, or (as in English) discourse-sensitive. See §3.8 for a summary.

The syllabic tones in BenT, whether lexical or grammatical, are H, L, <HL>, <LH>, and bell-shaped <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 (1Sg possessor) on a monosyllabic noun. There is no <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 {L}, i.e. stem-wide L-tone, also known as **tone-dropping**. {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  $d\acute{e}m \rightarrow$  '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 {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 {HL} after final H-tone and {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.

1Sg 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 {HL} overlay, which combines with the floating L-tone of the 1Sg to produce {LHL}, more accurately represented as L+{HL}. For a rare noun like  $b\tilde{\epsilon}y^n$  'beard' that already consists of a lexically <LHL> syllable, the possessed stem with the {HL} overlay is  $^{\text{HL}}b\hat{\epsilon}y^n$ , and the 1Sg form with the extra L-tone on the left edge is therefore  $^{\text{L+HL}}b\tilde{\epsilon}y^n$  '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  $^{\text{(H)L}}$ [N Adj Num]. The relevant possessed-noun overlay,  $\text{\{HL\}}$  or  $\text{\{L\}}$ , targets the full domain.

There is a process reminiscent of terminal intonation modulation in verbal morphology, where 1Sg -y and 1Pl -y..., and likewise 2Sg -w and 2Pl -w..., 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 passive-like constructions. The verb stem, simple or suffixally derived, is followed by an **aspect-negation** (AN) suffix plus a **pronominal-subject suffix**, or by a **modal suffix** that also includes pronominal-subject information. For example,  $t \circ j \circ w$  'you-Sg have sowed (seeds)', the verb is followed by recent perfect  $-j \circ w$  and then by 2Sg subject -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 \*-n (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  $k\dot{u}$  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  $\{HL\}$  or  $\{L\}$  overlay.

An example of a NP is [yà L pĕ-m] HL [ínjè pèrù] '(a/the) old woman's ten dogs'. The NP yà L pĕ-m is marked up [woman L old-AnSg], where superscript L indexes tonosyntactic tone-dropping 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 injé pérú, mark-up 'dog-Pl ten', with zero marking of animate Pl. This noun-numeral combination is subject to a possessor-controlled {HL} tone overlay. The mark-up of the possessed NP is HL [dog ten], realized as [HL dog L ten].

## 2.4 Postposition phrase (PP)

Postpositions include dative  $m\hat{a}$ ; instrumental  $p\hat{a}y^n$  '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  $[[X^{HL}túlu]^Lwo]$ , literally 'in X's rear', where tulu' 'rear' takes possessed-noun  $\{HL\}$  overlay.

Examples of PPs are, with another composite postposition,  $[tiw^n \xi y^n]^{HL} b \ell l \ell l \ell l \ell l$  'beside (a/the) tree' (originally 'in/at the tree's side'), mark-up [[tree HL side] in], and the simple PP  $h \ell l \ell l$  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 = ni 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.

- (2) a. yéŋgù bồ: dúwánsán yé-w = bè-Ø
  yesterday 1SgPoss-father D come-3SgSbj=Past-3SgSbj
  'My father came to Douentza yesterday.'
  - b.  $b\ddot{o}$ :  $y\acute{e}ng\grave{u}$   $d\acute{u}w\acute{a}ns\acute{a}n$   $y\acute{\epsilon}-\grave{w}=b\grave{\epsilon}-\mathcal{O}$  [=(a)]
  - c. yéngù bê:n bŏl èsf<sup>n</sup>→ mìr<sup>n</sup>è-Ø yesterday Beni rain(n) a.lot rain.fall.Pfv-3SgSbj 'Yesterday it rained a lot in Beni (village).'
  - d. yéŋgù [ɔ̂rʰɔ́: dá:] àsùwʰɛ̂-[yì-tɛ̂:]
    yesterday [outback around] boy-[children]
    jáy jàyà-bɔ̂
    fight(n) fight.Pfv<sup>L</sup>-3PlSbj
    'Yesterday the young men had a fight (squabble) in the fields.'
  - e.  $n\check{u}$ :  $n\grave{a}w^n\hat{a}$ :  $b\check{a}y^n \rightarrow k\grave{u}w\grave{o}-b\grave{o}$ person.Pl meat a.lot eat.meat.Pfv-3PlSbj 'The people ate a lot of meat.'
  - f. *yì-tê*:  $n\hat{a}y^n$ →  $súy\delta$ -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  $k\hat{a}$ : 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 (3b-c) replace this with a participle that agrees with the head NP.

```
a. main clause
    [stone see-Ipfv-1SgSbj]
    'I see a stone.'
b. subject relative
    [person-Pl<sup>L</sup> stone see-Ipfv.Ppl-AnPl Definite]
    'the people who see a stone'
c. nonsubject (in this case, object) relative
    [stone<sup>L</sup> 1Sg 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 **dey dusó**- 'put down and leave', where the nonfinal verb remains in the bare stem while AN and pronominal-subject 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  $= n \acute{a} y^n$  (§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  $= n \acute{a} y^n$ , are associated with same-subject (SS) sequences. The corresponding different-subject (DS) clause-final subordinating particle is  $= n \grave{i} \sim = \grave{n}$ , which suspiciously resembles the accusative morpheme that is optionally added to direct-object pronouns and other NPs. For example,  $y \grave{e} = n \acute{a} y^n$  'come=and.SS' occurs in contexts like 'I came and (then) went back', while  $y \acute{e} = \grave{n}$  'come=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 ( $\S17.1$ ). Quoted material can be framed by an explicit 'say' verb  $g\check{u}y^n$ -, 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 3Sg suffix. However, 3Pl subject is marked on the verb. This is one of several cases in BenT (mirrored in several other Dogon languages) where 3Pl subjects get special favored treatment in verbal agreement. The schema in (4) shows how a 1Sg 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 (=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 §3.3, followed by vowels in §3.4. The vowel-harmony system (§3.4.5) is not much of a factor in the morphophonology. Segmental (i.e. non-tonal) phonological processes are covered in §3.5, followed by remarks on cliticization in §3.6. The tonology is §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 Cv, Cv:, or CvC, rarely Cv:C.

Verb stems are fond of the Cv shape. Nearly all monosyllabic verb stems are of this monomoraic shape, for example  $d\check{\sigma}$  'burn',  $m\check{\sigma}$  'shape (pottery)',  $l\check{\sigma}$  '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:  $y\check{\varepsilon}$ - 'come',  $n\check{u}$ - 'hear',  $g\check{\sigma}$ - 'jab'. We do get a long vowel in  $j\check{\varepsilon}$ :- 'bring' with its <LHL> tone.

With the exception of a few Cv nouns and adjectives, stems other than verbs have at least two moras, so vowel-final monosyllabic stems are usually of the shape Cv:, as in  $k\hat{u}$ : 'head',  $n\hat{a}$ : 'big'.

The defective noun  $n\acute{a}$  'time(s)' is always short-voweled. It is always closely combined with a following numeral or other quantifier:  $n\acute{a}$   $y\acute{e}y$  'twice'. Other nouns and adjectives that appear to be lexically Cv are /yǎ/ 'woman', /nű/ 'person', /ô/ 'mouse', /sŏ/ '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  $n \hat{a} w^n \hat{a}$ :, compare Jamsay  $n \hat{b} w^n \hat{b}$  and Toro Tegu  $n \hat{a} m \hat{a}$ . The final rising tone is also found in two Dogon languages subgrouped with BenT: Nanga  $n \hat{a} m \hat{a}$ , Bankan Tey  $n \hat{a} m \hat{a}$ :. If we reconstruct \*n\hat{a}m\hat{a}-, 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 bisyllable stems with an initial heavy syllable, e.g. bà:tó 'sack', jémbé 'bag'. However, nouns

like  $s \grave{e} g \acute{e} r \grave{e}$  '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.  $CvCi \rightarrow CvC$  (§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-mì*, 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	-		m			W	$W^{n}$		
alveolar	t	d	n	$\boldsymbol{S}$	1	r	$r^n$		
alveopalatal		j	Ŋ	((š))		$\boldsymbol{y}$	$y^n$		
velar	$\boldsymbol{k}$	$\boldsymbol{g}$	ŋ						
laryngeal								<i>(h)</i>	((?))

c is IPA [t], j is  $[d_3]$ , š is [], y is [].

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, p)

As elsewhere in the northeastern Dogon language zone, there is some fluctuation between  $\{k \ g\}$  and  $\{c \ j\}$  pronunciations before front vowels  $\{i \ e \ e\}$ . Where both pronunciations have been recorded, I normalize the transcription as  $\{c \ j\}$ .

p is fairly common before a vowel. Examples:  $p \in \mathcal{E}^n$  'eat a meal',  $p \in \mathcal{E}^n$  'hold near fire',  $p \in \mathcal{E}^n$  'night', and  $p \in \mathcal{E}^n$  'do for a long time'.

An interesting alternation of y and p is intransitive y urd '(someone) wake up' and transitive p urd 'wake (someone) up'. In other languages, cognates have either a nasal element in both forms (Jamsay p, Bankan Tey  $n\hat{j}$ ), or a non-nasal element in both forms (Nanga and Najamba w).

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

Spirantization of intervocalic /g/ to y is fairly common, though not obligatory, when intervocalic within a word and flanked by vowels from the set  $\{a\ o\}$ . Thus  $k\dot{u}$ -dà $y\acute{a}$  'agemate',  $d\grave{o}y\acute{o}$  'state of being disdained'. One may consider g to be phonologically basic.

Historically, some original \*g have been deleted between nonhigh vowels, resulting in long vowels in BenT. For example,  $\grave{ars\check{e}}:$ -m 'domestic animal' reflects \*(g)\rangle rs\rangle g'. Jamsay and Nanga  $g\grave{as}\grave{e}g\acute{e}$ . It is ultimately from Arabic. Likewise  $d\eth$ : 'Dogon (people)' and  $\eth$ : 'chiefs' derive from \*d\rangle g' and \*\rangle g'. For deletion of \*\eta\$ in similar contexts see §3.3.3 below.

## 3.3.3 Velar nasal $(\eta)$

Aside from the homorganic clusters  $\eta g$  and  $\eta k$ , we get  $\eta$  in  $\frac{\partial \eta}{\partial y}$  'how?',  $\frac{\partial \eta}{\partial y}$  (variant  $\frac{\partial \eta}{\partial y}$  'strength',  $\frac{\partial \eta}{\partial y}$  'thus',  $\frac{\partial \eta}{\partial y}$  'get dressed',  $\frac{\partial \eta}{\partial y}$  'spinal cord', and several other stems.

As with \*g, original \*ŋ has disappeared intervocalically in certain words, e.g.  $n\check{a}:-m$  'cow' (\*nàŋá), though it is retained in  $n\grave{a}\eta\grave{a}-n\grave{a}:r^n\acute{u}$  'butter (from cow's milk)', which may have been borrowed from the identical form in Jamsay. In  $s\acute{\epsilon}w^n\acute{u}$  'make thorn-branch fence', we seem to have  $w^n$  for \*ŋ (Jamsay  $s\acute{a}\eta\acute{a}$ , Nanga  $s\acute{\epsilon}\eta\acute{\imath}$ ).

## 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 marpa: 'rifle', kape: (alongside kate:) 'coffee', puru-puru 'wheat-flour fritters'.

I have recorded f in some loanwords that I assume also have variants with p:  $c\acute{e}:f\grave{a}m$  'fever',  $t\acute{e}:f\grave{a}$  'fee paid to witness of livestock sale',  $f\grave{a}rn\^{i}$ : 'wheat-flour fritters',  $n\acute{a}:f\~{i}g\grave{u}$  'trouble-makers',  $d\acute{o}f\~{e}$  'good-for-nothing adult',  $n\grave{a}f\~{a}$ : 'usefulness',  $m\acute{a}:f\~{e}$  'red sauce',  $s\acute{a}:f\~{a}$  'evening prayer', and a few others. However, I also recorded f in  $j\acute{o}f\~{u}$  (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', híjiì 'pilgrimage to Mecca', and hí:lé 'dupe, trick'.

? (glottal stop) is found in  $g\acute{u}r\grave{u}$ ?á: $n\grave{a}$  'Koran (book)', where it reflects Arabic ?, and in the semi-linguistic utterance  $5^n$ ? $\grave{a}^n$  'nope!'. A glottal stop is also inserted after a v- (for Cv-) 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  $\{\breve{s}\ z\ \breve{z}\}$  occur in a few loanwords from French:  $\'{a}l\'{a}\breve{z}\'{e}r\^{i}$ : 'Algeria',  $\'{z}\'{a}n\'{a}rm\'{a}$  'gendarmes',  $\'{s}inw\^{a}$ : 'Chinese'. There is no strong tendency to phonetically palatalize s before front vowels.

## 3.3.7 Nasalized sonorants $(r^n, w^n, y^n)$

These nasalized sonorants can be independent phonemes in (noninitial) intervocalic position within words. In stems like  $b \grave{a} r^n \acute{a}$  'beat (tomtom)',  $k \acute{a} w^n \acute{a}$  'mash (to press out oil)',  $\ell w^n \acute{e}$  'milk (a cow)',  $p \acute{t} \cdot y^n \acute{t}$  'confine',  $d \acute{t} y^n \grave{a}$  'old', and  $g \check{a} y^n$  '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  $n \grave{u} w^n \acute{t}$ :, Jamsay  $n \check{t} m$ , Nanga  $n \grave{t} m \acute{t}$  'cow-pea'.

 $y^n$  and  $w^n$  may also occur syllable-finally, though only  $y^n$  is common here:  $g\check{a}y^n$  'put',  $k\acute{a}y^n$  'do',  $p\check{e}w^n$  (sound of fart).

In e.g.  $n a r^n i y^n - w^n$  (for /nar^niy^ni-w^nu/) '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  $siy^n \check{a}w$  'lover', pronounced  $[sij^n \check{a}w^n]$ , and verb  $n\grave{a}r^n iy^n \cdot \check{w}^n$  'expand (e.g. one's herd)'.

In  $\underline{aw^ny^n}$  ('(wound) swell',  $\underline{\epsilon w^n \hat{\epsilon} y^n}$  'milk (noun)',  $\underline{jir^n \check{\epsilon} y}$  'rainy season', and some few other stems, there are two mutually reinforcing consonants from the set  $\{r^n \ w^n \ y^n\}$ . 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' ( $w^n 5: p \hat{u}$ , but also  $w \delta: n j \hat{u}$ , etc.); the final element (not otherwise attested) in  $k \delta n j \delta - w^n \hat{a} y^n \hat{a} y^n$  'strong, effervescent millet beer' (cf.  $k \delta n j \delta$  'millet beer');  $w^n \hat{a} : r^n \hat{u}$  '(vine) spread out'. There is no general leftward Nasalization-Spreading, as shown by examples like  $w \delta m b \hat{u}$  'uproot peanuts' and  $y \delta m d \hat{u}$  'be useless'. 'Woman' is  $y \delta : -m$ , plural  $y \delta : \hat{u}$  (unnasalized).

#### 3.3.8 Consonant clusters

## 3.3.8.1 Initial *CC* clusters

Word-initial CC sequences are nasal-stop sequences  $\hat{\eta}g$  and  $\hat{m}b$ .  $\hat{\eta}g$  is seen in demonstrative  $\hat{\eta}gu$  'this' and in some other deictics, in  $\hat{\eta}go$  'not be', and a few Fulfulde loanwords like  $\hat{\eta}gu$ : 'livelihood'. Initial  $\hat{m}b$ , which often alternates with simple m, is illustrated by  $\hat{m}bo$ :  $\sim mo$ : 'mouth' and  $\hat{m}ba$   $\sim ma$  'interethnic cousinhood'; intermediate pronunciations like  $[\hat{m}^bo$ :] 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 *CC* clusters

Geminated medial *CC* clusters are generally limited to Fulfulde (and other) borrowings.

Geminated clusters in words not likely to have been borrowed are:

```
Il: illá 'slightly', kíllíyé 'be lost to sight', péllí 'break or cut off', illé 'lift from underneath'.
```

nn: dànní 'hunt (verb)', kŏnnò 'ladle (noun)' (variant of kòtúnò).

Other geminated clusters attested in probable loanwords are exemplified below:

```
Other geminated clusters attested in probable lobb: t5bbè-t5bbè 'spotted'.

cc: h5ccé 'chew cud'.

dd: sáddà àyí 'be responsible for'.

gg: l5ggí 'make dirty'.

jj: híjjì 'pilgrimage to Mecca'.

kk: júkké 'assess a fine'.

mm: júmmà 'Friday prayer'.

pp: síppé 'describe'.

rr: yárró:rè 'tolerance'.

tt: 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 *CC* 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:

```
mb: témbù 'traditions'.
        nd: súndù 'child's medicine'.
        nt: bènté 'loincloth'.
        nj: kònjó 'millet beer'.
        ηg: kóηgóró 'chew on (bone)'
        ηk: yóηkù 'soul'
Attested in Fulfulde loanwords:
        mp : hámpε 'chew (tobacco)'.
There are no attestations for \#nc.
    Another cluster that occurs in native vocabulary is this:
        lg: jélgé→ 'dangling'.
Other non-geminate CC clusters attested are found mostly in loanwords, especially from
Fulfulde. They include many combinations beginning with a sonorant \{v \ w \ r \ \}.
        yb: háybε 'watch over'.
        yk: táykέ 'notice'.
        yl: léylà 'night of 27th of Ramadan'.
        yn: láynέ 'chant (invoking God)'.
        yr: bóyrì 'porridge'.
        yt: sèytâ:n 'demon'.
        wd: jáwdù 'livestock'.
        wg: tíwgú 'be disoriented'.
        wl: dáwlè 'renown'.
        wt: sáwté 'be fed up'.
        wy: śwyi '(hen) brood'.
        w^n y^n: j \hat{a} w^n y^n i 'branch out'.
        rb: dárbôy 'sword'.
        rd: wírdù 'saying one's beads'.
        rg: dòrgú 'ransom'.
        rk: àrkélè 'armpit'.
        rm: bármá 'pot'.
        rn: fàrnî: 'wheat-flour fritters'.
        rp: màrpâ: 'rifle'.
        rs: mórsínè 'large gunpowder horn'.
        rt: sártù 'deadline'.
        Ib: àlbárkà 'thanks!'.
        lc: àlcêw 'stirrup'.
        lj: áljúmá:rè 'Friday'.
        lk: àlkàmí:sà 'Thursday'.
```

## 3.3.8.4 Medial triple *CCC* 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.

```
yŋg: póyŋgôl 'illumination'.
yŋk: sóŋóyŋkê 'Songhay (people)'.
rnd: bérndê '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 *CC* 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 [+ATR]  $\{e\ o\}$ , mid-height [-ATR]  $\{e\ o\}$ , and low a. The qualities all occur in short and long forms.

(7)	short oral	long oral
	u	u:
	0	<i>o:</i>
	o	<b>ɔ</b> :
	a	<i>a:</i>
	$oldsymbol{arepsilon}$	ε:
	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
u^n
u^n
o^n
o^n
a^n
a^n
e^n
o^n
```

 $j\hat{\imath}$ : "odor",  $g\hat{\imath}$ : "(or  $g\hat{\imath}y$ ") 'fart (noun)",  $c\hat{\imath}$ : "- $c\hat{\imath}$ : "creaking sound (onomatopoeic)",  $\hat{\epsilon}s\hat{\imath}$ " 'very much' (intonational prolongation makes identification of phonological length

impossible), *jí:*<sup>n</sup>-*jà:*<sup>n</sup> 'staggering or stumbling along' (expressive adverbial), *sî:*<sup>n</sup> 'liquid animal fat (for sauce)'.

```
s\check{u}: " s\acute{u}" 'breathe'. k\acute{\sigma}: " 'possession (of someone)'; j\acute{\sigma}: " j\acute{\sigma}" 'make a criticism'. c\acute{\varepsilon}: " 'inheritance'.
```

a<sup>n</sup> and a:<sup>n</sup>: -kă:<sup>n</sup> 'doers' (agentive) as in sìrdì-kă:<sup>n</sup> 'magicians'; gă:<sup>n</sup> 'put-ers' (agentive) as in yù:rù-gă:<sup>n</sup> 'fortune-tellers who analyse fox tracks', pá<sup>n</sup> 'take (a step)', àjăy<sup>n</sup> já<sup>n</sup> 'sow (seeds) in a pit with manure'.

## 3.4.3 Initial vowels

Words may begin with any oral vowel quality. Examples are  $\acute{a}rw\acute{u}$  'thunder (verb)',  $\acute{\epsilon}w^n\grave{\epsilon}y$  'milk',  $\acute{\epsilon}w$ -yé 'sit',  $\acute{o}s\grave{u}$  'road',  $\grave{u}s\acute{u}$  'sun',  $\grave{i}r\check{\epsilon}y$  'ripe',  $\grave{o}r\acute{u}$  'fresh'. Long vowels are uncommon but attested:  $\acute{\iota}:r^n\acute{\epsilon}y$  'iron'.

#### 3.4.4 Stem-final vowels

#### 3.4.5 Vowel harmony

The active vowel-harmonic sets in Dogon languages are  $\{\varepsilon \ o\}$  versus  $\{\varepsilon \ o\}$ , 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  $j \in b$  'bag',  $c \in l \in b$  'do well',  $s \in b \in b$  'sprinkle', and  $d \in b \in b \in b$  'trian' strike'. In other words, even combinations of  $b \in b \in b$  with  $b \in b \in b$ , are uncommon. However, we do seem to have harmonic effects in the nativization of loanwords such as  $b \in b \in b \in b \in b$  '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  $\{r^n \ w^n \ y^n\}$ . 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.  $\langle n \dots r \dots w \dots \rangle$  becomes  $n \dots r^n \dots w^n \dots$  I do not normally transcribe the nasalization in word-final position in nouns and other non-verb words.

In reversive verbs (§9.1), note  $pi:y^ni$ - 'shut', reversive  $pi:^n-r^ni$ - 'open' (i.e. 'un-shut'). A causative example is  $aw^ny^ni$ - 'be swollen', causative  $aw^ny^i-w^nu$ - 'cause to swell'.

The situation is complicated by cases where the potential target of Nasalization-Spreading is separated by a vowel from a preceding original \*mb or \*ng cluster that now alternates between the original nasal-stop pronunciation and a simple nasal  $\{m, y\}$ , or that has now shifted entirely to the simple nasal pronunciation. In most such cases, Nasalization-Spreading 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  $\grave{e}m\check{e}y^n$  'sorghum' (compare Bankan Tey  $\grave{e}mb\check{e}y$ ) and for younger speakers in  $m\check{a}y^n$  'hard' (archaic  $mb\check{a}y$  is also attested).

```
(9)
             bámàrà
                                        'Bambara (ethnicity)'
                                         'become lost' (cf. Bankan Tey mbara)
             màrá
             mì-rá-
                                        'not want' (cf. Bankan Tey mbirá-)
                                         'courtyard' (cf. Bankan Tey dámbáy)
             dámáy
                                         'earth, dirt' (cf. Bankan Tey sùmbăy)
             sùmŏy
         b. tángày ~ tánày
                                        'side'
             ngú-rù ~ ηú-rù
                                         'here'
             k \partial \eta g \partial r \delta \sim k \partial \eta \partial r \delta
                                         'stem'
             '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 -ri- is regularly nasalized to  $-r^ni$ - in combinations like  $ni-r^ni$ - 'did not give' (verb ni-), hence  $3Sg ni-r^ni$ - $\emptyset$ ,  $1Sg ni-r^ni$ - $\hat{y}^n$ ,  $1Pl ni-r^ni$ - $\hat{y}^n$ .,  $2Sg ni-r^ni$ - $w^n$ , and  $2Pl ni-r^ni$ - $\hat{w}^n$ ., but the 3Pl form is ni-r-a 'they did not give' with unnasalized r. Likewise, a suffix  $-y\hat{e}$  with various plural or 3Pl functions (plural of adjectives, 3Pl of imperfective), does not nasalize: ni- $y\hat{e}$  'they do/will give'. Other suffixes that do not nasalize are perfective- $1a : -r\hat{e}$ - (nii- $r\hat{e}$ - 'did not go in'), progressive  $:-r\hat{a}$ - (nii- $r\hat{e}$ - 'is not going in'), and purposive  $-r\hat{a}$ :  $-r\hat{e}$ :

## 3.5.2 Vocalism of suffixally derived verbs

## 3.5.2.1 Suffixal Vowel-Spreading

Reversive suffix  $-r\dot{v}$ - occurs (disregarding nasalization of the rhotic to  $r^n$ ) in the forms  $-r\dot{i}$ - (interchangeable with  $-r\dot{u}$ -),  $-r\dot{o}$ -, and  $-r\dot{e}$ -. The less common surface forms  $-r\dot{o}$ - and  $-r\dot{e}$ - continue the o or e vocalism of the input stem or at least its final syllable ( $k\dot{u}mj\dot{o}$ - $r\dot{o}$ - 'uncrumple',  $g\dot{o}l\dot{o}$ - $r\dot{o}$ - 'uncover',  $n\dot{e}ng\dot{e}$ - $r\dot{e}$ - 'become uncaught'). The example  $p\dot{r}r\dot{e}$ - $r\dot{r}$ - 'get unbogged' shows that  $-r\dot{r}$ - may occur even where the phonological conditions permitting  $-r\dot{e}$ - appear to be present. For the data, see §9.1.

Causative  $-w\acute{u}$ - has invariant suffixal vocalism (§9.2.1), as does the minor causative suffix  $-g\acute{\iota}$ - (§9.2.2). The vocalism of transitive suffix  $-r\acute{v}$ - (rarely  $-l\acute{v}$ -, §9.4) is consistent with that of reversive  $-r\acute{v}$ - (surface forms are  $-r\acute{\iota}$ - and  $-r\acute{e}$ -). In  $d\grave{\iota}$ -r\acute{e}- 'bathe (someone)' from intransitive  $d\grave{\iota}$ -y\acute{e}- 'bathe', and in  $s\acute{\iota}$ -l\acute{e}- 'take down' from intransitive  $s\acute{\iota}$ -y\acute{e}- '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  $\{o\ u\}$  vowels is associated with  $-lo-\sim -ro-$ , i.e. with suffixal o (duu u) 'fat', inchoative duu u) 'fat', inchoative duu u) 'fat', inchoative duu u) 'fat', inchoative duu u) 'smooth', inchoative duu u) 'fat', inchoativ

## 3.5.2.2 Presuffixal V<sub>2</sub>-Raising

In verbal derivation, the final syllable of a *CvCv*- (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):  $p\acute{e}g\acute{e}$ - 'nail (verb)', reversive  $p\acute{e}g\acute{e}$ - 'remove (nail)';  $p\acute{a}\gamma\acute{a}$ - 'tie', reversive  $p\acute{a}g\acute{e}$ -f- 'untie', f- 'forget', reversive f- 'remember; f- 'paste, affix', reversive f- 'unpaste, remove (something affixed)'. I know of no reversives involving input stem-final f- When the input stem-final is f- 'encourse in this vowel before the suffix: f- 'cover', reversive f- 'uncover'; f- 'get unbogged'. For data see f- 'become uncaught', f- 'get bogged', f- 'get unbogged'. For data see f- 'seminative in the suffixed in the s

There is no shift in stem-final vowel quality before causative  $-w\dot{u}$ - (§9.2.1). With a different causative suffix allomorph, we do get vowel raising in  $\dot{u}r\dot{o}$ - 'go up', causative  $\dot{u}l\dot{u}$ - $r\dot{u}$ - 'take up'. Similarly, the two verbs with causative  $-g\dot{\iota}$ - ( $k\dot{a}w\dot{a}$ - 'separate oneself' and  $s\dot{a}y\dot{a}$ - 'be dispersed') delete the stem-final a, presumably after first raising it to a high vowel:  $k\dot{a}w$ - $g\dot{\iota}$ - 'separate (X from Y)',  $s\dot{a}y$ - $g\dot{\iota}$ - 'disperse (others)'.

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

## 3.5.3 Vocalic rules sensitive to syllabic or metrical structure

## 3.5.3.1 Vowel-Lengthening before verbal derivational suffix

Cv with short vowel is an acceptable shape for verb stems, e.g.  $t\delta$  'step on'. Such short vowels are lengthened before derivational (but not inflectional) suffixes: reversive derivative  $t\delta$ :-ri- 'remove foot from (something that one has stepped on)' but e.g. perfective (inflectional)  $t\delta$ -ti:- 'stepped on'. Causative examples include  $p\epsilon$ - 'eat (meal)', causative  $p\epsilon$ :- $w^n u$ - 'feed, give food to' and nu- 'enter', causative nu:- $v^n u$ - 'cause to enter'.

Failure to lengthen was observed in irregular (frozen) causatives that involve truncation of an intransitive *Cv-yv-* stem to *Cv-*, rather than an underlying /Cv/ stem: *dì-yé-* 'bathe, take a bath', causative *dì-ré-* 'bathe (someone)'; *si-yé-* 'go down', causative *si-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 §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  $d\hat{e}w\hat{u}$  'cover (something)' is normally heard as  $d\tilde{e}w$ , both as simple  $d\tilde{e}w$  in chains and in suffixed forms like perfective-1b  $d\tilde{e}w$ - $t\hat{i}$ :- $\mathcal{O}$ . Pronunciations  $d\hat{e}w\hat{u}$  and  $d\hat{e}w\hat{u}$ - $t\hat{i}$ :- $\mathcal{O}$  are possible in careful speech. The bisyllabic character of such verbs is better brought out in e.g. imperative  $d\tilde{e}w\hat{a}$  (with a vowel mutation) and imperfective  $(d\hat{i}$ - $)d\hat{e}w\hat{u}$ - $\hat{m}$  'he/she covers'. Other verbs with similar patterns include  $\hat{a}w\hat{u}$ - 'receive',  $d\hat{a}$ :yi- 'encounter', and  $w\hat{a}yi$ - 'hold', which are heard as  $a\hat{u}$ -,  $a\hat{u}$ -, and  $a\hat{u}$ -, in the relevant environments.

Of the other sonorants, r is frequently associated with Syncope and Apocope in similar positions. Examples are  $p a r^n i$  'call', b a r i 'help', and l a r i 'chase', which are often heard as p a r i, b a r i, and b a r i.

Nouns like y ar u 'cloudy weather' have both full and reduced (y ar) pronunciations, with the full pronunciation favored in isolation and the reduced one common before a consonant-initial word, as in y ar g o- 'cloudy weather go out (= end)'.

#### 3.5.4 Local consonant cluster and consonant sequence rules

## 3.5.4.1 Derhoticization $(/r^n/ \text{ to } n)$

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

The best example of  $/r^n/ \to n$  is probably the agentive compound  $tin-tir^n i-m$  'woodgatherer', whose initial is the noun  $tir^n i \sim tir^n i$  'firewood'.

Stem- or word-final ... $r^n i$  or ... $r^n u$  optionally drop the vowel before certain consonants, especially alveolars  $\{t \ d \ n\}$ , and in this case the  $/r^n/$  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 II, which in other northeastern Dogon languages sometimes arise from \*rl, see §3.3.8.2.

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

Perfective negative /-rí-/ combines with final /y<sup>n</sup>/ in verb stems to produce -ní-. The three verbs with final  $y^n$  are  $k\acute{a}y^n$ - 'do, make',  $g\check{a}y^n$ - 'put', and  $g\check{u}y^n$ - 'say'. Their perfective negative forms are  $k\grave{a}$ -ní-, and  $g\grave{u}$ -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  $\{n \ \eta \ r^n\}$ , e.g. Jamsay  $k\acute{a}r^n\acute{a}$ -.

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

The /y<sup>n</sup>/ of the three  $Cvy^n$  verbs (see preceding section) combine with hortative negative /-rè-m/ (§10.5.6) to give -lè-m/. Thus  $k\acute{a}$ -lè-m' 'let's not do!' from  $k\acute{a}y^n$  'do', and  $g \check{a}$ -lè-m' 'let's not put!' from  $g \check{a}y^n$ . The same fusion occurs with purposive subordinator /-rá:/ (§17.5.1.1), e.g.  $k\grave{a}^L$ -lá: 'in order to do'.

## 3.5.4.5 /r...r/ becomes l...r or l...l in verbal morphology

**Reversive** verbs (§9.1) normally add  $-r\sqrt{r}$  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 Cvlv (10b). This suggests that a **dissimilatory** shift of /r...r/ to l...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).

```
(10)
            input
                         gloss
                                           reversive
                                                          gloss
        a. gòró-
                         'cover (person)' gòlò-ró-
                                                           'uncover (person)'
                         'paste, affix'
                                           tálí-rí-
                                                           'unpaste, detach'
            tárá-
                         'forget'
            ìré-
                                           ìlì-rí-
                                                           'remember'
           kólí-
                         'hook, hang up' kólí-rí-
                                                           'unhook, take down (sth hanging)'
        c. píré-
                         'get bogged'
                                           píré-rí (gŏ)
                                                           'get unbogged'
```

The **causative** suffix allomorph  $-r\dot{v}$ - is responsible for a similar, though frozen and isolated, alternation in  $\dot{u}r\dot{o}$ - 'go up', causative  $\dot{u}l\dot{u}$ - $r\dot{u}$ - 'take up'.

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

These alternations are typical of suffixal derivation, but are not systematic in AN inflection. In particular, perfective negative -ri- does not regularly induce the shift of an r in the stem to l. Thus t ere-ri- 'did not chop', g ro-ri- 'did not steal', b ang ri-ri- 'did not hide', etc.

However, the verb bèré- 'get, obtain' does combine with perfective negative -rí- as bèl-lí- 'did not get', a form that is multiply attested in texts. The key difference between bèl-lí- and e.g. tèrè-rí- is syncope, which is not regular for Cvrv- verbs with final non-high vowels but which does apply idiosyncratically to /bèrè-rí-/. When syncope does apply, the resulting /rr/ cluster is realized as II. Evidently /rr/ is disfavored. Indeed, rr clusters do not occur within stems, in native Dogon vocabulary, though there are some Fulfulde loans like várró:rè 'tolerance'.

Another example of the ll output from /rr/ after syncope is  $siy\check{e}-l=l\grave{a}$ : from /siyè-rí=rà:/ 'it has not gone down' (text 2005.1b.05). Another is  $d\grave{a}:l-l\acute{l}$ -, syncopated variant of  $d\grave{a}:r\grave{l}-r\acute{l}$ - 'did not please'.

The shift /rvr/ to ll is arguably accomplished in two stages, a dissimilation to /r(v)l/ or /l(v)r/ (perhaps before syncope), followed by an assimilation (after syncope) to ll. There is one attestation of unassimilated rl, namely  $l\acute{a}y\^{a}:r=l\acute{a}$  'it isn't a sacrificial animal', for /l\acute{a}y\^{a}:r\^{u}=r\^{a}), text 2005.1b.04, where only the dissimilation has occurred (noun  $l\acute{a}y\acute{a}:r\`{u}$  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 lvr from /rvr/ in unsyncopated reversives (10a). Underlying /lvr/ also becomes as ll after syncope in  $t\grave{a}l-l\acute{l}$ -, syncopated variant of  $t\grave{a}l\^{l}-r\acute{l}$ - 'did not transform' (§10.2.3.2).

$$3.5.4.6 \quad \{w \ w^n\} \to m$$

When a stem with shape like Cvwv- or  $Cvw^nv$ - 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  $\{r\}$  to d as well.

The adjective  $\tilde{a}m$  'plump' corresponds to inchoative verb ('become ADJ')  $\tilde{a}w^n\tilde{a}$ - '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  $-l\dot{v}$ - or less often  $-r\dot{v}$ - (§9.7). In the case of 'black', we get adjective  $j\dot{\epsilon}w^n\dot{\epsilon}$ - but inchoative

*jèm-dé*- 'become black' (the *md* 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  $-y\dot{v}$ -. For 'cold', the adjective is  $t\hat{a}m$  while the inchoative is  $t\hat{a}w^n - v^n - t$ ' become cold, cool off'.

/w/ does not shift to m in adjectives with a following nominal suffix (singular, plural). Thus  $\hat{\jmath}w$  'hot, fast', animate singular  $\hat{\jmath}w$ -m, animate plural  $\hat{\jmath}w$ - $y\hat{e}$ . The shift also does not occur before reversive derivational suffix -ri-(§9.1), to judge by the one known example:  $d\tilde{e}w$  'cover (object)', reversive  $d\tilde{e}w$ -ri- 'uncover (object)'. It does not apply before the minor causative suffix - $g\hat{v}$ - in  $k\hat{a}w\hat{a}$ - 'separate oneself', causative  $k\hat{a}w$ -gi- 'separate (X from Y)'.

### $3.5.4.7 / r/ \rightarrow d$

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  $= r\acute{a}$ . It becomes  $= d\acute{a}$  in e.g.  $\acute{i} = \grave{m} = d\acute{a}$  '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 /CCvC/, the cluster is simplified. The examples known to me involve /mbvr/ becoming *md*, 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 *VV*-Contraction

Contraction of two vowels to one vowel occurs in verbal morphology.

In verbs, the **progressive** suffix appears as  $:-r\hat{a}-$ , i.e. as lengthening of a stem-final vowel followed by  $r\hat{a}$ . The suffix could be represented as  $/-vr\hat{a}-/$  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 :- $r\hat{\epsilon}$ -, and could be represented as /- $vr\hat{\epsilon}$ -/.

There are no opportunities for *VV*-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  $i-?\check{e}w^nr^n\grave{e}$  '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  $\acute{e}w-y\acute{e}-$  'sit') we get reduplicated forms like  $i-?\acute{e}w-y\grave{e}-w$  '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  $\{j \ c \ p\}$  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  $y \frac{\partial \hat{l} \cdot r\hat{t}}{\partial l}$  (meat) become tender' seems more common than  $y \frac{\partial \hat{l} \cdot r\hat{u}}{\partial l}$  in spite of the initial-syllable o, while the causative  $y \frac{\partial \hat{l} \cdot r\hat{u} \cdot w\hat{u}}{\partial l}$  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  $1 \text{Sg} - t\hat{\imath} - \hat{y}$  [ $t\hat{\imath}$ i] and  $2 \text{Sg} - t\hat{\imath} - \hat{w}$  [ $t\hat{\imath}$ u], and a few similar cases in verbal inflectional morphology. This transcriptional practice permits an orthographic distinction in the perfective-1b between  $1 \text{Sg} - t\hat{\imath} - \hat{y}$  and  $3 \text{Sg} - t\hat{\imath} - \emptyset$  (the latter is from /- $t\hat{\imath} - \emptyset$ / with the / $\hat{\imath}$ / 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 [dògǐ:] etc..

Inanimate suffix -w may be added to adjectives that end in u, as in  $y \partial r \hat{u} - \hat{w}$  'tender (e.g. meat)', which is heard as [j $\partial r \hat{u}$ :].

### 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"  $\{y \ w \ r\}$  to be nasalized after a nasal syllable could be taken as an indicator of clitic status. In this analysis, passive  $-y\acute{e}y$  (§9.5), adjectival plural  $-y\grave{e}$  (§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 $= \dot{m} \sim = \emptyset$

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 = $b\hat{\epsilon}$ -

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 verb-suffix combination; see §10.4.1.

# 3.6.3 Stative negative $= r\acute{a}$ -

Stative negative  $= r\acute{a}$ - (§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 H[igh], L[ow], <LH> (rising), <HL> (falling), and **bell-shaped** <LHL>. There are no <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. H.<HL> (H followed by <HL>).

Contour-toned syllables usually have at least two moras. In other words, light Cv syllables are normally simple H or L. Exceptions are  $C\check{v}$  verb stems, and initial  $C\check{v}$  syllables in nouns when 1Sg 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 Cv: or CvC and superheavy Cv: syllables may be H, L, <LH>, <HL>, or <LHL>. There is no increase in duration for <LHL> as opposed to <HL> or <LH> syllables; the three tone segments are articulated over a similar duration, with the initial L-tone segment generally brief. Thus  $j\check{e}$ : 'bring' does not have noticeably greater duration than e.g.  $c\hat{e}$ : 'scale', and  $g\check{a}w$  '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 H, <LH>, <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 clause-final subordinating morphemes.

For the possibility that some nouns might have no lexical H-tones, see  $\S 3.7.1.7$ . Whether lexical or not, even these nouns must have at least one H-tone element in surface forms, except when an  $\{L\}$  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,  $j\tilde{\epsilon}$ : '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 /H/ melody. Stems beginning with a sonorant or with zero initial consonant (i.e. with initial vowel) have a lexical choice between /H/ and /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 /LH/ stems, **the tone break is just before the right edge** of the stem. The patterns are therefore  $C\check{v}$ ,  $C\check{v}$ :,  $C\hat{v}C\acute{v}$ ,  $C\hat{v}CC\acute{v}$ ,  $C\hat{v}C\acute{v}$ ,  $C\hat{v}C\acute{v}$ ,  $C\hat{v}C\acute{v}$ , etc. This pattern is enforced for suffixal derivatives as well as for underived stems; for example, a  $C\hat{v}C\acute{v}$  stem has suffixal derivatives of the shape  $C\hat{v}C\acute{v}-C\acute{v}$ .

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'		
ɲέ	'eat (meal)'		
káy <sup>n</sup>	'do, make'	§10.1.3.6	
b. /LH/ melody			
gŏ	'go out'		
yĚ	'come'	§10.1.3.3	
nŭ	'hear'		
gǎy <sup>n</sup>	'put'	§10.1.3.6	
gŭy <sup>n</sup>	'say'	§10.1.3.6	
c. <lhl> melody (only example)</lhl>			
iἒ:	'bring'	\$10.1.3.4	

Some bisyllabic and longer stems of /H/ and /LH/ melodies are in (12).

# (12) Nonmonosyllabic verb tone melodies

```
stem
                     gloss
a. /H/ melody
    tíwé
                     'die'
                     'tie'
    páyá
    pégírí
                     'unbutton'
                     'chew'
    tógóró
b. /LH/ melody
    jìyέ
                     'kill'
                     'do farm work'
    wàrá
                     'spread out'
    wà:r<sup>n</sup>ú
                     'roll oneself (on the ground)'
    bìlìré
                     'break in half'
    dàngìrí
```

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.

```
(13)
            stem
                             gloss
        a. H tone
                             'child'
            yí-m
            ná
                             'time(s)' (with numeral)
            ná:
                             'entire (e.g. plant)'
                             '(a) Dogon'
            d⋽:-m
        b. <LH> tone
            yă:
                             'women' (Sg. yă-m)
                             'knife'
            pŏ:
            něm
                             'salt'
```

```
c. <HL> tone
    kû:
                       'head'
    kô:
                       'scab'
    yû:
                       'millet'
    dâm
                       'gunpowder'
d. <LHL> tone (fairly full list, excluding Cv-y verbal nouns)
                       'guinea-fowls'
    ŏ:
    ď:
                       'fiber, tree bark' (contrast 3: 'chiefs')
                       'Dogon'
    ďã:
                       'cut (wound)'
    mĩ:
    gŏ:
                       'fire'
    gÿ:<sup>n</sup>
                       'pigeons'
    b\tilde{\varepsilon}v^n
                       'beard'
    b\tilde{a}v^n
                       'tibia of bird's leg'
  with initial L-toned Ci-/Cu-reduplication
                       'hyenas' (Sg tì-tă:-m)
    tì-tã:
                       'beetles, bugs'
    cì-cề:
    kì-kã:
                       'grasshoppers'
                       'grubs, worms'
    sì-sĩ:
    jì-j\tilde{\varepsilon}:^{n}
                       'flies'
                       'termites'
    tù-tũ:
                       'dancing ground'
    tì-tãy
  with initial H-toned Ci-/Cu- reduplication
    gí-gã:<sup>n</sup>
                       'crows'
    gú-gũ:
                      (pèrè-gìrè gú-gũ: 'vinaceous dove')
  with L-toned compound initial
    sàwà-sề:
                       '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-kùŋgùrɔ́ 'giant turtles' (§4.1.6)

/H/ /LHL/
kór pɛ̃: 'tree sp.' (Piliostigma)
sá gõ: 'ostriches'
tíŋ gõ: 'hornbills'
í- ʔĕwʰrʰɛ̃ 'tree sp.' (Spondias)
```

```
'grasshopper sp.' (Oedaleus)
    pété pề:
    s \acute{\epsilon} \eta \acute{\epsilon} r^n \acute{\epsilon} s \widetilde{\epsilon} : n
                        'grasshopper sp.' (Kraussella)
    pélé gìrê:
                        'doves'
     -sá kèlê:
                        'tiny scorpions' (compound final)
/LH/ /H/
                        'weaver (bird)'
    pòrú yóló
    gòrŏm gómjó
                        'millipedes'
/LH//HL/
    jòlŏm jórù
                        'herb sp.' (Xysmalobium)
    pèlěm pérù
                        'tall herb sp.' (Aeschynomene)
/LH/ /LH/
    mǎy kìr<sup>n</sup>é
                        'tree sp.' (Maerua)
/LH//LHL/
    àr<sup>n</sup>á wềy
                        'tree sp.' (Crataeva)
                        'glossy starling sp.'
    bă: kɔ̃:
                        'herb sp.' (Cassia)
    tùtǔ: běndè
                        'shellfish'
    kèrěŋ kě:sù
/L/ /LHL/
    yì-tề:
                        'children' (plural of yí-m)
    yà-tề:
                        'female (lizard)' (cf. yà- 'woman')
    kàtà kỹ:
```

With these compound-like forms factored out, the regular lexical tone melodies for noun stems are /H/, /HL/, /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.

```
(15)
        melody
                     stem
                                     gloss
                                     'cricket'
        /H/
                     kí-kéré-m
        /HL/
                     tớrờ
                                     'mountain'
        /LH/
                                     'body'
                     jèsú
        /LHL/
                                     'waterjar'
                     sèngû:
                                     'tree sp. (Acacia tortilis)'
        /HLH/
                     bísěm
```

## 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.

```
(16)
                                gloss
              stem
         a. /H/ melody
                                 'respectable'
              nínáy<sup>n</sup>
                                 'white'
              pílέ
         b. /LH/ melody
              lă-
                                 'other' (lă-w, lă-m, lă:)
              mă:
                                 'dry'
              gàlú
                                 'crooked'
              kòrŏy
                                 'empty, bare'
              bòlòrŏy
                                 'half-ripe'
         c. /HL/ melody
                                 'hot'
               \hat{\jmath}W
                                 'new'
              kálà
                                 'sweet' (érù-m, etc.)
               έrù-
                                 'cold'
               tâm
         d. /LHL/ melody
              mènjê-
                                 'thin' (m \hat{\epsilon} n j \hat{\epsilon} - w \text{ etc.})
               sàsû-
                                 'nearby' (sòsû-w, etc.)
              sŏ: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.

```
(17)
                 stem
                                      gloss
           a. /H/ melody
                                      'ten'
                 pérú
           b. /LH/ melody
                                      'three'
                  tà:nú
                 nĭ:y<sup>n</sup>
                                      'four'
                 nùmǔy<sup>n</sup>
                                      'five'
                 tè:sĭm
                                      'nine'
           c. /HL/ melody
                  súy^n \ni y^n
                                      'seven'
                 gá:rày
                                      'eight'
           d. /LHL/ melody, in part
                 tùw<sup>n</sup>ĵ-
                                      'one' (t\hat{u}w^n5||t\hat{u}w^n\hat{z}-m||t\hat{u}w^n5-y\hat{\epsilon}, \text{ cf. }t\hat{u}w^n\hat{z}: \text{ 'same'})
```

# 3.7.1.5 Tone-Component location for bitonal noun stems

The bitonal melodies are /HL/ and /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. *CvCv*) bisyllabic (18).

```
(18)
              stem
                                       gloss
         <LH>
              bĭ:n
                                       'tree sp.' (Sclerocarya)
              g\check{u}y^n
                                       'sedge'
              jž:<sup>n</sup>
                                       'hares' (Sg jɔੱ:<sup>n</sup>-m)
                                       'mongooses' (Sg sě:-m)
              sě:
         <HL>
                                       'francolin (bird)' (Sg sû:-m)
              sû:
              â:n
                                       'bee' (Sg â: n-m)
                                       'mice' (Sg ô-m)
              ô:
         L.H
              wàr<sup>n</sup>ú
                                       'tree sp.' (Anogeiussus)
              dùrú
                                       'spear for fruits'
                                       'father's sister'
              sìs\epsilon
         H.L
                                       'duiker (mammal)'
              lósù
              wárà
                                       'daba (hoe)'
```

In bisyllabics of the types Cv:Cv and CvCCv, the tone break is at the syllable boundary (19).

```
(19)
            stem
                                  gloss
        L.H
            pè:lú
                                  'tree sp.' (Detarium)
            kà:rú
                                  'crack'
            kà:sá
                                  'wool (fabric)'
            jàmbá
                                  'betrayal'
                                  'foot-chain'
            jàlgś
        H.L
                                  'shiftlessness'
            já:sù
            tó:rù
                                  'idol'
                                  'recognized value'
            dáwlè
                                  'ablutions'
            sálgù
```

When the second syllable of a bisyllabic stem has two moras, the situation is more complex. Stems of this shape with /LH/ melody have the tone break at the syllable boundary if the final syllable is *Cv*: 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 /HL/ melody have the tone break at the syllable boundary if the final syllable is *Cv*: (20c), but those with final *CvC* (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.

```
(20)
             stem
                                     gloss
         a. LH with break at syllable boundary
          final Cv:
             sà:yú:
                                      'wild fonio grass'
             \partial r^n \delta:
                                      '(the) bush, outback'
             dùmdó:
                                     'end (finish)'
         b. L<LH> with break in middle of final syllable
          final CvC
                                      'caïlcédrat tree'
             pèrěy
             jàmsěy
                                      'grass sp.'
                                     'tree sp.' (Grewia)
             àsšy
                                      'spike, point (of spear)'
             cìrgěv
           morphologically composite
                                      'shrub sp.' (Calotropis)
             gù:-gǔ:
             à-kǐ:
                                     'edible winged termites'
         c. H.L with break at syllable boundary
          final Cv:
             wúrò:
                                      'shrub sp.' (Salvadora)
             sínjì:
             kúrì:
                                     'rosary, prayer beads' (variant)
         d. H.L with break at syllable boundary
          final CvC (also a few numerals like s\acute{u}y^n\grave{j}y^n 'seven')
             \dot{\varepsilon} w^n \dot{\varepsilon} y^n
                                      'milk'
                                      'spices'
             s\acute{o}m\grave{o}v^n
             \int W^n \partial y^n
                                      'cemetery'
                                      'truth'
             térèw
                                      'expense'
             sádàm
         e. H.<HL> with break in middle of final syllable
          final CvC (mostly Fulfulde loans)
             dárbôy
                                      'single-edged sword'
                                      'sword'
             ká:fây
             póyηgôl
                                      'illumination (on horizon)'
             tílây
                                     'certainty'
                                     'animal market'
             gárbâl
```

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.

```
(21)
            stem
                                 gloss
        L.L.H with final monomoraic syllabie
            òsòró
                                 'baobab tree'
            kèrkèlé
                                 'tree sp.' (Dalbergia)
            gàngàrá
                                 'herb sp.' (Cassia)
            bìyà:kú
                                 'guava'
        L.L.L.H with final monomoraic syllabie
            dòŋ-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)
                                 'trouble-maker'
            ná:fígù
```

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.

```
(22) stem gloss

L.H.H

cèmkúsú 'tall herb sp.' (Sesbania)
sàsóŋgóm '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).

```
(23) stem gloss

L.L.<LH> or L.L.L.<LH> with tone break in middle of final syllable bà:rnàm(-)băm 'tall grass sp.' (Panicum)
pùtùm(-)pǔ: 'herb sp.' (Commelina)
èsègèrĕy 'lemon grass sp.'

H.H.<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 L.<LH> (24a) or <LH>.L (24b-c). The difference between L.<LH> and <LH>.L usually correlates with syllabic structure. If the final syllable ends in a long vowel, we get L.<LH> (24a); if the final syllable is monomoraic, we get <LH>.H (24b). Judging from (24c), a final sonorant (or at least a final semivowel) is disregarded.

```
(24)
                                    gloss
             stem
        a. L.<HL>, ends in long vowel
          inanimate
             òmdô:
                                    'tamarind'
             kùrô:
                                    'wild grape' (Lannea)
                                    'wild date' (Balanites)
             m \hat{\jmath}: r^n \hat{\jmath}:
             jìmbê:
                                    'shrub sp.' (Feretia)
          animate
             ènjê:
                                    'chickens' (Sg ènjê-m)
                                    'agama lizards' (Sg cèŋgû-m)
             cèngû:
        b. <LH>.L, ends in short vowel
             kěrsù
                                    'grass sp.' (Cynodon)
                                    'sand foxes'
             yŭ:rù
        c. <LH>.L (disregarding cpd initial), ends in CvC syllable
             gà:y<sup>n</sup>-kɔ̃:lò̄y
                                    '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  $\langle \hat{Cv} \rangle$  can be easily lengthened to  $\hat{Cv}$ : by Contour-Tone Mora-Addition (§3.7.4.1). One could therefore posit underlying  $\langle \hat{c}md\hat{o} \rangle$  etc. for (24a), with the same syllabic and moraic structure as e.g.  $\hat{k}$  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.<HL>. The data on nouns with a final short vowel plus semivowel are too sparse to allow generalizations (25c-d).

```
(25)
             stem
                                     gloss
         a. L.H.L or L.L.H.L, ends in short vowel
             màngórò
                                     'mango'
             sèkúrù
                                      'bush sp.' (Hibiscus)
                                     'tree sp.' (Celtis)
             gà:ní:kò
                                     'rifle'
             làsá:sù
             sàr<sup>n</sup>àkúyð
                                      'squirrels'
             tàbàtérù
                                      'colubrid snake sp.'
              wògòtórò
                                     'donkey cart'
         b. L.L.<HL> or L.L.<HL>, ends in long vowel
             mù-mùr^n\hat{u}:
                                     'scorpions'
                                      'owls'
             èdùnû:
                                      'tree sp.' (Combretum)
             àsàgùsô:
         c. L.H.L, ends in short vowel plus semivowel
             kànár<sup>n</sup>ày
                                      'watermelon'
                                      'segment'
             tìngírèy
             s \partial \eta \partial r^n \partial 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.<LH>, with rising tone in the final syllable. The final <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 <LH> is brought out by the fact that a following possessum (or noun-based postposition) has {HL} rather than {L} tone overlay. See §3.7.4.5 for the phonology.

```
(26)
             stem
                                    gloss
        H.<LH>
          plants
             bá:r<sup>n</sup>ăm
                                    'tree sp. (Acacia nilotica)'
             bísěm
                                    'tree sp. (Acacia tortilis)'
             n\acute{o}r^n\check{o}y^n
                                    'néré tree (Parkia biglobosa)'
                                    'tree sp. (Cassia sieberiana)'
             séwrěm
                                    'grass sp. (Dactyloctenium)'
             dáŋgĕy
                                    'aromatic sedge tubers'
             múy<sup>n</sup>ǎm
          ethnicities
                                    'Fulbe (people)', Sg púlð-m
             púlš:
             sórgš:
                                    'Bozo (people)', Sg sórgŏ-m
             jémbě:
                                    'blacksmiths', Sg jémbě-m
          other nouns
             bú:săm
                                    'marrow'
                                    'tent'
             húkům
```

```
déwrěm 'pit-trap'
sɔ́:rɔˇm 'upstairs'

H.H.<LH>
pórúyŏm 'bush sp. (Pergularia tomentosa)'
sémégĕm 'tree sp. (Acacia seyal)'
```

I know of three bisyllabic <LH>.<LH> nouns, all flora terms: yămbŏm 'tree sp. (Gyrocarpus americanus)', ɔ̃:mbŏm 'grass sp. (Andropogon gayanus)', and kĕ:lĕy '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.

(27)		plural	singular	gloss
	a.	wàrú mùnjú tèŋú bìr <sup>n</sup> ì-pìgìrí	wàrú-m mùnjú-m tèŋú-m bìr <sup>n</sup> ì-pìgìrí-m	'antelope sp.' 'Mossi' (ethnicity) 'Tengou' (ethnicity) 'spotted skink sp.'
	b.	àw <sup>n</sup> á àwá ùlú ànjá àr <sup>n</sup> à-mòró sèrù-kùw <sup>n</sup> á ìnjé gùló nì-nìw <sup>n</sup> é pèré kòlòró àsèmbé sàr <sup>n</sup> à-gàlàrá àbù:ló á-kùŋgùró	àw <sup>n</sup> ă-m àwă-m ùlŭ-m ànjă-m àr <sup>n</sup> à-mòrŏ-m sèrù-kùw <sup>n</sup> ă-m ìnjě-m gùlŏ-m nì-nìw <sup>n</sup> ĕ-m pèrĕ-m kòlòrŏ-m àsèmbĕ-m sàr <sup>n</sup> à-gàlàră-m àbù:lŏ-m	'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'

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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 /H/-toned, or have a rising tone pattern /LH/ with the rise on the final syllable.

In the perfective negative (suffix -ri-), and in the unsuffixed perfective, regular verbs undergo **tone-dropping** to {L}. The exception is the irregular verb  $j\tilde{\epsilon}$ :- '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 {H}-toned stems if not already lexically /H/. Within the perfective system, the reduplicated perfective and the reduplicated stative have an {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  $\{L\}$  when followed by a reference-restricting modifier (adjective, demonstrative pronoun); see §6.1.4. Thus  $is\hat{e}$ : 'village',  $is\hat{e}$ :  $is\hat{e}$ : ' $is\hat{e}$ : 'i

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', *isê*: 'village' will appear as *isè*: 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  $\{HL\}$  or  $\{L\}$  overlay when **preceded by a possessor**. In the case of  $\{HL\}$ , 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 (Cv: or CvC). This  $\{HL\}$  contour is clearly heard when the possessor ends in an H-tone, as in  $\hat{u}^{HL}$  isè: 'your-Sg village'. When the possessor ends in an L-tone, we get an apparent  $\{L\}$  overlay, as in  $\hat{u}^{LL}$  isè: 'your-Pl village'. One can argue whether this is a true  $\{L\}$  overlay, or is the more general  $\{HL\}$  possessed-noun contour plus an idiosyncratic tone-assimilation 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 environments. 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  $b\hat{u}$ -, 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 /H/ and /LH/ melodies, or are assumed to have /HL/ and /LHL/. See §11.4.1.

If a demonstrative pronoun follows a core NP, the final word in the core NP is tone-dropped. See (124a-c) in §6.5.2.

Numerals do not interact tonally with a preceding core NP. Therefore in e.g. [[house<sup>L</sup> 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]<sup>L</sup> [two<sup>L</sup>]] 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 {HL} or {L}, and since the initial H-tone in {HL} 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 /H/ or rising /LH/ tone melody. In the /LH/ case, the break between the L- and H-toned portions is at the onset of the stem-final syllable. In cases like w as a - c remain' and its causative w as a - c (the latter often subsequently apocopated to w as a - c), 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 {HL} and {LH} tone overlays

We start with {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.</hd>

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

If the domain targeted for {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  $\acute{u}$   $t\acute{u}ng\grave{u}r\grave{u}m$  'your-Sg stool', the initial H-tone is coterminous with the syllable [tun]. If the target domain is monosyllabic, the {HL} overlay is, as we would expect, realized as a falling tone:  $\acute{u}^{HL}b\hat{e}y^n$  'your-Sg beard', phonetically  $[\acute{u}b\acute{e}]^n$ ] 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  $p\check{e}y^n$  '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  $pey^ndumdo:$  were treated as an undifferentiated unit, we would have expected that the tone break between the H and the L of the  $pey^ndumdo:$  as in e.g.  $pey^ndumdo:$  as in e.g.  $pey^ndumdo:$  as in e.g.  $pey^ndumdo:$ 

```
(28) a. n \check{e} y^n meal

b. u \overset{\text{HL}}{} n \hat{e} y^n
2SgPoss \overset{\text{HL}}{} m e a l
'your-Sg meal'

c. u \overset{\text{HL}}{} [n \hat{e} y^n \quad d \hat{u} m d \hat{\sigma} : ]
2SgPoss \overset{\text{HL}}{} [m e a l \quad last]
'your-Sg last 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 \*L-HH 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 {LH} overlays. This pattern occurs in the final of agentive compounds, as in  $t \circ g \circ r \circ -[t \circ g \circ$ 

# 3.7.3.3 Tone-Grafting (1Sg possessor)

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

The 1Sg possessor morpheme is a floating L-tone, so when it is grafted onto the left edge of the possessed noun, the possessed noun ends up with {LHL}, analysable as L+{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.

(29)		noun	gloss	possessed {HL}	'my'
	a.	nă:	'hand'	nâ:	nã:
	b.	túŋgúrúm	'stool'	túŋgùrùm	tŭŋgùrùm
	c.	bànàkû:	'cassava'	bánàkù:	bănàkù:

The articulatorily and perceptually difficult case is (29c), because the 1Sg possessor form has a rising tone on a nonfinal monomoraic Cv 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  $\{HL\}$  or  $\{L\}$ . Some syntactic types of possessor require  $\{HL\}$  on the possessum. Other syntactic types of possessor require either  $\{HL\}$  or  $\{L\}$  on the possessum, depending on whether the possessor itself ends in an H- or L-tone.

The basic rules for choosing between {HL} and {L} overlay on the possessum are these. First, if the possessor is a **determined NP**, defined here as one ending in definite  $k\hat{u}$  or in a non-numeral quantifier such as plural  $b\hat{e}$ , it controls {HL} on the possessum. An example is  $[\hat{u}r\hat{o} \ b\hat{e}]^{HL}y\hat{i}-t\hat{e}$ : '(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 {L} on possessum, as in  $\hat{a}:m\hat{a}d\hat{u}$  ' $\hat{u}r\hat{o}$  'Amadou's house' (91a). Final H on possessor requires {HL} on possessum, as in  $y\hat{a}-m$  HL  $\hat{u}r\hat{o}$  '(the) woman's house' (92a).

The same distribution of {H} and {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 *isê*: 'village' as possessum appears as HL isê: or Lisê: after N-Adj (30a-b) or N-Num (30c-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  $\{L\}$  overlay, but this is only because the medial possessum ('uncle') itself has  $\{HL\}$  or  $\{L\}$  overlay and therefore always ends in an L-tone.

- (30) a. [àr<sup>n</sup>à<sup>L</sup> díy<sup>n</sup>à] Lìsè:
  [man.Pl<sup>L</sup> big.Pl] Lvillage
  'a big men's village' (=a village of big [=old] men)
  - b. [àr<sup>n</sup>à<sup>L</sup> èsú] <sup>L</sup> HL ìsè: [man.Pl L good.Pl]<sup>L</sup> Village 'a big men's village' (=a village of good men)
  - c. [ár<sup>n</sup>à kúròy] <sup>L</sup>ìsè: [man.Pl six] <sup>L</sup>village 'a village of six men'
  - d. [árnà tà:nú] HL ísè: [man.Pl three] HL village 'a village of three men'
  - e. [ú HL lésù] Lìsè:
    [2SgPoss HL uncle] Lvillage
    'your-Sg uncle's village'

Only {HL} overlay is allowed when the possessor ends in plural  $b\dot{e}$  (31a-b) or definite  $k\dot{u}$  (31c), so we get strictly the {HL} overlay on <sup>HL</sup> *isè*: in spite of the L-tones of these particles.

- (31) a. [ú HL] lésù bè] HL sè:
  [2SgPoss HL] uncle Pl] HL village
  'your-Sg uncles' village'
  - b. [pèré bè] HL ísè: [sheep Pl] 'tullage 'a village of sheep-Pl'
  - c. [[ár<sup>n</sup>à-m kù] HL ísè:] [[man-AnSg Def] HL village 'the man's village'

One might assume that {HL} on the possessum is also controlled by a postnominal demonstrative ('this', 'that'). This is correct, but since all such demonstratives end in an H-tone (§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  $k\dot{u}$  and plural  $b\dot{e}$  allow following {HL}-toned possessums is that they were originally H-toned \*kú and \*bé. Definite  $k\dot{u}$  is etymologically an offshoot of near-distant demonstrative  $k\dot{u}$ , and the definite marker is still heard with H-tone in a few combinations, for example with 'it is' clitic in  $[\acute{a}r^n\dot{a}-mk\acute{u}]=\dot{m}$  'it's the (aforementioned) man' (333b) in §11.2.1.1. Likewise,  $b\dot{e}$  becomes  $b\dot{e}$ : 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  $k\dot{u}$  is distinct from near-distant  $k\dot{u}$ , precisely by their tones (§4.4.1). So the fact that NP-final  $k\dot{u}$  and  $b\dot{e}$  control {HL} overlay is synchronically a morphosyntactic fact.

Still, one is tempted to unify the  $\{HL\}$  and  $\{L\}$  melodies, taking one of them as underlying and the other as derived by a tone sandhi process, even if morphosyntactically conditioned. Since  $\{HL\}$  has the broader distribution, we could take it as basic and derive  $\{L\}$  by a tone-sandhi rule (perhaps called "Initial H-Tone Suppression") of the type  $L\#HL \to L\#LL$ , 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.  $m\acute{e}g\acute{e}$  'more' can be lowered to  $m\grave{e}g\grave{e}$  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 <HL> and L- toned forms of conjugated 'it is' clitics matching the final tone of the preceding noun, e.g.  $1Sg = m-i-\grave{y}^n$  versus  $= m-i-\grave{y}^n$  (§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  $1Sg X = \grave{m} = d\acute{a}-\grave{y}$  'I am not X', and in  $3P1 X = r\acute{a}-b\acute{b}$  'they are not X' after L-tone as in  $inj\grave{e}:=\varnothing=r\acute{a}-b\acute{b}$  '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 {HL} and {L} to one basic overlay is to choose {L} for this honor. In this case, the {HL} version require a tone sandhi rule of the type H#LL  $\rightarrow$  H#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  $\hat{u}$  [ $\hat{n}\hat{u}$   $\hat{v}$   $\hat{v}$ 

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 §6.2.1 for more detail.

## 3.7.3.5 Atonal-Syllabic-Suffix Tone-Spreading

The 3Pl pronominal-subject suffix has a wide range of allomorphs depending on the AN category (-b5,  $-y\dot{e}$ , etc.). Of interest here is the 3Pl perfective-1b form  $-ti-y\dot{a}$ . The perfective-1b suffix is /-ti-/ (3Sg -ti-/) with an extra mora added, 1Sg  $-ti-\dot{y}$ , 2Sg  $-ti-\dot{w}$ , etc.). The general tonal structure of verbal inflectional suffixes suggests that 3Pl -ya (like most other pronominal-subject suffixes) is atonal, acquiring its tone from the preceding morpheme. To get from /-ti-ya/ to -ti-ya/, the L-tone part of the HL-tone in /-ti-/ 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 /-j $\hat{\epsilon}$ -/. The 3Pl form appears as -j- $\hat{a}$ :, which could be derived from /-j $\hat{\epsilon}$ -a/ via /-j $\hat{\epsilon}$ -à/.

A similar process may be at work in a suffix -ma, which occurs both as yet another 3Pl subject allomorph, in experiential perfect  $-t\acute{a}$ -ma (§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  $-t\^{a}$ - with <HL> tone, its other forms ( $-t\^{a}$ -m,  $-t\^{a}$ -w) are analysable as having atonal suffixes. One could envision a similar analysis for  $-t\acute{a}$ -ma, namely as underlying /-t\^{a}-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 Cv syllable, lengthening its vowel, to allow a contour (i.e. non-level) tone to be articulated with ease. Contour tones are  $\langle HL \rangle$ ,  $\langle LH \rangle$ , and  $\langle LHL \rangle$ . In the case of final  $\langle LH \rangle$ , lengthening is pre-empted when the preceding syllable is L-toned. In this case, Final-Cv  $\langle LH \rangle$ -to-H Reduction (§3.7.4.3) applies, simplifying the final  $\langle LH \rangle$  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 aspect-negation (AN) suffix of the shape /- $\hat{\text{Cv}}$ -/ is followed by 3Sg (zero) pronominal-subject ending. The relevant suffixes are perfective-1b /- $\hat{\text{ti}}$ -/ (§10.2.1.5) and recent perfect /- $\hat{\text{je}}$ -/ (§10.2.1.8). The 3Sg forms are heard as - $\hat{\text{ti}}$ :- $\hat{\text{O}}$  and - $\hat{\text{je}}$ :- $\hat{\text{O}}$ , respectively, which show the extra mora in the form of vowel length. For the underlying short vowel of the AN suffixes, cf. e.g. 3Pl perfective-1b - $\hat{\text{ti}}$ - $\hat{\text{ya}}$  and 2Sg recent perfect - $\hat{\text{je}}$ - $\hat{\text{w}}$ .

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 /yă/ there is no such cushion, so the vowel is lengthened and we get yă: 'women'. A bisyllabic example is /púlɔ/ 'Fulbe (ethnic group)', where singular púlɔ-m corresponds to plural púlɔ-m to 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 /inje/ 'dog' with singular inje-m and plural inje. A final short <HL> 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 ô-m and plural ô:, /cèngû/ 'agama lizard' with singular cèngû-m and plural cèngû:

Adjectives are treated like nouns as far as the data reveal. Adjectives:  $/p\check{\epsilon}-/$  'old' with animate singular  $p\check{\epsilon}-m$  and animate plural  $p\check{\epsilon}:$ ,  $/n\grave{a}:r^n\hat{a}/$  'easy, cheap' with animate singular  $n\grave{a}:r^n\hat{a}-m$  and animate plural  $n\grave{a}:r^n\hat{a}:$ . The only relevant numeral is 'one', and here the data are somewhat tricky, as both  $t\grave{u}w^n\hat{s}:$  and  $t\grave{u}w^n\hat{s}$  are attested (in different senses) alongside  $t\grave{u}w^n\hat{s}-m$ , see §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 1Sg possessor morpheme (floating L-tone) to a noun. The result is a noun whose first sylable 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 accommodate 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 Sg -y, 1 Pl -y.:, 2 Sg -w, or 2 Pl -w.: 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 <LHL>), the **final tone gravitates toward** the suffixal sonorant. For example, recent perfect -jê- combines with (atonal) 2 Sg -w as -jê-w, where the pitch drop is roughly coterminous with the final semivowel. Likewise, in yă-m 'woman' from noun stem /yă/ 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 <LH>-tone when animate singular -m is present but becomes H-toned when unsuffixed (i.e. in the plural). Example: *injě-m* 'dog', plural *injé*. 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 injě-m, phonetically [indzem]; 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 /cengû/ '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 (cengû: 'agama lizards', jémbě: 'blacksmiths'). This lengthening is pre-empted in stems like 'dog', i.e. those with underlying final /...Cv(C)Cv/, by Final-Cv <LH>-to-H Reduction, resulting in final ...CvC.

Another type of final <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  $y = x^2 + x^2 +$ 

Examples (using the nouns just listed), involving locative  $w\acute{o}$ , are  $y\grave{a}r\acute{t}$ :  $w\acute{o}$  'in the sky' and  $k\grave{o}mb\acute{t}$ :  $w\acute{o}$  'in the burrow'. An example with conjunction particle  $y\acute{a}\rightarrow$  is  $\grave{a}rs\acute{e}$ :  $y\acute{a}\rightarrow$  'animals and ...'. An example with a numeral is  $\grave{a}rs\acute{e}$ :  $k\acute{u}r\grave{o}y$  'six animals', contrast  $\grave{a}rs\acute{e}$ :  $l\check{e}y$  'two animals'.

<LH>-to-H raising does not apply to monosyllabic stems. For example, mă: 'dry' remains rising-toned in gòyò mă: wó 'in the dry season', as does tă: 'pond' in tă: wó 'in the pond'.

## 3.7.4.4 <LHL>.H to downstepped <LH>.\(^1\)H

There are few opportunities for a <(L)HL> syllable to be followed within a word by an 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,  $j\tilde{\epsilon}$ :- bring'. When it is followed by an H-toned suffixal or clitic syllable, the verb stem simplifies to <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  $j\tilde{\epsilon}$ :- 'ri- $\mathcal{O}$  'he/she didn't bring'. The symbol ' indicates downstep of the following syllable. If the suffixal/clitic syllable is <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  $-\dot{m}$ - $d\acute{o}$ - (3Pl form  $-\dot{m}$ -n- $\acute{e}$ ) which is preceded by an H-tone (§10.2.3.3). However, in this case the L-tone does not delink; it is clearly audible on the  $-\dot{m}$ - formative. The pitch of the following  $-d\acute{o}$ - 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 <LHL> syllable to <LH> occurs in certain combinations involving the high-frequency noun yi- $t\tilde{\epsilon}$ :, irregular plural of yi-m 'child' (§4.1.2), especially in yi- $t\tilde{\epsilon}$ :  $m\tilde{a}$ :, which can be either dative  $m\tilde{a}$ :  $\sim$   $^Lm\tilde{a}$ : (§8.3) or quotative-subject  $m\tilde{a}$ :  $\sim$   $^Lm\tilde{a}$ : (§17.1.1.1). Since both morphemes take L-toned form after an L-tone, the underlying final L-tone of yi- $t\tilde{\epsilon}$ : is manifested indirectly. Similarly, a possessum or noun-like postposition following yi- $t\tilde{\epsilon}$ : takes {L} rather than {HL} tone overlay, as it would after any common noun ending in L-tone: [vi]- $t\tilde{\epsilon}$ : [vi]-[vi]

#### 3.7.4.5 H.<LH> to H.M, or to H.L before H

There are a number of H.<br/>
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  $b\acute{a}:r^n\check{a}m$  'tree sp. (*Acacia nilotica*)' pronounced [b\acute{a}:r^n\bar{a}m]. That it is structurally <LH> is shown by the fact that a following possessum, including noun-based postpositions, have {HL} rather than {L} tone overlay, which occurs when a common-noun possessor ends in an H-tone:  $[b\acute{a}:r^n\grave{a}m]$  HL  $t\acute{u}l\grave{u}$ ] Lwò 'behind (a/the) acacia'. However, in this combination the noun has lost its final H-tone.  $p\acute{u}l\grave{b}:=\emptyset=r\acute{a}-b\acute{b}$  'they are not Fulbe (people)', see (345c) in §11.2.1.6, with H.<LH>-toned  $p\acute{u}l\grave{b}:$  'Fulbe (people)' followed by H-toned stative negative  $=r\acute{a}$ , I hear [púlō:rābō], i.e. the  $\acute{b}:$  is not dropped to  $\grave{b}:$ , and the ceiling for the pitch of H-tones is lowered.

#### 3.8 Intonation contours

# 3.8.1 Phrase and clause-final nonterminal contours $({}^t, {}^t, \rightarrow, \rightarrow{}^t, \rightarrow{}^t)$

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 ( $^{\uparrow}$ ) and/or prolongation ( $\rightarrow$ ) is typical of nonfinal phrases in such parallel constructions; I use  $\rightarrow$  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  $^4$ . Where the final phrase ends with intonational prolongation in addition to a low pitch, I use  $\rightarrow$   $^4$ .

Before (rather than after) a word or syllable, 'indicates downstep.

## 3.8.2 Lexically built-in intonational prolongation (→)

Many expressive adverbials have a lexically built-in intonational prolongation, symbol  $\rightarrow$ . This is distinct from vowel length, as seen especially in cases like  $d\acute{e}m \rightarrow$  '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 (:)

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 Cvn with final nasal prolongs the nasal rather than the vowel. H-toned  $C\acute{v}n$ : is heard as  $[C\acute{v}n\grave{n}]$ , 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).

(32)	person	singular	plural
	first	í	î:
	second	ú	û:
	third	$ \acute{arepsilon}r^n\!\acute{arepsilon}$	bû:
	logophoric/reflexive	á	â:

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 i., i., b., b., b., and a., with the understanding that c 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 <HL>-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.

```
(33) a. \dot{u}s\dot{u}^L y\hat{u}: \dot{u}: (\hat{\imath}c, b\hat{u}c, \hat{\imath}c)
day millet 2PlSbj (1PlSbj, 3PlSbj, LogoPlSbj)
\dot{k}\dot{s}s\dot{u}-\dot{w} \dot{k}\dot{u}
harvest.Pfv-Ppl.Inan Def
'the day when we (you-Pl, they, they-Logophoric) harvested the millet'
```

```
b. \frac{\partial r^n \partial^L}{\partial r^n} y\hat{u}: \frac{\partial k \partial u - \hat{m}}{\partial r^n} \hat{k}\hat{u} man millet harvest.Pfv-Ppl.AnSg Def 'the man who harvested the millet'
```

Similar examples, this time with a *Cî*: noun ('water') as the comparandum, are in (34). Again, I could detect no prosodic difference between the plural pronouns and the noun.

```
(34) a. \dot{\boldsymbol{w}}\dot{\boldsymbol{s}}\dot{\boldsymbol{u}}^L n\hat{\boldsymbol{n}}: \hat{\boldsymbol{i}}: (\hat{\boldsymbol{u}};, \hat{\boldsymbol{b}}\hat{\boldsymbol{u}};, \hat{\boldsymbol{a}};)
day^L \quad \text{water} \quad 1PlSbj (2PlSbj, 3PlSbj, LogoPlSbj)
n\check{\boldsymbol{5}}\boldsymbol{\cdot}\dot{\boldsymbol{w}}^n \quad k\dot{\boldsymbol{u}}
drink.Pfv-Ppl.Inan \quad Def
'the day when we drank the water'
```

```
b. \frac{\partial r^n \partial - m^L}{\partial r^n \partial r^n} \frac{n\hat{i}}{\partial r^n \partial r^n} \frac{n\hat{j} - m\hat{j}}{\partial r^n \partial r^n} \frac{k\hat{u}}{\partial r^n \partial r^n} water drink.Pfv-Ppl.AnSg Def 'the man who drank the water'
```

3Pl  $b\hat{u}$ : is also homophonous (to my ear) with inanimate participial  $b\hat{u}$ - $\hat{w}$  from the existential-locational quasi-verb  $b\hat{u}$ - 'be' (§14.1.6.3), and with 3Sg  $b\hat{u}$ :- $\emptyset$  'he/she/it is' in adjectival predicates (§11.4.1).

I will therefore transcribe the plural pronouns as  $\hat{\imath}$ ;  $\hat{u}$ ;  $\hat{b}\hat{u}$ ; 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 1Pl and 2Pl 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 3Sg and 3Pl verbal suffixes.

1Sg suffix -y and 2Sg -w are word-final in verbs, following the stem and any nonzero AN suffix. The effect is to create a final Cv-y or Cv-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 Cv-y or Cv-w inflected verb is possible when a Cv stem (verb or quasi-verb) is followed directly by the pronominal suffix (in the unsuffixed perfective). A monosyllabic Cv:-y or Cv:-w inflected verb occurs in similar forms of je: 'bring'.

The dying-quail effect is realized on 1Pl and 2Pl counterparts of these 1Sg and 2Sg 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 1Pl suffixes; the 2Pl forms with -w. are parallel prosodically. The table shows the 1Sg form in the central column. The right-hand column shows the phonetic realization of the 1Pl form, which consists structurally of the 1Sg form plus the  $\therefore$  effect. Verbs in (35) are  $d\dot{u}y\dot{s}$  'pound (in a mortar, to dislodge grains from grain spike)' in several forms,  $1\dot{o}$  'go' (perfective-1a), and  $b\dot{i}$ - $y\dot{e}$  'lie down' (statives).

## (35) Dying-quail intonation for 1Pl suffixes

		1Sg	1Pl (i.e. 1Sg plus ∴)
a.	Sg $C\hat{v}$ - $y$ > Pl $[C\hat{v}$ :- $j$ ]		
	'have' (H-toned)	yá só-y	[jásô:j]
	'be there'	yá bú-y	[jábû:j]
b.	$\operatorname{Sg} C\hat{\mathbf{v}} - \mathbf{y} > \operatorname{Pl} [C\hat{\mathbf{v}} : -\mathbf{j}]$		
	progressive	dùyó:-rà-y	[dùjớ:râ:j]
	perfective-1a	ló:-rὲ-y	[ló:rɛ̂:j]
	reduplicated stative	bì-bíyè-y	[bìbíjê:j]
	simple stative	yá bí-yé-ỳ	[jábíjê:j]
c.	$\operatorname{Sg} C\hat{v}\text{-}y > \operatorname{Pl} [C\hat{v}\text{:-}j]$		
	unsuffixed perfective	dùyò-ỳ	[dùjô:j]
	perfective negative	dùyò-rí-ỳ	[dùjòrî:j]
	perfective-1b	dùyó-tí-ỳ	[dùjótî:j]
	experiential perfect	dùyó-tá-ỳ	[dùjótâ:j]
	resultative	dùyó-só-ỳ	[dùjɔ́sô:j]
	recent perfect	dùyó-jé-ỳ	[dùjójê:j]

```
unsuffixed imperfective
                                  dúyó-ỳ
                                                            [dújô:j]
                                                            [dújóm¹dô:j]
imperfective negative
                                  dúyó-m-⁴dó-ỳ
past imperfective
                                  d\acute{u}y\acute{5}-\grave{m}=b\grave{\varepsilon}-y
                                                            [dújóm¹bê:j]
past stative
                                  (bi-)bi-y\acute{e}-w=b\acute{e}-\dot{y} [(bì)bíjéwbê:j]
                                  bi-ye-w=ra-\dot{y}
stative negative
                                                            [bìjèwrâ:j]
progressive negative
                                  d\hat{u}y5:-r\hat{a} = ra-\hat{y}
                                                            [dùjó:ràrâ:j]
'not have'
                                  sò-ló-v
                                                            [sòlô:j]
adjectival predicate
                                  mòsú bú-ỳ
                                                            [mòsúbû:j]
'be (a child)' (copula)
                                  yi-m = m-i-\hat{y}^n
                                                            [jím:î:j<sup>n</sup>]
                                  púl\partial - m = m - i - \hat{v}^n
'be (a Fulbe)' (copula)
                                                            [púlòm:î:j<sup>n</sup>]
'not be (somewhere)'
                                  ὴgó-ỳ
                                                            [ŋgô:j]
```

Whether the 1Sg form has a final syllable with H-tone (35a), L-tone (35b), or  $\langle HL \rangle$ -tone (35c), the 1Pl has  $\langle HL \rangle$ -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 1Sg.

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 1Pl column of (34) with other *Cv:y* and *Cv: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 *Cv:wu*, respectively.

Among true nouns, the only examples of Cv:y and Cv:w stems known to me are  $t\check{a}:y^n$  'shed',  $p\check{o}:y^n$  'fonio (a cultivated grain)',  $d\acute{u}w\hat{a}:w$  'blessing' (<Arabic), and  $j\grave{i}r\grave{e}-j\check{e}:y^n$  as cognate nominal in the collocation  $j\grave{i}r\grave{e}-j\check{e}:y^n$   $j\grave{e}:y^n$  'glare at'. 'Shed' and 'fonio' are frozen diminutives with \*- $\acute{y}^n$ , see §5.1.4. There are also a few Cv:-m nouns including the animate singular suffix, e.g.  $n\check{a}:-m$  'cow' and  $\check{a}:-m$  'monitor lizard'.

Among adjectives, I can cite  $w\tilde{a}:w$  'distant' and the related noun ('distance') or adverb ('far away')  $w\tilde{a}:w$ ,  $g\tilde{b}:w$  'short', suffixed forms of  $d\hat{a}:$ - 'small' ( $d\hat{a}:-w$ ,  $d\hat{a}:-m$ ), and  $g\check{a}:y^n$  in  $ir^n$ i  $g\check{a}:y^n$  'molar tooth'.

The marginal status of superheavy syllables in final syllables of nonmonosyllabic stems, combined with the productivity of the prosodic features in 1Pl and 2Pl suffixal forms, suggests that the latter do have a special prosodic status outside of the regular tone system. I will therefore transcribe them with : 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  $tiw^n \check{\epsilon} y^n$  '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).

### (36) Nominal Suffixes

```
-m (animate) singular
```

-Ø (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 tone-dropped). 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).

# (37) Animate nouns (nonmonosyllabic)

```
gloss singular plural before adj
```

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

```
'European' ànsá:rá-m ànsá:rá ànsà:rà 'man' ár<sup>n</sup>à-m ár<sup>n</sup>à àr<sup>n</sup>à 'farmer' wòŋgùrò-wàrú-m wòŋgùrò-wàrú wòŋgùrò-wàrù '
```

b. final <HL>-toned short vowel subject to lengthening, §3.7.4.1

```
'Messor ant' ci-c\dot{\epsilon}r^n\hat{u}-m ci-c\dot{\epsilon}r^n\hat{u}: ci-c\dot{\epsilon}r^n\hat{u} L
```

c. final short <LH>-toned after L-tone, simplified to H-tone, §3.7.4.3

```
'dog' inj\check{e}-m inj\acute{e} inj\acute{e}^{L} 'snake' aw\check{a}-m aw\check{a} aw\check{a}^{L}
```

d. final short <LH>- after H-tone, subject to lengthening, §3.7.4.1

```
'blacksmith' jémbě-m jémbě: jèmbè<sup>L</sup>

'Fulbe' púlð-m púlð: pùlð<sup>L</sup>
```

```
e. final <LH>-toned long vowel not subject to shortening (only known ex.)

'animal' àrsě:-m àrsě: àrsè

f. final semivowel (rare)

'Jamsay' jàmsǎy-m jàmsǎy jàmsày

'X's kinsman' X tôw-m X tôw —
```

The basic types of monosyllabic animate nouns are in (38).

# (38) Animate nouns (monosyllabic)

```
singular
                                                  before adj
    gloss
                                  plural
a. short <LH> or <HL> tone subject to lengthening, §3.7.4.1
    'woman'
                  vă-m
                                  yă:
                                                  yà
    'person'
                  nŭ-m
                                  nŭ:
                                                  nù
    'hawk'
                   tì-tê-m
                                  tì-tê:
                                                  tì-tè
b. long vowel not subject to shortening
    'chief'
                   ô:-m
                                  ŝ:
                                                  ð:
    'hyena'
                                  tì-tã:
                                                  tì-tà:
                   tì-tã:-m
```

Compounds may preserve archaic *Cv*- forms of stems that are now regularly *Cv*:. 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, -mbo, etc. I suspect that BenT (and Bankan Tey) -m is a mutation from \*-n, possibly via a lenited \*-n (preserved in Nanga as a rare singular suffix in e.g. y n 'woman'). The 'it is' (also focalizing) clitic very likely played a decisive role. Its fullest variant is =n but it is often reduced to =n 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 *yì-tɛ̃*: has L-tone, *yì-tɛ̃*: 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).

```
(39) a. 'child' yi-m yi-t\tilde{\epsilon}:

b. 'boy' asuw^n\hat{\epsilon}-yi-m asuw^n\hat{\epsilon}-yi: \sim asuw^n\hat{\epsilon}-[yi-t\tilde{\epsilon}:] 'girl' ya:-yi-m ya:-yi: \sim ya:-[yi-t\tilde{\epsilon}:]
```

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  $b\dot{e}$  is added to mark plurality. Thus  $n\dot{a}r^n\dot{a}$  'mother', plural  $n\dot{a}r^n\dot{a}$  be 'mothers', possessed  $u\dot{n}\dot{a}r^n\dot{a}$  'your-Sg mother' and  $u\dot{e}$ :  $n\dot{a}r^n\dot{a}$  be '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 tive-m as a variant of tive for 'cousin'.

(40)		gloss	singular	plural
	a.	'(a) cousin' 'your-Sg cousin'	tìyé, tìyě-m ú tíyè-m	tìyé bè ú tíyè bè
	b.	'younger sibling' 'your-Sg y. sibling'	ònjó ú ónjò-m	ònjó bè 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 ( $b\check{s}$ :,  $n\grave{a}r^n\check{a}$ , ...). However, in texts one finds such forms as  $b\check{s}$ :-m '(the) father' and  $n\grave{a}r^n\check{a}$ -m '(the) mother', with a contextually clear, already named possessor, i.e. as alternatives to an explicit third-person possessor combination. Other attested forms of this type are  $\grave{o}n\check{j}\check{o}$ -m 'younger sibling' and  $d\grave{e}r\check{e}$ -m 'elder sibling'.

The term for 'child' (singular yi-m, plural  $yi-t\tilde{\epsilon}$ ), 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 (yi-m 'a child',  $u^{HL}yi-m$  'your child').

# 4.1.4 'So-and-so' (*mâ:n*, *à-mâ:n*)

The 'So-and-so' noun, denoting a variable personal name, is  $\hat{a}$ - $m\hat{a}$ :n or  $m\hat{a}$ :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 *Ci*- or *Cù*- reduplication in nouns

Examples of a more or less frozen initial Ci- or Cu- 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) $C\hat{i}$ - and $C\hat{u}$ - nouns

```
related form
     form
                                   gloss
a. insects/arthropods
                                   'beetle, bug'
    cì-cɛ̃:-m
                                   'grasshopper'
    kì-kã:-m
                                   'grub, worm'
    sì-sĩ:-m
                                   'termite'
     tù-tũ:-m
                                   'fly'
    gi-g\tilde{\varepsilon}: ^{n}-m
                                   'Messor ant'
    cì-cèr<sup>n</sup>û-m
    cì-céw<sup>n</sup>è-m
                                   'mosquito'
    ni-n\dot{\partial}:r^n\check{\partial}y^n-m
                                   'spider'
    m\dot{u}-m\dot{u}r^n\hat{u}-m
                                   'scorpion'
                                   'ant' (generic)
    gù-gòngórù-m
  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.'
    ni-niw^n\check{\varepsilon}-m
                                   'cat'
     tì-tã:-m
                                   'hyena'
    gù-gùsú-m
                                   'giant pouched rat'
d. plants and plant parts
                                   'leaf'
    (jì-)jèlêy
    gù-gùmtò:ró
                                   'bush sp. (Datura)'
                                                                    dòró 'thorn'
                                   'thorny herb (Tribulus)'
    [jì-jàm]-dòró
    kù-kòmbî: ~ kì-kòmbî:
                                   'tree bark'
                                                               also unredup.
  H-toned reduplicant
     i-?\check{\epsilon}w^nr^n\grave{\epsilon}
                                   'tree sp. (Spondias)'
                                   'tree sp. (Boscia angustifolia)'
     tí-táwrù
    kú-kóró
                                   'tree sp. (Sarcocephalus)'
    kí-kósò
                                   'dried-out leaves on ground'
```

```
e. body parts and similar
                               'sweat'
    sù-sŏ:
    pì-pă:
                               'shank'
    gù-gùwš:
                               'front-leg section (butchery)'
    kì-kìlê: ~ kì-kìlé
                               'shade'
    gì-gòlî: ~ gù-gòlî:
                               'soft spot below knee'
    ti-t\partial si: \sim tu-\partial si:
                               'calf (of leg)'
 H-toned reduplicated syllable
    nà:-[tí-tôw] ~ -[tú-tôw]
                               'elbow'
                                                       nă: 'hand'
f. verbal concepts
                               'cowardice'
    kù-kŏ: ~ kì-kŏ:
                               'cowardice'
    lù-ló:rùm
                               'mission'
                                                       verb tí- 'send'
    tì-tírù
                               'dancing ground'
    tì-tãy
g. weather, time, space
                               'cool weather'
    tì-tăm
    nì-nǐ:
                               'sun'
 H-toned reduplicant
                               'dune, elevation'
    tí-têm
    dú-dûm
                               'mound'
h. artefacts
    dì-dê:
                               'statuette'
                                                       dì-dê:-m 'midgit'
    tù-tù:lú
                               'horn (for blowing)'
                               'vat, basin'
    pì-pàtàrá
                                                        -pàtàrá in cpds
 H-toned reduplicant
    dí-dâm
                               'large basin/vat'
i. substances
    kù-kùmbó
                               'smoke'
                               'mud'
    pì-pòtú ~ pù-pòtú
```

# 4.1.5.2 Other reduplicated and iterated nouns

The data are presented in (42) without further commentary.

```
a. CỳC-CỳCŷC (noisy birds, onomatopoeic)
    kàw²-kàr²âw²-m 'white-bellied bustard'
    cèw²-cèr²êw²-m 'black-headed lapwing'
b. final -Cv: or -CvC with repeated initial C
    final is < LHL>-toned
    kàtà-kã:-m 'spotted thick-knee'
    pété-pẽ:-m 'grasshopper sp. (Oedaleus)'
    séŋér²-é-sẽ:-m 'small grasshopper sp. (Kraussella)'
```

```
kàtà-kä:-m
                            'louse'
    [kì-kàrà]-kãy
                            'gravelly terrain' (variant kàgàrà-kãy)
 final is <HL>-toned
    tì-tà: kóŋór<sup>n</sup>ó-kôy<sup>n</sup>
                            'spotted hyena' (tì-tã: 'hyena', 2 spp.)
 final is <LH>-toned
    pùtùm-pǔ:
                            'herb sp. (Commelina)'
    wà:rùm-wă:
                            'vine sp. (Cissus)'
    bà:r<sup>n</sup>àm-bǎm
                            'tall grass sp. (Panicum)'
c. full iteration
                            'shrub sp. (Calotropis)'
    gù:-gǔ:
    pέ:-pέ:
                            'herb sp. (Evolvulus)'
                            'hawk-moth' (hums)
    wîl-wîl
    tîm-tîm
                            'herb sp. (Scoparia)'
d. double or triple iteration with final or medial a-vowel(s)
                            'tree sp. (Grewia flavescens)'
    àsày-[kòró-kàrá]
  o-a-o
                            'woodpecker'
    tó:-tà:-tó:-m
                            'loud chatter'
    hó:-hà:-hó:
    kòró-kàrà-kòró
                            'noise, din'
  u-a-u
                            'hubbub'
    kúr-kàr-kúr
  e-a-e
                            'black cricket'
    tèm-tàm-tê-m
  \varepsilon-a-\varepsilon
    c\acute{\varepsilon}."-c\grave{a}."-c\acute{\varepsilon}."
                            'rattling sound'
    kě:-kà:-kě:
                            'croacking (of toad)'
  i-a-i
    cí:n-cà:n-cí:n
                            'creaky sound'
  i-9-i
                            'motorcycle' (archaic)
    pì:-pɔ:-pî:
e. iteration (?) flanking an unrelated medial (only example)
    dòŋ-gòm-dò:rú
                            'burry herb sp. (Pupalia)'
                            cf. Jamsay dòη-nà:-dŏη for this sp.
f. miscellaneous
    pèlěm-pérù
                            'tall herb sp. (Aeschyomene)'
                            'tiny grass sp. (Tripogon)'
    jàsúm-jàsárà
    gòrŏm-gómjó-m
                            'giant millipede'
```

Roughly similar to (42b) are expressive adverbials  $g\acute{o}mb\acute{o}$ - $g\acute{o}m$  and  $j\acute{e}mb\acute{e}$ - $g\acute{e}m$ , both meaning 'jutting out' (along with  $g\grave{o}mb\grave{o}$ - $g\acute{o}mb\acute{o}$ -).

#### 4.1.6 Frozen initial à- in nouns

An original \*à- prefix of unclear meaning may survive in the 'so-and-so' noun  $\grave{a}-m\hat{a}:n$  with variant  $m\hat{a}:n$ , in  $\grave{a}-j\grave{e}r\acute{u}$  'wrestling', in cognate nominals  $\grave{a}-p\acute{e}t\grave{u}$  '(a) jump' and  $\grave{a}-j\check{a}y^n$  'act of sowing in a pit with manure' (§11.1.5.1), and in several fauna terms:  $\grave{a}-k\check{t}:$  'edible winged termites',  $\grave{a}-b\grave{u}:l\check{o}-m$  'spotted skink',  $\grave{a}-s\grave{e}mb\check{e}-m$  'five-lined skink', and  $\acute{a}-k\grave{u}ng\grave{u}r\check{o}-m$  'giant tortoise'. In some other cases where Jamsay has initial  $\grave{a}$ , the BenT form lacks this vowel:  $k\grave{e}ng\^{u}-m$  'agama lizard',  $p\grave{a}r\hat{a}:$  'millet-cake meal',  $t\acute{e}mb\grave{u}$  'tradition(s)' (Jamsay  $\grave{a}-c\check{e}:\eta\sim c\check{e}:\eta$ ,  $\grave{a}-p\grave{a}l\acute{a}$ ,  $\grave{a}-t\hat{e}m$ ). I refrain from segmenting the initial a in  $\grave{a}s\grave{a}p\grave{e}r\acute{u}$  'herb sp. (Cassia nigricans)' and  $\grave{a}s\grave{a}g\grave{u}s\hat{o}:$  'tree sp. (Combretum)', since they can be parsed prosidically as CvCv-CvCv compounds ( $\grave{a}s\grave{a}g\grave{u}s\hat{o}:$  is also a borrowing, from Songhay).

#### 4.2 Derived nominals

## 4.2.1 Characteristic derivative ( $-g\dot{u}$ -)

The characteristic nominal derivational suffix is  $-g\hat{u}$ . The animate singular is  $-g\hat{u}-m$  and its plural is  $-g\hat{u}$ . Examples are in (43).

```
(43)
            stem
                        gloss
                                         characteristic
                                                           gloss
        a. mostly nominal
                                         dày-gú-m
                                                           'rich person'
                        'wealth'
            dăy
        b. mostly adjectival
            Ιόγὸ
                        'filth'
                                         làyà-gú-m
                                                           'dirty (one)'
                        'intelligence'
                                                           'smart (one)'
            tèré
                                         tèrè-gú-m
```

## 4.2.2 Verbal nouns $(-\hat{i}: \sim -\hat{y})$

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

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

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

The rare semivowel-final verb-stem type, namely in  $g\check{a}y^n$  'put' and  $k\acute{a}y^n$  'do', has a <LHL> verbal noun pattern  $C\grave{a}-\hat{\imath}:^n$  (or  $C\check{a}-\hat{\jmath}^n$ ), indistinguishable from that of  $Ca(:)^n$ - stems.

```
(44)
                                                                   VblN
                gloss
                                         bare stem
          a. nonmonosyllabic
                                          bàŋgí
                'hide'
                                                                   bàŋg-î:
                'hit'
                                          súyó
                                                                   sùy-î:
                'tie'
                                          páyá
                                                                   pàg-î:
                'shout'
                                                                   pìy-î:
                                         píyé
                'winnow in wind'
                                         nèr<sup>n</sup>ìy<sup>n</sup>í
                                                                   n \hat{\epsilon} r^n i v^n - \hat{\imath}:
          b. monosyllabic
                'drink'
                                          пš
                                                                   nž-ỳ
                'go'
                                          ló
                                                                   lŏ-ỳ
          c. irregular monosyllabic verb
                'bring'
                                                                   jě-ỳ
                                         jἒ:
          d. Cvy<sup>n</sup> stems
                                                                   g\check{a}^n-\grave{v}^n
                'put'
                                          găyn
                'do'
                                          káyn
```

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  $j\acute{a}y$   $j\grave{a}y\acute{a}$ - 'fight a fight' with cognate nominal  $j\acute{a}y$  '(a) fight' has a verbal noun  $j\grave{a}y^L$ - $[j\grave{a}y$ - $\hat{i}z$ ] 'fighting fights', where the cognate nominal takes the form of an L-toned compound-initial.

Suffix  $-\dot{u}$  after {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 i: and y

A number of nouns or adjectives have an H-tone and final f, 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).

```
(45)
                                                related form
            stem
                           gloss
        a. cognate nominals
            mɔ́:lí:
                           'collective (feast)' mà:lí- 'gather'
            yórí:
                           '(s) stroll'
                                                yàrìyí- 'take a stroll'
            górí:
                           'blanket, sheet'
                                                gòró- 'cover (w. blanket)'
                           '(a) curse'
                                                jèwé- 'curse' (note e/ε alternation)
            jéwí:
                           'woman's wrap'
                                                págí- 'tie'
            òròsù-págí:
            yà-pémbí:
                           'woman's wrap'
                                                pémbí- 'gird (with rifles)'
```

```
tímbí:
                     'lid'
                                           tímbí- 'cover'
                                           mà:ní- 'think'
    má:ní:
                     'thought, worry'
    sú:r<sup>n</sup>í:
                     'rest (noun)'
                                           sú:r<sup>n</sup>ú- 'rest, relax'
    túmbí:
                     'small mound'
                                           túmbú- 'make (mound)'
    ùsù-dér<sup>n</sup>í:
                                           dèr<sup>n</sup>€- 'spend mid-day'
                     'daytime'
    dá:rí:
                     'nostalgia'
                                           dà:rá- 'miss (sb)'
                                           túmdí- 'begin'
    túmdí:
                     'beginning'
    úsúrí:
                     'question'
                                           úsúrú- 'ask (question)'
b. other nouns
    té:lí:
                     'wooden bed'
    túní:
                     'mortar'
                                           (Nanga túndí etc.)
                     'ladder'
    bíní:
    ùrò-jéŋgí:
                    'neighbors'
c. adjectives or compound finals
    kúsí:
                     'private (field)'
                     'massive (rock)'
    túmbí:
```

There are also a few **instrument nominals** with {L}-toned stem and suffix -î:, like èmbî: 'tweezers' (verb émbí- 'hold by pinching'), dì:sî: 'file (tool)' (verb dì:sé- 'file'), and perhaps inir<sup>n</sup>î: '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', ùmgŏ-y 'draught, mouthful', verb úmgó- 'fill up (mouth)', kòsŏ-y '(millet) harvest', cf. verb kósú- 'harvest (with knife)', mùynō-yn 'patience', cf. múynō- 'be patient, wait', pòrŏ-y 'row', cf. verb pórō-'align, form into rows', and pàyã-y 'tied bundle', from páyá- 'tie'. The compound final in kòsù-[nàrnă-yn] 'gourd fruit' and yù:-[nàrnă-yn] 'millet plant that has grown a substantial spike' is related to verb nàrnā- 'give birth, bear (fruit)'. See also the cognate nominals tóy, jìmbăy, and mòngŏy in §11.1.5.1. Note the predominance of L.<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  $\{LH\}$  overlay.

Most agentives include a compound initial, so for further examples of the forms see (§5.1.3).  $j \partial_{\eta} g u - m$  'healer' (Pl  $j \partial_{\eta} g u$ ) 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:  $j \partial_{\eta} g^{1} - j \partial_{\eta} g u - m$ .

One older speaker used a morpheme  $-m\dot{u}$  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.

```
(46)
        búnúgóy
                             yèy,
        group
                             two.
                  HL [śsà]
                               dìmbì-yí-mù
        [[mǎ:
                                                          yà→†]
                  HL foot]
        [[dry
                               follow-MP.Agent-Pl
                                                          and]
                 Llàsà]
                             dìmbì-yí-mù
        [[nî:
                                                     yà→1
        [[water <sup>L</sup>foot]
                             follow-MP.Agent-Pl
                                                     and]
        'two groups, those who followed a dry route, and those who followed the water route
```

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.

```
(47) verb gloss agentive agentive plural

dànní- 'hunt' dănnà-m dănnà
```

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*)

(along the river).' [2005.2a.08]

The noun ti-tiru 'mission, commissioned task' (also in Jamsay) is irregularly related to the verb ti- '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  $-y\hat{e}$ ). Adjectives already ending in a consonant, including those with a final formative -m, have no suffix (48b). The productive abstractive nominal has {LH} 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 {H}-toned form in comparative constructions, after  $m\acute{e}g\acute{e}$  'more', specifying the domain of comparison (e.g. 'X is more than Y with respect to height'). Some other abstractives keep their {LH} tones in comparatives. The forms used with  $m\acute{e}g\acute{e}$  recur in predicative adjectives before 'be' quasi-verb variant  $b\^{u}$ -, see §11.4.1. Not shown here is a {HL}-toned form that is also used in comparatives, but which is syntactically adjectival rather than nominal (§12.1.1).

# (48) Abstractive nominals from adjectives

```
adjective gloss
                                        noun
                                                           gloss (nouns)
                               regular
                                            with mégé
                                             {H} or {LH}
                                /LH/
a. u-final, no {H}-toned form
  inanimate -w
    dùgû-w
                  'fat, thick'
                               dùgú
                                            dùgú
                                                           'thickness'
    dùsû-w
                  'heavy'
                                dùsú
                                             dùsú
                                                           'weight; respect'
                  'near'
                                sòsú
                                            sòsú
                                                           'vicinity'
    sờsû-w
    vàrû-w
                  'soft'
                                            vàrú
                                                           'softness'
    nèr<sup>n</sup>û-w
                  'light'
                                                           'lightness (weight)'
                                            nèr<sup>n</sup>ú
  inanimate - Ø
    mòsú-Ø
                                            mòsú
                                                           'nastiness'
                  'nasty'
    èsú-Ø
                  'good'
                                èsú
                                            èsú
                                                           '(good) quality'
b. consonant-final
 final w or m, no \{H\}-toned form
                                                           'height'
    gãw-Ø
                  'tall'
                                găw
                                            găw
    wã:w-∅
                  'distant'
                                wă:w
                                             wă:w
                                                           'distance'
                                                           'plump'
    ãm-∅
                  'plump'
                                            ăт
  like preceding, but reduplicated in basic abstractive form
    tâm-Ø
                  'cold, cool' tì-tăm
                                                           'coolness'
                                             tám
    nům-Ø
                  'difficult'
                                                           'poverty'
                               nù-nǔm
                                            nŭm
 final -m formative, {H}-toned in comparative
    έrù-m
                  'sweet'
                                èrŭ-m
                                            έrú-m
                                                           'sweetness'
    gárù-m
                  'bitter'
                                gàrŭ-m
                                            gárú-m
                                                           'bitterness'
c. ends in vowel other than u
  {H}-toned form in comparative
    diy^n \grave{a} - w^n
                                dìy<sup>n</sup>ă-w<sup>n</sup>
                                                           'size'
                'big'
                                            diy^n \acute{a} - w^n
     w\acute{o}r^n\grave{o}-w^n 'deep'
                                w \grave{\partial} r^n \check{\partial} - w^n
                                            W \acute{\mathfrak{I}} r^n \acute{\mathfrak{I}} - W^n
                                                           'depth'
    káwà-w
                  'thick'
                                kàwă-w
                                            káwá-w
                                                           'thickness'
  no {H}-toned form
                  'long'
                                                           'length'
    gùrô-w
                               gùrð-w
                                            gùrɔ-w
```

For 'big', cf. also the noun  $diy^n \acute{a}$  'status of being the oldest freeborn man in the village'.  $w \check{a}$ :-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 bad*). (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.

[k3:nL (49)[yà-n∂r<sup>n</sup>ú mâ:] mòsú] jâ:w<sup>n</sup>, [thing<sup>L</sup> [co.wife Dat] bad] normal, èsú [\'\epsilon r^n \'\epsilon  $j \hat{a} : w^n = r \hat{a}$ mâ:] Dat] normal=StatNeg good [3Sg '(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). 3Sg and 3Pl are animate categories (including humans and animals), while Inan[imate] applies to plants and non-living things.

### (51) Personal Pronouns

		indep.	accusative		oject Verb	poss/PP
a.	1Sg 1Pl	í î:	i = ni i = ni	í î:	-ŷ -ŷ∴	Ø (+L) î:
b.	2Sg 2Pl	ú û:		ú û:	- <i>ẁ</i> - <i>ẁ</i> ∴	ú û:
c.	3Sg 3Pl	έr <sup>n</sup> έ bû:	$ \begin{aligned} & \acute{\varepsilon}r^n \acute{\varepsilon} = n \grave{\imath} \\ & b \mathring{u} := n \grave{\imath} \end{aligned} $	έr <sup>n</sup> έ bû:	[see below]	έr <sup>n</sup> έ bû:
d.	Inan	kú	kú = nù	kú	[see below]	kú
e.	3ReflSg 3ReflPl	á â:		á â:	[see below]	á 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  $\langle HL \rangle$ -tone). The accusative is  $=n\hat{\imath}$  except for 2Sg  $\hat{\imath}=n\hat{\imath}$  and inanimate  $k\hat{\imath}=n\hat{\imath}$ , where the short  $\hat{\imath}$  of the first syllable has induced rounding in the suffixal syllable.

Of interest is the use of  $\acute{\epsilon}r^n\acute{\epsilon}$  as all-purpose nonsuffixal 3Sg morpheme. It is evidently cognate to Jamsay  $\grave{\epsilon}n\acute{\epsilon}$ , which however is an anaphoric 3Sg 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 3Sg and Inan[imate] have the same forms. For this 3Sg/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 16- 'go' and (for the perfective-1b) dàmbí- 'push'. For fuller discussion of pronominal-subject suffixes, see §10.3.

(52)		category	3Sg/Inan	3P1
	a.	perfective-1a	ló:-rὲ-Ø	ló:-r-à:
		perfective-1b	dàmbí-tî:-∅	dàmbí-tí-yà
	b.	imperfective	lì-ló-ṁ	lì-ló-yè
	c.	perfective negative	lò-rí-∅	lò-r-á
	d.	imperfective negative	ló-ṁ-ló	ló-ṁ-n-€

### 4.3.2 Discourse-definite function of inanimate pronoun *kú*

Inanimate  $k\dot{u}$  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  $k\dot{u}$  toward the end resumes the earlier proposition.

```
(53) n\check{u}-m \acute{e}r<sup>n\acute{e}</sup> g\grave{o}r<sup>n\acute{o}</sup>-\varnothing, person-AnSg 3SgObj be.stronger.Pfv-3SgSbj, [b\acute{e}:n n\grave{u}-m] k\acute{u} \grave{a}w-r\acute{t}-\varnothing

[B person-AnSg<sup>L</sup>] 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  $k\acute{u}$  is apparent in a number of adverbial phrases that resume something just stated. For example, instrumental PP  $[k\acute{u} \, p \check{a} y^n]$  'with that' or 'in that way' is a common phrase in texts, connecting one clause or paragraph to the next.

 $k\acute{u}$  can also be used as a **prenominal** pseudo-possessor ( $k\acute{u}$  <sup>(H)L</sup>X) in a similar resumptive fashion. This construction functions as a **strong discourse-definite**, as opposed to the weak discourse-definite postnominal  $k\grave{u}$  (i.e., X  $k\grave{u}$ ), see §4.4.1 below and §6.5.1. In this prenominal pseudo-possessor function, the interlinear abbreviation is "DiscDef." Prenominal  $k\acute{u}$  and postnominal  $k\grave{u}$  often co-occur:  $k\acute{u}$  <sup>(H)L</sup>X  $k\grave{u}$ .

### 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.

```
(54)
                                                                P1 form
             form (Sg) gloss
      A. deictic categories (control tone-dropping)
        a. m<u>v</u>:
                          'this' (proximal, animate)
                                                                mǔ: bè
                          'this' (proximal, inanimate)
                                                                ngú bè
             ηgú
        b. -m kú
                          'that' (near-distant, animate)
                                                                -m kú bè
             -Ø kú
                          'that' (near-distant, inanimate)
                                                                -Ø kú bè
                                                                mbá bè
        c. mb\acute{a} \sim m^b\acute{a} 'that' (far-distant, animate)
                          'that' (far-distant, inanimate)
                                                                ngá bè
             ngá
      B. definite marker (does not control tone-dropping)
        d. -m kù
                          'the (same)' (definite, animate)
                                                                -Ø bû:
                          'the (same)' (definite, inanimate)
                                                                -Ø kù bè
        [see also the strong discourse-definite prenominal k\acute{u}, §4.3.2]
```

For more on the definite morphemes, see §6.7. Definite plural  $b\hat{u}$ : is identical in form to the 3PI independent pronoun. Definite  $k\hat{u}$  is normally distinguishable from near-distant  $k\hat{u}$  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  $\vec{m}b\vec{a}$  'that (far-distant) one'. A similar example is  $\vec{m}^b\vec{a}$  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  $m\check{u}$ : or  $\grave{m}b\acute{a}$ . Example:  $y\check{a}$ -m 'woman',  $y\grave{a}$   $m\check{u}$ : 'this woman',  $y\grave{a}$   $mb\acute{a}$  'that woman'. One could argue that the m of  $m\check{u}$ : and that of  $mb\acute{a}$  are actually instances of the (animate) singular suffix -m, but since the demonstratives can be used absolutely ( $m\check{u}$ : 'this one',  $mb\acute{a}$  'that one'), and since they are not dropped in the plural, I take the m to be part of the demonstrative. Before near-distant  $k\acute{u}$  and definite  $k\grave{u}$ , -m is present on animate singular nouns.:  $y\check{a}$ -m k $\check{u}$  'that (aforementioned) woman', cf. plural  $y\check{a}$ :  $k\grave{u}$   $b\grave{e}$ .

**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**  $k\dot{u}$ . Tones (on both words) distinguish near-distant from definite NPs (55).

```
a. nà:-m<sup>L</sup> kú
cow-AnSg<sup>L</sup> 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)'
```

### 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).

```
(56) a. 
\mathring{\eta}g\acute{u}-r\grave{u} \sim \eta\acute{u}-r\grave{u}
 'here'

'there' (deictic)

yâ: 'there' (discourse-definite)

b. 
\mathring{\eta}g\acute{u}-d\acute{a}:
 'around here; on this side'

'
\mathring{\eta}g\acute{a}-d\acute{a}:
 'around there; on that side'

yá-dá: 
\sim y\acute{a}-r\acute{a}:
 'around there' (discourse-definite)

kú-dá: 
\sim k\acute{u}-r\acute{a}:
 '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: ngú-rù já:tì 'right here', yâ: já:tì 'right there (in that same place)'.

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

```
(57) a. L+HL ĭrnà
1SgPoss. HL field
[bé:nì ú dɔ̄:-rɛ̀ mà:] bù-Ø
[Beni 2SgSbj reach-Pfv1a before] be-3SgSbj
'My field is this side of Beni.' (lit. "... it is before you reach Beni")
```

```
b. L+HL ĭrnà
1SgPoss. HL field
[bé:nì láwá:-rè-w dé] bù-Ø
[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' ( $\acute{a}$ $\eta \grave{a}$ y<sup>n</sup>)

### 4.4.3 Presentatives

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

(58)*ô:-m* bù-Ø a. úŋgòy be-3SgSbj chief-AnSg here's! 'Here's the chief!' b. *úŋgòy* y-ε̂: come.Ipfv-3PlSbi here's! 'Here they come!' c. úŋgòy éw-yê-y here's! sit-MP.Ipfv-1SgSbj 'Here I am, sitting!.' (= 'I'm sitting over here!') d. úŋgòy bírέ bírê-m work(n) here's! work.Ipfv-3SgSbj 'Here he/she is, working!' M bírέ bírê-m e. úηgòy e'. úŋgòy bíré bírê-m MM here's! work.Ipfv-2SgSbj M work(n)

'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  $-y\hat{e}$  (59a). In another important set of forms, the inanimate form is unsuffixed, versus singular -m and plural  $-y\hat{e}$  (59b). 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  $-y\hat{e}$  (59c). A number of adjectives have -m as an **inanimate/animate singular suffix**, versus animate plural  $-y\hat{e}$  without the m (59d). There are a handful of adjectives with a noun-like unsuffixed plural instead of animate plural suffix  $-y\hat{e}$  (59e). For nouns that do allow  $-y\hat{e}$ , the suffix is sometimes omitted in collective contexts. For example, the phrase  $n\hat{u}$   $d\hat{t}y^n\hat{a}$  'big (i.e. old) people' occurs frequently in texts with collective plural sense, although the form  $d\hat{t}y^n\hat{a}-y\hat{e}$  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 (59g), 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 asu-m, paru-m, and asu-m. The inclusion of asu-m in the inchoative verbs for monosyllabic asu-m 'pointed' and asu-m 'difficult' shows that in these cases the asu-m is lexical. No verb corresponding to asu-m 'foul' or to asu-m 'bland' is known, so this test does not work for them. However, all monosyllabic asu-m stems that do have full paradigms asu-m 'plump', asu-m 'cold, slow') or for which the inchoative-verb test is available asu-m 'plump', asu-m 'cold, slow') or for which the inchoative-verb test is available asu-m have lexical asu-m so there is no good reason to segment the asu-m as a suffix in monosyllabic asu-m and asu-m and asu-m.

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  $-y\hat{c}$  is always L-toned.

Nasalization-Spreading affects inanimate -w (which is tautosyllabic with the source of the nasalization), but y in plural  $-y\hat{e}$  is unaffected. In general,  $-y\hat{e}$  acts like an independent particle and does not interact phonologically with the stem. It reflects a very old plural noun \*ye/\(\epsilon\) (Nanga  $y\hat{e}$  'things') that evolved into a plural suffix for adjectives or demonstratives (e.g. Najamba adjectival inanimate plural  $y\hat{e}$ ), or into a plural possessive classifier (e.g. Nanga  $^{\text{HL}}y\hat{e}$ ).

### (59) Adjectives

gloss Inan AnSg AnPl a. Inan -w, Sg -m, Pl -yè (Inan ...û-w arguably just lengthened ...û:- $\emptyset$ ) /HL/-toned, stem-fînal unrounded vowel 'big, adult'  $diy^n$ à-w''  $diy^n$ à-m  $diy^n$ à-yè 'spacious' káwà-w káwà-m káwà-yè

```
'small, young'
                                dâ:-w
                                                     dâ:-m
                                                                         dâ:-yè
  like preceding, colors (for bar^n \hat{a} - y^n, jew^n \hat{e} - y^n, see discussion below)
     'red'
                                bár<sup>n</sup>à-w<sup>n</sup>
                                                     bár<sup>n</sup>à-m
                                                                         bár<sup>n</sup>à-yè
     'black'
                               jéw<sup>n</sup>è-w<sup>n</sup>
                                                     jéw<sup>n</sup>è-m
                                                                         jéw<sup>n</sup>è-yè
  /LH/-toned
      'good'
                                \grave{\varepsilon}sú ~ \grave{\varepsilon}sû-w
                                                     \grave{\epsilon}sú-m \sim \grave{\epsilon}sí-m \grave{\epsilon}sí-y \grave{\epsilon}
  /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 \hat{\epsilon} r^n \hat{u} - w^n
                                                     ກ̀er<sup>n</sup>û-m
                                                                         nèr<sup>n</sup>ú-yè
     'nearby'
                                sòsû-w
                                                     sàsû-m
                                                                         sòsú-yè
     'bad, ugly'
                                mòsû-w
                                                     mòsû-m
                                                                         mòsú-yè
     'long, tall'
                                gùrô-w
                                                     gùrô-m
                                                                         gùró-yè
     'thin'
                                mènjê-w
                                                     mènjê-m
                                                                         mènjé-yè
b. Inan -Ø, Sg -m, Pl -yè
  /H/-toned
     'white'
                                pílέ-Ø
                                                     pílέ-m
                                                                         pílé-yè
                                nináy^n-\emptyset
                                                     nínáy<sup>n</sup>-m
     'respectable'
                                                                         nínáy<sup>n</sup>-yè
     'skinny'
                                kómbó-∅
                                                     kómbó-m
                                                                         kómbó-yè
     'living'
                                \acute{u}w^n \acute{5}-\varnothing
                                                     úw<sup>n</sup>∕j-m
                                                                         \acute{u}w^n\acute{5}-y\grave{\varepsilon}
  /HL/-toned
     'hot, fast'
                                \hat{\jmath}w-\emptyset
                                                     ôw-m
                                                                         \hat{\jmath}w-y\hat{\varepsilon}
     'new'
                                kálà-Ø
                                                     kálà-m
                                                                         kálà-yè
  /LH/-toned
     'old'
                                pě:-Ø
                                                     pě-m
                                                                         pě:-yè
     'empty, bare'
                                kòrŏy-Ø
                                                     kòrŏy-m
                                                                         kòrŏy-yè
     'unripe, raw, fast'
                                cèsú-Ø
                                                     cèsú-m
                                                                         cèsú-yè
     'crooked'
                                gàlú-Ø
                                                     gòlú-m
                                                                         gòlú-yè
  /LHL/-toned
     'tight'
                                \tilde{\varepsilon}w-\emptyset
                                                     \tilde{\varepsilon}w-m
                                                                         ěw-yè
     'short'
                                g̃3:w-Ø
                                                     gɔ̃:w-m
                                                                         gɔ̃:w-yè
     'distant'
                                wã:w-Ø
                                                      wã:w-m
                                                                          wã:w-yè
                                sŏ:rò-Ø
     'young'
                                                     sŏ:rò-m
                                                                         sŏ:rò-yè
     'flat'
                                pàtà-pátà-Ø
                                                     pàtà-pátà-m
                                                                         pàtà-pátà-yè
     'easy, cheap'
                                nà:r<sup>n</sup>â:-Ø
                                                     nà:r<sup>n</sup>â-m
                                                                         nà:r<sup>n</sup>á-yè
c. m-final with Inan -Ø, Sg -Ø, Pl -yè
  /LHL/-toned
      'plump'
                                                     ãm-∅
                                ãm-∅
                                                                         ăm-yὲ
  /HL/-toned
     'cold, slow'
                                tâm-Ø
                                                     tâm-Ø
                                                                         tâm-yè
d. Inan -m, Sg -m, Pl -yè
  /HL/-toned
                                                     έrù-m
     'sweet; sharp'
                                έrù-m
                                                                         érù-yè
     'bitter'
                                gárù-m
                                                     gárù-m
                                                                         gárù-yè
```

'smooth, sleek'	ớrù-m	ớrù-m	ớrù-yὲ
e. unsuffixed plural /LH/-toned			
'other'	<i>l</i> ă-w	lǎ-m	lă:-∅
	[lă-w is often ac	dverbial 'otherw	vise, further']
'blind'	jìmdú	jìmdí-m	jìmdú-∅
f. no inanimate form			
/H/-toned			
'runty'	_	cété-m	cété-Ø
g. no animate forms			
/LH/-toned			
'half-ripe'	bòlòrŏy-Ø	_	
'ripe, cooked'	ìrĕy-Ø	_	
'rotten'	ờmbú-∅		_
'weak, diluted'	sèré-Ø		
'dry'	mă:-Ø		
'difficult, costly'	nŭm-∅		
/HL/-toned			
'deep'	w∕ər <sup>n</sup> ∂-w <sup>n</sup>		
(variant <i>wór<sup>n</sup>ò-w<sup>n</sup></i> )			
'coarse'	kúnjù-m	_	_
'dense'	úlì-Ø	_	_
'full'	bâ:-∅	_	_
'pointed'	sîm-∅	_	_
'unflavored, bland'	gûm-∅	_	_
'foul (odor)'	gôm-∅	_	_
'half-bitter'	ásù-m	_	_
'sour, salty'	párù-m	_	_
/LHL/-toned			
'thin (wall)'	pèŋgû-w		

For 'red' and 'black' there are alternative forms, perhaps archaic, with suffix -y instead of -w and with L<HL> tones. These forms occur in a few highly lexicalized combinations, all inanimate. For 'black':  $s \grave{e} n g \grave{u} j \grave{e} w^n \hat{e} - y^n$  'earthenware cooking pot' (lit. "black pottery") and  $\grave{e} l \grave{e} y j \grave{e} w^n \hat{e} y^n$  'groundnut' (lit. "black peanut"). For 'red':  $n \grave{a} w^n \grave{a} : b \grave{a} r^n \hat{a} - y^n$  'flesh, muscle tissue' (lit. "red [i.e. not cooked] meat"), and combinations of  $b \grave{a} r^n \hat{a} - y^n$  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 dugu-w should be treated as having inanimate suffix -w, or as having suffix  $-\emptyset$  with long vowel due to Contour-Tone Mora-Addition. In the latter case, they should be transcribed as  $dugu-\emptyset$ , and shifted from (59a) to (59b). There is no audible difference between u: and u in BenT, to my ear.

Vowel-length is distinctive in Cv(:) and Cv(:) adjectives, as in nouns. We see consistent long vowels in  $d\hat{a}$ :- 'small, young' (59a), and in  $g\tilde{b}$ :w 'short' and  $w\tilde{a}$ :w 'distant' (59b), though in the two latter cases the final -w might be segmentable.  $l\tilde{a}$ - 'other' (59e) and perhaps  $p\tilde{e}$ -

'old' (59b) are lexically short-voweled, but are lengthened when unsuffixed (and not tone-dropped) by Contour-Tone Mora-Addition (§3.7.4.1). Plural  $p\check{e}:-y\grave{e}$  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 CvC adjectives ( $\hat{o}w$ - 'hot, fast',  $\hat{o}w$ - 'tight',  $\check{a}m$ - 'plump',  $t\hat{a}m$ - '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  $j\delta \rightarrow$  and  $b\tilde{a}y^n \rightarrow$ . 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  $j\delta \rightarrow$ , so that in e.g.  $ur\delta j\delta \rightarrow$  'many houses',  $ur\delta$  'house' has lexical tones. However, there are some textual occurrences where a noun is tone-dropped before  $j\delta \rightarrow$ .

# 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  $t \hat{u} w^n \hat{j}$ , which has a presuffixal (and occasionally unsuffixed) form  $t \hat{u} w^n \hat{j}$ - (note the L.<HL> tone pattern). It is treated as a **modifying adjective**, so a preceding noun drops tones and omits its own inflectional suffix (the L.<HL> pattern is likewise characteristic of adjectives). Examples:  $n \hat{a} : t \hat{u} w^n \hat{j} - m$  'one cow' ( $n \hat{a} : -m$  'cow'),  $\hat{a} r^n \hat{a}^L t \hat{u} w^n \hat{j} - m$  'one man' ( $\hat{a} r^n \hat{a} - m$ ),  $\hat{k} \hat{u} r^n \hat{u}^L t \hat{u} w^n \hat{j}$  'one stone' ( $\hat{k} \hat{u} r^n \hat{u}$ ).

In the sense '(the) same' (indicating identity or other substantive sameness), the inanimate form is  $t \hat{u} w^n \hat{s}$ : with L.<HL> tones, and the animate forms are the same singular  $t \hat{u} w^n \hat{s} - m$  and plural  $t \hat{u} w^n \hat{s} - y \hat{e}$  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).

- (60) a.  $[n\hat{u}^L \quad m\check{u}: \quad b\hat{e}] \quad [n\hat{u}^L \quad t\hat{u}w^n5-y\hat{e}]$ [person<sup>L</sup> Prox.An Pl] [person<sup>L</sup> one-Pl]

  'Those people are the same (e.g of a single extended family).'
  - b.  $[k \acute{o}r \acute{o}b \acute{o}r \acute{o} \quad y \grave{a} \rightarrow {}^{\dagger}]$   $[p \acute{u}l \acute{o}: \quad y \acute{a} \rightarrow {}^{\dagger}]$   $t \grave{u} w^n \acute{o}:$  [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  $n a r^n a t w r^n b$  and  $b b t w r^n b$ , respectively.

In the phrase usu usu usu 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 usu 'sweet' (§4.5.1).

Warning: English 'same' in the discourse-definite sense ('that same dog that I mentioned before') can be expressed using definite  $k\dot{u}$  (§6.7) or a prenominal demonstrative pseudopossessor  $k\dot{u}$  (§4.3.2).

### 4.7.1.2 '2' to '10'

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

(61)	gloss	form
	'2'	yěy
	<b>'3'</b>	tà:nú ~ tǎ:n
	<b>'4'</b>	nǐ:y <sup>n</sup>
	<b>'</b> 5'	nùmŭy <sup>n</sup>
	<b>'6'</b>	kúròy
	<b>'</b> 7'	súy <sup>n</sup> ày <sup>n</sup>
	<b>'</b> 8'	gá:rày
	<b>'</b> 9'	tè:sĭm
	<b>'10'</b>	pérú

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

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

With a preceding noun and before a pause (or in isolation), numerals with final-syllable <LH>-tone (i.e. '2' to 5' and '9') regularly omit the final H-tone component and appear with all-L-tone:  $n\check{a}$ :  $y\grave{e}y$  'two cows',  $u\grave{r}o$   $n\grave{u}m\grave{u}y^n$  'five houses'. The lexical <LH>-tone reappears if there is a following modifier, like the definite marker in  $n\check{a}$ :  $y\check{e}y$   $b\hat{u}$ : 'the two cows' and in  $u\grave{r}o$   $n\grave{u}m\check{u}y^n$   $k\grave{u}$  '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:  $n\check{a}$ :  $y\check{e}y$   $s\grave{e}w^n\grave{e}-y^n$  'I slaughtered two cows'. The lexical tone is also audible in isolation (e.g. in counting sequences):  $y\check{e}y$  'two'.

Both the preservation of the tone of a preceding modified noun, and the dropping of the final <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.

```
b. n\grave{a}:^L p\check{e}:-m
cow^L old-AnSg
'(an) old cow' (n\check{a}:)

c. t\grave{o}r\grave{o}^L t\grave{u}w^n\acute{o}
mountain one
'one mountain' (t\acute{o}r\grave{o})
```

## 4.7.1.3 Decimal units ('10', '20', ...) and combinations ('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'.

```
(63)
          gloss
                             form
          '10'
                             pérú
           '20'
                             pèrí-yěy
          '30'
                             pέ-tǎ:n ~ pέ-tà:nú
          '40'
                             pέ-nǐ:y<sup>n</sup>
           '50'
                             pé-nùmŭy<sup>n</sup>
           60'
                             pèr-kúròy
          '70'
                             pèr-súv<sup>n</sup>òv<sup>n</sup>
           '80'
                             pèr-gá:rày
          '90'
                             pèr-tè:sim
```

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  $p\acute{e}r\acute{u}$ . Thus '30' through '50' begin with  $p\acute{e}$ , while '60' through '90' begin with  $p\grave{e}r$ . 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  $p\acute{e}r$  before an L-initial numeral in '30' to '50', and L-toned  $p\grave{e}r$  before an H-initial numeral in '60' through '90'. However, there is no phonological basis for the loss of r in  $p\acute{e}r$  and its preservation in  $p\grave{e}r$ . 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 <LH>toned syllable ('20' through '50'), the <LH>-tone reduces to L-tone prepausally and in isolation (64a) but not before another constituent (64b).

```
(64) a. <u>úrò pèrí-yèy</u>
house ten-two
'twenty houses'

b. <u>nă: pé-nùmŭy<sup>n</sup> kù</u>
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) a.  $p\acute{e}r\acute{e}$  [ $t\grave{u}w^n\acute{o}$   $s\^{a}$ :] ten [one **plus**] 'eleven'
  - b.  $p \epsilon n u m u y^n$  [tè:sim 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.

```
(66) gloss form

a. 'hundred' té:mdérè (<Fulfulde)

b. 'thousand' mùsú

c. 'million' mìlyô:n (<French)
```

Like other numerals '2' and up, these numerals do not force tone-dropping on a preceding modified noun: nă: té:mdérè '(one) hundred cows', nă: mùsú '(one) thousand cows', nă: mìlyô:n' (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:  $t\acute{e}:md\acute{e}r\grave{e}$  yĕy 'two hundred',  $m\grave{u}s\acute{u}$  tǎ:n 'three thousand'. A single-digit numeral ending in <LH>-tone drops to L-tone under the usual conditions, hence e.g.  $t\acute{e}:md\acute{e}r\grave{e}$  yèy prepausally.

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

```
nùmǔy<sup>n</sup>]
(67)
        [pèré
                 mùsú
                            yĕy]
                                     [pèré
                                                té:mdérè
        Sheep
                 thousand two]
                                     [sheep
                                                hundred
                                                             five]
        [pèré
                    pèrí-yěy]
        Sheep
                    ten-two]
        'two thousand, five hundred, (and) twenty sheep'
```

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  $\langle LH \rangle$ -tones in  $y \notin y$  and n u m u v

```
(68) [mùsú yĕy¹] [té:mdérè nùmǔyn¹]
[thousand two] [hundred five]
[yá→ pèrí-yĕy]
[and ten-two]

'two thousand, five hundred, (and) twenty'
```

### 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  $b\acute{u}:d\grave{u}$ , shared with Fulfulde, Jamsay, and some other regional languages. '5 CFA francs' is therefore  $b\grave{u}:d\grave{u}$   $t\grave{u}w^n\emph{5}$ , '10 CFA francs' is  $b\acute{u}:d\grave{u}$   $y\widecheck{e}y$ , etc.

For very large amounts, *mìlyô:* "'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').

```
(69) 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  $t \hat{u} w^n 5 - t \hat{u} w^n 5$  even with animate referents (70). Compare animate singular  $t \hat{u} w^n \hat{o} - m$ .

```
(70) n\check{a}:-\emptyset t\grave{u}w^n5-t\grave{u}w^n5 y\grave{\varepsilon}-b5 cow-Pl one-one come.Pfv-3PlSbj '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 5:, 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'.

```
(71) a. uro^L uro^L uro^L first 'the first house'

b. uro^L u
```

Singular forms are seen in  $n\dot{u}^L k\dot{u}y$ 5:-m 'the first person' and  $n\dot{u}^L d\dot{u}m$ 6:-m 'the last person'. The plurals are  $n\dot{u}^L k\dot{u}y$ 5: and  $n\dot{u}^L d\dot{u}m$ 6:.

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

'the last house'

All other numerals have an ordinal with suffix  $-n\dot{\epsilon}$  after tone-dropped numeral stem. Slightly irregular forms are  $t\dot{a}y-n\dot{\epsilon}$  'third' and  $p\dot{e}r-n\dot{\epsilon}$  'tenth'. Representative examples are in (72). Ordinals behave morphosyntactically like modifying adjectives and induce tone-dropping on a preceding noun:  $\dot{u}r\dot{o}^L$   $\dot{v}\dot{e}v-n\dot{\epsilon}$  'the second house'.

```
(72)
            form
                                            gloss
        a. single-digit numeral
            yèy-nέ
                                            'second'
            tày-né
                                            'third'
                                            'fourth'
            nì:-nέ
            kùròy-né
                                            'sixth'
                                            'tenth'
            pèr-né
        b. decimal
            pèrì-yèy-né
                                            'twentieth'
        c. decimal plus single-digit numeral
            pèrè tùw<sup>n</sup>à sà:-né
                                            'eleventh'
        d. huindred
                                            'hundredth'
            tè:mdèrè-né
        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  $(\bar{x} \ \hat{n})$ . This is indistinguishable from the possessive construction with any possessor X other than a first or second person pronoun.

```
(73) a. bé:nì Lyà:
B Lwoman.Pl
'the women of Beni'

b. ìsê: Là:-m
village Lchief-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  $n\acute{a}:-l\grave{e}md\^{e}:$  'herb sp. (Portulaca)', we have an unexpected H-toned variant of  $n\check{a}:$  'cow' before  $l\grave{e}md\^{e}:$  'tongue'. One would have expected  $\#n\grave{a}:^L-l\grave{e}md\^{e}:$  matching Bankan Tey  $n\grave{a}:-l\grave{e}mb\grave{r}:$  (applied to the same herb sp.). The regularly possessed form is  $n\check{a}:$   $l\acute{e}md\grave{e}:$  '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 $(\hat{x} \vec{n})$

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: L-gìyé
rifle dance
'rifle dance (dance in which rifles are shot off)' (màrpâ:)
b. ènjè L-sùwó
chicken L-excrement
'chicken excrement' (ènjê-m)
c. kù: L-ùrùyí:
head L-pain
'headache' (kû:)
```

```
d. sùkòrò¹-kìlô:
sugar¹-kilo
'kilo of sugar' (súkórò)
e. pèrè¹-kû:
sheep¹-head
'sheep's head' (pèrè-m)
f. ìnjè¹-úrò
dog¹-house
'doghouse' (ìnjĕ-m)
```

Tone-dropped initials are flagged with superscript <sup>L</sup> in this section, but I usually omit word-internal superscripts in texts.

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

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

```
(75) nàw<sup>n</sup>à<sup>L</sup>-[kùw-î:]
meat<sup>L</sup>-[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 ni:  $^L$ -[tegir-i:] 'antivenin (antidote for snakebite)' in line 7 of (671) in the sample text, with ni: 'water' and verbal noun of tegiri '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 ( $\hat{x}$ $\check{v}$ -Ppl)

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 {LH} tones with just the final syllable high. Examples with ordinary noun as compound initial are in (76).

```
(76) a. m \grave{a} g \grave{o} r \grave{o}^{L-LH}[t \grave{i} y \acute{i} - m]
mango L^{LH}[sell.Agent-AnSg]
'mango seller' (m \grave{a} g \acute{o} r \acute{o} t \acute{i} y \acute{e}-)

b. \grave{a} r s \grave{e} : L^{LH}[\grave{e} r \acute{e} - m]
animal L^{LH}[t end.Agent-AnSg]
'herder, shepherd' (\grave{a} r s \check{e} : b \grave{e} r \acute{e}-)
```

```
c. wèrè<sup>L_LH</sup>[dănnà-m]
gazelle<sup>L_LH</sup>[hunt.Agent-AnSg]
'gazelle-hunter' (wéré-m dànní-)
```

The plurals are màngòrò L-H tìyú, àrsè: L-H bèré, and wèrè L-H dănnà.

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 b e c 'pasture'. 'Hunter' (76c) belongs to the same word-family as verb d e c hunt' but is not a regular derivational form.

Examples with cognate nominals as compound initials are in (77).

```
    a. yògù <sup>L</sup> - LH [yògú-m]
        running <sup>L</sup> - LH [run.Agent-AnSg]
        'runner' (yógù yòyó-)
    b. bìrὲ <sup>L</sup> - LH [bìrí-m]
        work(n) <sup>L</sup> - LH [work.Agent-AnSg]
        'worker' (bírє bìrє-)
```

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  $g \check{a} y^n$  'put' loses its final semivowel (78b).

```
(78)
                                             gloss
                                                                                        agentive
                                                                                                                                            gloss
                           verb
                                                                      singular
                                                                                                                          plural
                                                                     kòsù <sup>L</sup> - <sup>LH</sup> [sèw<sup>n</sup>ú-m]
ùrò <sup>L</sup> - <sup>LH</sup> [cèw<sup>n</sup>ú-m]
gòr<sup>n</sup>ù <sup>L</sup> - <sup>LH</sup> [tìyí-m]
                                                                                                                          -sèw<sup>n</sup>ú 'calabash-cutter'
                                             'saw'
                          séwé-
                           céw<sup>n</sup>é- 'build'
                                                                                                                          -cèw<sup>n</sup>ú 'homebuilder'
                                             'weave'
                                                                                                                          -tìyú
                                                                                                                                            'basket-weaver'
                           tíyέ-
                                             'get wood' tìn LH[tìr ní-m]
                                                                    wòngùrò <sup>L</sup> L<sup>H</sup> [wàrú-m] -tìr<sup>n</sup>ú 'wood g

wòngùrò <sup>L</sup> L<sup>H</sup> [wàrú-m] -wàrú 'farmer'

nùw<sup>n</sup>ò <sup>L</sup> L<sup>H</sup> [nùw<sup>n</sup>ú-m] -nùw<sup>n</sup>ú 'singer'

jìyè <sup>L</sup> L<sup>H</sup> [jìyí-m] -jìyú 'dancer'

lè:tèrè <sup>L</sup> L<sup>H</sup> [tìyí-m] -tìyú 'letter-sa
                           'wood gatherer'
                           wàrá-
                                             'farm'
                                             'sing'
                           nùw<sup>n</sup>5-
                                             'dance'
                          jìyé-
                           tí-
                                             'send'
                                                                                                                                            'letter-sender'
                                                                     tòrì: LH [tòrú-m]
àpètù LH [pètú-m]
                  b. tóró-
                                             'pound'
                                                                                                                          -tòrú
                                                                                                                                            'pounder (of grain)'
                                             'jump'
                                                                                                                          -pètú
                                                                                                                                            'jumper'
                           pété-
                                             'stomp' g\grave{u}s\grave{u}^{L}_{-}^{LH}[t\check{\sigma}-m]'put' g\grave{a}r\grave{a}^{L}_{-}^{LH}[g\check{a}^{n}-m]'do, make' m\grave{\sigma}s\grave{u}^{L}_{-}^{LH}[k\check{a}^{n}-m]'carry' d\grave{u}:^{L}_{-}^{LH}[d\check{u}-m]
                                                                                                                                            '(hide-)tanner'
                  c.
                          tó-
                                                                                                                          -tš:
                           gǎy<sup>n</sup>-
                                                                                                                          -gă:n
                                                                                                                                            '(indigo-)dyer'
                                                                                                                          -kǎ:n
                           káv<sup>n</sup>-
                                                                                                                                            'evil-doer'
                           dú-
                                                                                                                          -dŭ:
                                                                                                                                            'porter, carrier'
                                                                     tògòrò L-LH [tògùrú-m] -tògùrú 'meat-chewers'
                  d. tógóró- 'chew'
```

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 -*vî*: 'child of'

With a nonhuman referent, a compound with L-toned initial followed by  $-y\hat{\imath}$ : '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  $-n\hat{a}$ : (§5.1.8).

```
(79) a. m \delta : n \delta :^{L} - y \hat{\imath}:
wild.date-child
'wild date' (m \delta : n \delta : n \delta : -n \delta :^{\omega} wild date tree')

b. [n u m - n a :]^{L} - y \hat{\imath}:
[?-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  $y\hat{i}$ -m 'child' or related forms, like that in (80). Here the possessor has its regular tones, while the possessed noun has an {HL} or {L} overlay.

```
(80) úrò Lyì-tè:
house Children
'the children of the house'
```

Numerous nouns with final rising tone and ending in  $y^n$ , such as  $t\check{a}:y^n$  'shed',  $\grave{e}m\check{e}y^n$  'sorghum',  $d\grave{\partial}y^n\check{\partial}y^n$  'ashes',  $j\grave{e}m\check{e}y^n$  'waterjar shard', and  $p\check{\delta}:y^n$  'fonio (grain)', originated as diminutive compounds with \*- $\acute{y}^n$  (another 'child' form) after L-toned stem. Compare Nanga  $t\check{a}:^n$ ,  $\grave{e}:mb\acute{e}$ ,  $d\grave{u}y\acute{a}$ ,  $j\grave{e}:mb\acute{e}$ , and  $p\check{\delta}:^n$ . The BenT forms, however, are now frozen.

### 5.1.5 'Woman' ( $y\dot{a}$ -, $y\dot{a}$ :-), 'man' ( $\dot{a}r^n\dot{a}$ -)

'Woman' is singular  $y\check{a}-m$ , plural  $y\check{a}$ . The short-voweled form  $y\grave{a}$  is used as a compound initial (or preadjectival noun form) in  $y\grave{a}^L-g\grave{u}r\hat{\jmath}-m$  'adolescent girl',  $y\grave{a}^L-s\acute{a}gt\acute{a}r\acute{a}-m$  'full-grown woman',  $y\grave{a}^L-p\check{e}:-m$  'old woman',  $y\grave{a}^L$   $d\hat{a}:-m$  'junior wife',  $y\grave{a}^L$   $d\acute{u}y^n\grave{a}-m$  'senior wife',  $y\grave{a}^L-n\grave{\jmath}r^n\acute{u}$  'co-wife',  $y\grave{a}^L-b\acute{u}r\acute{u}m$  'betrothal',  $y\grave{a}^L-[t\grave{a}l-\hat{\imath}:]$  'bridal procession' and  $y\grave{a}^L$   $k\acute{a}l\grave{a}-m$  'new bride'. The phonologically more regular long-voweled preadjectival form  $y\grave{a}:^L$  is less common but occurs in  $y\grave{a}:^L$   $y\^{\imath}-m$  'girl' and  $y\grave{a}:^L$   $k\^{u}-m$  'unmarried woman'.

'Man' is  $\frac{\dot{a}r^n \dot{a} - m}{a}$ , plural  $\frac{\dot{a}r^n \dot{a}}{a}$ . It has the regular form  $\frac{\dot{a}r^n \dot{a}}{a}$  as compound initial or before an adjective:  $\frac{\dot{a}r^n \dot{a}^L}{a} = \frac{\dot{a}r^n \dot{a}^L}{b} = \frac{\dot{a}r^n \dot{a}^L}{b} = \frac{\dot{a}r^n \dot{a}^L}{a} = \frac{\dot{a$ 

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 $(\bar{n} \hat{n}, \bar{n} \hat{n})$

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 {HL}- or {L}-toned following the usual rules for possessor-controlled tone overlays. Such combinations compete with the basic  $(\hat{x} \ \bar{n})$  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,  $p\acute{e}t\acute{e}-p\~{e}:-m$  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  $k\`{i}-k\`{a}r\`{a}-k\~{a}y$   $^Lp\`{e}t\`{e}-p\~{e}:-m$ , literally "gravel's Oedaleus." Creatures associated with a specific plant sp. have similar names, e.g.  $g\~{u}r\~{u}-p\'{r}\'{u}$   $^{HL}k\'{i}-k\~{a}:-m$  'grasshopper sp. (*Acrodideres*)', literally "*Guiera* tree's grasshopper."

## 5.1.7 'Owner of' (Sg $b \grave{\partial} \eta g \acute{o} \sim b \grave{\partial} \eta \acute{o}$ )

As an uncompounded noun, we have  $b \partial g \partial m \sim b \partial g \partial m$  'owner', plural  $b \partial g \partial \sim b \partial g \partial m$  'owners'.

Much more often, this noun has possessed-noun tone overlay, i.e. {HL} or {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  $^{\text{HL}}b\acute{o}\eta g\grave{o}\sim{}^{\text{L}}b\grave{o}\eta g\grave{o}$ , with the plural expressed by adding plural  $b\grave{e}$ .

- (81) a. <u>úrò Lbòngò</u> house Lowner 'home-owner (head of household)'
  - b. wògòtórò Lbàngà bè cart Cowner Pl
  - c.  $[[\hat{u}r\hat{o} \quad t\hat{a}:n]^L \quad \hat{\eta}g\hat{u}]$   $[[house \quad three]^L \quad Prox.Inan]$  HL owner 'the owner of these three houses'
  - d. [úrò kù] HL bóŋgò
    [house Def] 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  $n\acute{a}$ : to the L-toned noun as compound initial unambiguously denotes the entire plant.  $n\acute{a}$ : is often omitted since the most common reference is to the entire plant, but without  $n\acute{a}$ : the noun can also loosely denote the fruit or other part.  $n\acute{a}$ : 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.

- (82) a.  $\frac{\partial s \partial r \partial^L n \acute{a}:}{\text{baobab}^L \text{entire}}$ 'baobab tree'
  - b. tà:y<sup>nL</sup> ná:
    shelter<sup>L</sup> main
    'togu-na, main palaver shelter of a village'
  - c. sùngòy<sup>L</sup> ná:
    boubou<sup>L</sup> main
    'large, elegant boubou (man's robe)'
  - d. yù: L ná:
    millet main
    'ordinary millet'

 $n \dot{u} m - n \dot{a}$ : 'large grindstone' is now fused; the small grindstone held in the hand while grinding on the larger stone is  $[n \dot{u} m - n \dot{a}]^L - y \hat{i}$ ; not  $\# n \dot{u} m - y \hat{i}$ .

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

A loose compound consisting of a nominal compound initial (L-toned) and an imperfective verb with suffix  $-y\hat{e}$  is used to define a type of object by its typical function. The verb stem plus  $-y\hat{e}$  has the form of a 3Pl 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).

- (83) a. ni: L-[nó-yè]
  water [drink.Ipfv-Ppl.AnPl]
  'drinking water'
  - b.  $ni:^L$ -[diyé-yè] water^L-[bathe.Ipfv-Ppl.AnPl] 'water for bathing'
  - c.  $n \hat{\epsilon} y^{nL} [n \hat{\epsilon} y \hat{\epsilon}]$ food<sup>L</sup>-[eat.Ipfv-Ppl.AnPl]

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

## 5.1.10 Resultative compounds ending in nominalized verb $(-\dot{u})$

There are also some combinations where a verb in L-toned form with suffix  $-\hat{u}$  functions as a compound final (or, arguably, modifying adjective) to a preceding  $\{L\}$ -toned noun. The final denotes an event or process that has left the entity in a changed state. (In Jamsay, the form in  $-\hat{u}$  is the productive verbal noun for nonmonosyllabic verb stems, but it is also used in resultative modifying functions.)

```
(84) a. y\grave{u}: L-[y\grave{a}g-\acute{u}] millet L-[fall-Nom] 'fallen-off millet grain spikes' (verb y\grave{a}y\acute{a} 'fall')
```

```
b. n\grave{a}w^n\grave{a}:^L-[sìmb-ú]
meat<sup>L</sup>-[roast-Nom]
'roasted (=grilled) meat' (verb símbé)
```

c.  $pir^n a^L$ -[sar-ú] cream.of.millet-[coarsely.grind-Nom] 'coarsely ground millet' (verb sara)

Perhaps also  $m u r^n u^L - [k \varepsilon s - u]$  'long pants' (verb  $k \varepsilon s \varepsilon$  'cut').

These resultative compounds superficially resemble agentive compounds with incorporated theme nouns (§5.1.3).

### 5.1.11 Phrasal compounds

[kă: lè] ìré-m 'I am bigger than a grasshopper', borrowed entirely from Jamsay, denotes tiny birds such as the cricket warbler (Spiloptila [=Prinia] clamans).

sŏ:-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 ( $\bar{n}$ â)

In this type, the initial has its usual tones, while the final has an {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. \frac{\partial r^n \partial^L}{\partial r^n} \frac{\partial r^n \partial^L}
```

- b.  $\frac{\partial r^n \partial^L}{\partial r^n}$   $\frac{\partial r^n \partial^L}{\partial r^n}$   $\frac{\partial r^n \partial^L}{\partial r^n}$   $\frac{\partial r^n \partial^L}{\partial r^n}$   $\frac{\partial r^n \partial^L}{\partial r^n}$  belly-HL fat)adj)-Pl 'big-bellied men'
- c. *pìré-<sup>HL</sup> [pátá-pátà]-m* belly-<sup>HL</sup>flat-AnSg 'flat-bellied' (*pàtà-pátà*)
- d.  $k\hat{u}$ :-HL  $k\acute{o}r\grave{o}y$ -m head-HL empty-AnSg 'empty-headed'  $(k\grave{o}r\check{o}y)$
- e. *lɔ̂sɔ̂:-HLcésì-m* foot-HLfast-AnSg 'fleet-footed' (*cèsú*) [2005.2a.09]

A double bahuvrihi is  $t\acute{e}m^{-HL}d\acute{u}g\grave{u}$   $n\grave{a}w^n\acute{a}^{-HL}\acute{e}r\grave{u}$ , 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.  $n\grave{a}$ :  $k\hat{u}$ :-HL  $n\hat{r}$ : $y^n$ -m cow head-HL four-AnSg 'four-headed cow' ( $n\check{r}$ : $y^n$ )
  - b. gìré-<sup>HL</sup>túw<sup>n</sup>3-m eye-<sup>HL</sup>one-AnSg 'one-eyed person' (</tùw<sup>n</sup>3/)
  - c. sàmbà: L mŏ:-HL yêy
    spear mouth-HL two
    'spear with blades at both ends' (yĕy)

# 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

b<sub>1</sub>. possessor NP

b<sub>2</sub>. pronominal possessor

b<sub>2</sub>. 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  $k\hat{u}$  (~  $k\hat{u}$ )
- g. plural bè
- h. universal quantifier 'all' (dàn-wôy)

The primary ordering relationships can be seen in (88). (88a) has all slots filled except that for numerals. A numeral does occur in (88b).

- (88) a. á:mádù Lùrò Ldìy<sup>n</sup>à-w<sup>n</sup> ŋgú kù bè dà<sup>n</sup>-wôy
  Amadou Lhouse Lbig-Inan Prox.Inan Def Pl all
  'all of those big houses of Amadou'
  - b.  $\acute{u}$   $\stackrel{\text{HL}}{\text{E}}[\acute{u}r\grave{o} \qquad d\grave{i}y^n\grave{a}w^n \qquad t\grave{a}:n\grave{u}]$   $k\grave{u}$  2SgPoss  $\stackrel{\text{HL}}{\text{HL}}[\text{house big} \qquad \text{three}]$  Def 'your-Sg three big houses'

When plural bè is combined with a demonstrative, the sequence is tightly-knit and may be followed by a numeral: mǔ: bè yèy 'these two'.

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

ŋgú 'this' (inanimate, proximal) can be used absolutely: ŋgú mã: ní 'give me this!'.

An adjective can be used absolutely, with an understood but unexpressed noun:  $[b\acute{a}r^n\grave{a}-w^n k\grave{u}]$   $m\~{a}$ :  $n\'{i}$  'give me the red one!'.

A numeral can be used absolutely: tà:nú mã: 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 clause-internal. 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.

(89) a. 
$$[[n\grave{a}:^L j\grave{\epsilon}w^n\grave{\epsilon}]^L y\grave{a}g\acute{a}-s-\hat{\epsilon}:^n t\grave{a}:n\acute{u} b\mathring{u}:]$$
 $[[cow^L black]^L fall-Reslt-Ppl.AnPl three DefPl]$ 
 $y\acute{a} y\check{i}:-r\grave{a}-\grave{w} m\grave{a}$ 
Exist see-Prog-2SgSbj Q
'Do you-Sg see the three fallen black cows?'

```
b. [[nà: kùròy]<sup>L</sup> í śwś-mà bû:]

[[cow six]<sup>L</sup> 1SgSbj buy-Pfv.Ppl DefPl]

án-dá: b-è:<sup>n</sup>

where? be-3PlSbj

'Where are the six cows that I bought?'
```

In §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  $\{L\}$  overlay on the noun and any preceding adjective. Therefore N-Adj appears as  $[N^L \text{ Adj}_1]$ , and N-Adj<sub>1</sub>-Adj<sub>2</sub> appears as  $[N^L \text{ Adj}_1^L \text{ Adj}_2]$ , analysable tonosyntactically as  $[N \text{ Adj}_1]^L \text{ Adj}_2]$ .

An additional feature of core NPs is that animate singular -m, the only overt animacy-number suffix that can appear on a noun, is added to the adjective if one is present. Thus  $inj\check{\epsilon}^L$  inji inj inj

A numeral follows the core NP.  $tuw^n 5$  '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 §6.4 for examples.

A **demonstrative pronoun** (§6.5.2) controls  $\{L\}$  on a preceding word or word-string going back to the noun. The resulting combinations are  $[N^L \text{ Dem}]$ ,  $[[N^L \text{ Adj}]^L \text{ Dem}]$ ,  $[[N \text{ Num}]^L \text{ Dem}]$ , and  $[[N^L \text{ Adj Num}]^L \text{ Dem}]$ , where all words enclosed in a bracket marked with following  $^L$  superscript are tone-dropped under the control of the word to the right.

Definite morphemes ( $\S6.7$ ) have the same linear position as demonstratives, but they do not control  $\{L\}$  on preceding words. Universal quantifiers ('all') and discourse-functional morphemes bring up the rear in the NP. They too fail to control  $\{L\}$  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 {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 {HL} or {L} on the possessed NP depending on its own structure and final tone. Simple possessed nouns therefore appear either as [Poss HLN] or as [Poss LN]. 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  $[[N^L \ Adj]^L \ Dem]$  both the noun and the adjective are  $\{L\}$ -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 {HL} rather than {L} on the following possessed NP. Just one example of conflict resolution will be given in this section. In (90a-b),  $\acute{u}r\grave{o}$  'house' and  $\grave{i}nj\check{e}-m$  'dog' have overlaid {HL} overlay controlled by the preceding possessor '(a) woman'.

- (90) a. <u>yǎ-m</u> HL úrò ŋgú woman-AnSg HL house Prox.Inan 'this house of a woman' (< úrò)
  - b. yǎ-m HL ínjè mǔ: woman-AnSg HL dog Prox.An 'this dog of a woman' (<ìnjě-m)

In the absence of a possessor, the demonstrative controls  $\{L\}$  on the noun:  $\grave{u}r\grave{o}^L$   $\grave{\eta}g\acute{u}$  '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.  $\c v\check{a}-m$  in  $\c v\check{u}$   $\c v\check{u}$ .

### 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 {HL} 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.

1Sg 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  $\{HL\}$  tone overlay, resulting in a bell-shaped surface melody that we can represent as  $L+\{HL\}$ . For possessors other than 1Sg, 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  $k\dot{u}$  or plural  $b\dot{e}$ ), the final tone of the possessor determines the overlay. Possessor-final H-tone requires {HL}-toned possessum, while possessor-final L-tone requires {L}-toned possessum.
- b) If the possessor is an NP ending in definite  $k\dot{u}$  or plural  $b\dot{e}$ , the following possessum gets the {HL} overlay, even though  $k\dot{u}$  and  $b\dot{e}$  are L-toned.

The possessum also gets {HL} 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  $\{HL\}$  and  $\{L\}$  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 {L} or to {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 <LH>), the possessum has {HL} overlay, 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 <HL>), the possessum has {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 {L} overlay.

```
<sup>L</sup>ùrò
(91)
            á:mádù
                          <sup>L</sup>house
             Amadou
             'Amadou's house' (úrò)
                              <sup>L</sup>yà-m
        b. á:mádù
             Amadou
                               Lwoman-AnSg
             'Amadou's woman (=wife)' (vă-m)
                              <sup>L</sup>ìnjè-m
        c. á:mádù
             Amadou
                              Ldog-AnSg
             'Amadou's dog' (injě-m)
                             <sup>L</sup>wògòtòrò
        d. á:mádù
                             Lpushcart
             Amadou
             'Amadou's pushcart' (wògòtórò)
                                              Lìniè-m
        e. /yă:
                               gá:rày]
                                              Ldog
                              eight]
             'the dog of (the) eight women' (injě-m)
        f. /yà<sup>L</sup>
                                                   Lìnjè-m
                               dâ:-m]
                                                   Ldog
             [woman<sup>L</sup>
                               small-AnSg]
             'the dog of (the) small woman' (injě-m)
```

In (92), the possessor NP ends in an H-tone, so the possessed noun has the {HL} overlay.

```
HL úrò
(92)
        a. yǎ-m
                                  <sup>HL</sup>house
             woman-AnSg
             '(the) woman's house' (úrò)
                                   <sup>HL</sup>ínjè-m
        b. yă-m
                                   HL dog-AnSg
             woman-AnSg
             '(the) woman's dog' (injě-m)
                                    HL wógòtòrò
HL pushcart
        c. yǎ-m
             woman-AnSg
             '(the) woman's pushcart' (wògòtórò)
                                           HL ínjè-m
        e. /yă:
                                           HLdog-AnSg
             [woman.Pl
                               two]
             'the dog of (the) two women' (injě-m)
        f. /yà<sup>L</sup>
                                              <sup>HL</sup> ínjè-m
                               pě-m]
                                              HLdog-AnSg
             [woman<sup>L</sup>
                               old-AnSg]
```

'the dog of (the) old woman' (*injě-m*)

If the possessor NP ends in a free plural morpheme bè or in a determiner (definite or demonstrative), we again get {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 {L} or {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 {L} on a following possessum (Z), as in (93d). See also §6.2.4 on recursive possession.

```
HL yí-tè:
HL children
(93)
         a. [úrò
                               bè1
                               P1]
              [house
               '(the) children of (the) houses' (vì-tɛ̃:)
                                                                 HL ínjè-m
HL dog-AnSg
         b. [nŭ:
                                yěy
                                                 kù]
              [person
                                two
                                                 Def]
              'the dog of the two people' (injě-m)
                                             HL ínjè-m
HL dog-AnSg
         c. [nù<sup>L</sup>
                             тй:1
              [person<sup>L</sup>
                             Prox.An]
              'this person's dog'
         d. L-HL b3:
                                      Linjê-mLdog-AnSgL
              1SgPoss. HL father
              'my father's dog'
```

The phonology of the {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 <HL>-tone. The nonmonosyllabic examples have H-tone on the first syllable, whether this first syllable is short (*Cv*-), heavy (*CvC*-, *Cv:*-), or superheavy (*Cv:C*-) (94c-e).

(94)		gloss	lexical form	{HL} possessed form
	a.	'house' 'road' 'water'	úrò ósù nî:	HL úrò HL ósù HL nî:
	b.	'women' 'person'	yǎ: nǔ-m	HL yâ: HL nû-m
	c.	'fabric' 'children'	òròsú yì-tἒ:	<sup>HL</sup> óròsù <sup>HL</sup> yí-tè:
	d.	'mango' 'stool' 'dog' 'kola nut'	màŋgórò túŋgúrúm ìnjĕ-m gŏ:rò	HL máŋgòrò HL túŋgùrùm HL ínjè-m HL gó:rò

e. 'short hoe' dà:mbâ: HL dá:mbà:

### 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 complement-postposition constructions (§8.2-5). Except for the zero 1Sg, these forms are also identical to those used as independent pronoun, as preparticipial subject pronominal, and optionally as direct object.

```
(95)
         category
                           possessor form (preceding possessed noun)
         1Sg
                           (zero, with floating L-tone)
         1P1
                           î:
         2Sg
                           ú
         2P1
                           û:
                           \varepsilon r^n \varepsilon
         3Sg
         3P1
                           bû:
                           kú
         Inan
         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 1Sg 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 {HL} tone overlay, while if the possessor ends in an L-tone, the possessed noun has all-L tones.

```
(96) possessors possessed noun

a. 1Pl \hat{i}; 2Pl \hat{u}; 3Pl \hat{b}\hat{u}; 3ReflPl \hat{a}: {L}

b. 2Sg \hat{u}, 3Sg \hat{\epsilon}r^n\hat{\epsilon}, 3ReflSg \hat{a}, Inan \hat{k}\hat{u} {HL}

c. 1Sg (segmentally zero) L+{HL}
```

The **1Sg 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 1Sg 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 {HL} overlay controlled by other singular possessors. However, the details of tone association for the 1Sg differ from those that are valid for the other pronouns that precede {HL}-overlaid possessed nouns. Consider the data in (97).

```
(97)
                                                                          possessed, after ...
                                                       ...2Sg
                                                                               ...1Pl
                   stem
                                     gloss
                                                                                                        ...1Sg
                                                       ú HL yû:
                                                                                                       L+HL vű:
                                     'millet'
                   уû:
                                                                               î: yù:
                                                                                                       ^{\text{L+HL}}\vec{k}\vec{u}:
                                                       ú HL kû:
                                     'head'
                                                                               î: kù:
                   kû:
                                                       ú <sup>HL</sup>sîw
                                                                                                       L+HL_{\vec{SIW}}
                   \hat{siw}
                                     'hoe'
                                                                               î: sìw
                                                                                                       L+HL 👸:
                                                       \vec{u}^{\mathrm{HL}}\hat{\varepsilon}:
                                     'well'
                                                                               î: È:
                   ě:
                                                                                                       ^{\text{L+HL}}b\tilde{\varepsilon}y^{n}
                                                       u^{\mathrm{HL}}b\hat{\varepsilon}v^{n}
                   b\tilde{\varepsilon}v^n
                                     'beard'
                                                                               \hat{i}: b \hat{\varepsilon} y^n
                                                       ú <sup>HL</sup>á:rà
                                                                                                       L+HL ă:rà
                                                                               î: <sup>L</sup>à:rà
                                     'rice'
            b. á:rá
                                                                                                       L+HL ěnjî:
                                                       ú <sup>HL</sup>énjì:
                                                                               î: Lènjì:
                                     'roselle'
                   ènjî:
                                                                                                       L+HL dă:mbà:
L+HL gŏ:rò
                                     'short hoe' ú HL dá:mbà:
                                                                              î: <sup>L</sup>dà:mbà:
                   dà:mbâ:
                                                      ú HL gó:rò
                                                                               î: <sup>L</sup>gò:rò
                                     'kola nut'
                   gŏ:rò
                                                                                                       L+HL bărmèy
                                                       ú <sup>HL</sup>bármèy
                                                                               î: <sup>L</sup>bàrmèy
                   bàrměy
                                     'corn'
                                                                                                       L+HL ŭrò
                                                       ú <sup>HL</sup>úrò
                                                                               î: Lùrò
                   úrò
                                     'house'
                                                                                                       L+HL kărà
                                                       ú <sup>HL</sup>kárà
                                     'mat'
                                                                               î: <sup>L</sup>kàrà
                   kàrá
                                                                                                       L+HL běrè
                                                       ú <sup>HL</sup>bérè
                                                                               î: Lbèrè
                   béré
                                     'stick'
                                                                                                       L+HL\check{\varepsilon}m\grave{\varepsilon}v^n
                                     'sorghum' ú HL émèyn
                                                                               \hat{i}: ^{L}\grave{\varepsilon}m\grave{\varepsilon}y^{n}
                   \grave{\varepsilon} m \check{\varepsilon} v^n
                                                                                                       L+HL dŭrù
                                     'long pole' ú HL dúrù
                                                                               î: Ldùrù
                   dùrú
                                                                                                       L+HL mŏbìl
                                                                               î: <sup>L</sup>mòbìl
                                                       ú <sup>HL</sup>móbìl
                                     'vehicle'
                   mòbîl
                                                                                                       <sup>L+HL</sup>tǔŋgùrùm
                                                       ú <sup>HL</sup>túŋgùrùm î: <sup>L</sup>tùŋgùrùm
                                     'stool'
                   túŋgúrúm
                                                                                                       L+HL măŋgòrò
                                                       ú <sup>HL</sup>mángòrò
                                                                              î: <sup>L</sup>màŋgòrò
                   màngórò
                                     'mango'
                                                                                                       L+HL <mark>bănàkù:</mark>
                                                       ú <sup>HL</sup>bánàkù:
                                                                               î: <sup>L</sup>bànàkù:
            e. bànàkû:
                                     'cassava'
                                                                                                       <sup>L+HL</sup>gǐ-gàsà:
                                                       ú <sup>HL</sup>gí-gàsà:
                                                                               î: <sup>L</sup>gì-gàsà:
                   gì-gàsâ:
                                     'pioche'
                                                                                                       L+HL kănàr này n
                                                       ú HL kánàr này n î: Lkànàr này n
                                     'melon'
                   kànár<sup>n</sup>ày<sup>n</sup>
                                                                                                       L+HL

ŏsò-kòrò
                                                       ú <sup>HL</sup> ós à-k à r à
                                                                               î: Lòsò-kòrò
                   àsà-kárà
                                     'throat'
                                                                                                       L+HL kŭ-kùyð
                                                       ú <sup>HL</sup>kú-kùyɔ̀
                                                                               î: Lkù-kùyò
                   kù-kùyớ
                                     'hair'
                                                                                                       L+HL bǐyà:kù
                                                       ú <sup>HL</sup>bíyà:kù
                                                                               î: Lbìyà:kù
            f.
                   bìyà:kú
                                     'guava'
```

In the 1Sg possessor forms, we observe the following:

- (98) 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 (Cv), the H-tone component is pushed to the right by the L-tone of the 1Sg 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 Cv syllable. Possibly in connection with this, I have noticed occasional pronunciations of the 1Sg possessor form where an initial voiced consonant, especially  $\{b\ m\}$ , is slightly prolonged and allows an earlier phonetic expression of the 1Sg possessor's L-tone, so that e.g.  $^{L+HL}b\breve{e}r\dot{e}$  'my stick' approaches phonetic [ $\dot{b}$ b: $\dot{e}r\dot{e}$ ].

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).

```
(99)
                                                                                                 possessed, after ...
                          stem
                                               gloss
                                                                         ...2Sg
                                                                                                       ...1Pl
                                                                       \stackrel{.}{u}^{HL}inj\grave{e}-m \stackrel{.}{i}^{:}^{L}inj\grave{e}-m \stackrel{.}{u}^{HL}p\acute{e}r\grave{e}-m \stackrel{.}{i}^{:}^{L}p\grave{e}r\grave{e}-m \stackrel{.}{u}^{HL}y\^{a}-m \stackrel{.}{i}^{:}^{L}y\grave{a}-m \stackrel{.}{u}^{HL}y\^{i}-m \stackrel{.}{i}^{:}^{L}y\grave{i}-m
                                                                                                                                     L+HL ĭnjè-m
                                                'dog'
                 a. ìnjě-m
                                                                                                                                     L+HL pěrè-m
                                                'sheep-Sg'
                         pèrě-m
                                                'woman'
                         yǎ-m
                                                                                                                                     L+HL yıı-m
                                               'child'
                         yí-m
                                                                         ú <sup>HL</sup>ínjè
ú <sup>HL</sup>pérè
                                                                                                       î: Linjê
î: pêrê
                                               'dogs'
                 b. injé
                                                'sheep-P1'
                         pèré
                                                                                                                                     L+HL yã:
L+HL yǐ-tè:
                                                                         ú HL yâ:
                                                                                                       î: Lyà:
                                                'women'
                         yă:
                                                                          ú <sup>HL</sup>ví-tè:
                                                'children'
                         yì-tε̃:
```

### 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. 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 (H)L[N Adj (Adj)]], where the overlay, either {HL} or {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 (2Sg  $\acute{u}$ , 3Refl/LogoSg  $\acute{a}$ ). This sequence can therefore appear either as [Poss HL[N Adj]] or as [[Poss N]L Adj], as shown by the two options in (100c). In the variant  $[\grave{u} \ les\grave{u}]^L \ m\grave{o}s\^{u}-m$ , the (phonologically light) 2Sg pronoun  $\acute{u}$  is tone-dropped 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 1Sg possessor form (100f).

```
<sup>HL</sup>[úrò
                                           div^n \hat{a} - w^n l
(100) a. u
                           HL[house
             2SgPoss
                                           big-Inan]
              'your-Sg big house' (< úrò, díy<sup>n</sup>à-w<sup>n</sup>)
                           HL [lésù
                                           mòsù-m]
         b.
             ú
                           HL uncle
             2SgPoss
                                           bad-AnSg]
              'your bad (nasty) uncle' (<lèsú, mòsû-m)
                            HL [lésù
              ú
         c.
                                               mòsù-m]
                             lèsù]<sup>L</sup>
              ſù
                                                màsû-m
     or:
             2SgPoss
                             uncle
                                               bad-AnSg
              'your-Sg bad (nasty) uncle'
```

```
HL [lésù
                                             mòsù-m]
   d.
        ú
                         lèsù1<sup>L</sup>
not:
        #ſù
                                             màsû-m
        #2SgPoss
                         uncle
                                             bad-AnSg
        'your bad (nasty) uncle'
                          HL[ínjè
ìnjè] L
        ú
                                            mòsù-m]
   e.
not:
        #<del>[</del>û
                                            màsû-m
        #2SgPoss
                          dog
                                            bad-AnSg
        'your bad (nasty) dog'
        L+HL[ĭnjɛ̀
                                 mòsù-m]
        L+HL[1Sg-dog
                                 bad-AnSg]
        'my bad (nasty) dog'
                     HL [úrò
HL [house
   g. ú
                                                         bàr<sup>n</sup>à-w<sup>n</sup>]
                                         big-Inan
        2SgPoss
                                                         red-Inan]
        'vour-Sg big red (=brown) house' (< \dot{u}r\dot{o}, \dot{d}iv^n\dot{a}-w^n, \dot{b}\dot{a}r^n\dot{a}-w^n)
```

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[N Num]] (101a). Inalienables sometimes follow the same [Poss (H)L[N Num]] pattern. More often, an inalienable possessor treats the numeral as **external to the overlay**, resulting in [Poss (H)L] Num] where {(H)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).

The wide-domain alienable overlay is unaffected by Adj-Num Inversion (§6.4.2). (102) below shows the same wide domain of the {HL} overlay in both uninverted (102a) and inverted (102b) versions, which are schematized respectively as [Poss (H)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]L Adj] Num], with the final numeral tonosyntactically external as expected. His inverted version was (102d), schematically [[Poss N Num]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 HL lésù] '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.

(102) a. 
$$\acute{u}$$
  $\stackrel{\text{HL}}{}$   $[\acute{u}r\grave{o}$   $d\grave{i}y^n\grave{a}-w^n$   $p\grave{\epsilon}r\grave{u}]$   $(k\grave{u})$   $2\text{SgPoss}$   $\stackrel{\text{HL}}{}$  [house big-Inan ten] (Def) 'your-Sg ten big houses'

b. 
$$\acute{u}$$
  $\stackrel{\text{HL}}{=} [\acute{u}r\grave{o}$   $p\grave{e}r\grave{u}$   $d\grave{i}y^n\grave{a}-w^n]$   $(k\grave{u})$   $2\text{SgPoss}$   $\stackrel{\text{HL}}{=} [\text{house}$  ten big-Inan] (Def)  $[=(a)]$ 

d. 
$$[\hat{u} \quad l\hat{e}s\hat{u} \quad p\hat{e}r\hat{u}]^{L} \quad m\hat{\sigma}s\hat{i}-y\hat{e}$$
 $[2SgPoss \quad uncle \quad ten]^{L} \quad bad-AnPl$ 
 $[=(c)]$ 

e. 
$$[\acute{u}]$$
 HL  $\acute{l}\acute{e}s\grave{u}$   $\acute{p}\acute{e}r\acute{u}$   $\acute{m}\grave{o}s\acute{i}-y\grave{e}$   $\acute{b}\^{u}$ :) [2SgPoss HL uncle] ten bad-AnPl (DefPl) [= (c,d)] [from another informant]

Late-NP morphemes such as  $\hat{woy}$  'all, each' are not included in a possessor-controlled domain under any conditions (104).

The same is true with definite markers like plural  $b\hat{u}$ ; 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  $k\hat{a}y$ ,  $k\acute{a}l\grave{a}$  'even',  $s\check{a}y$  'only') likewise have no effect on the form of preceding words in the NP.

For  $[\subseteq Poss^{(H)L}N \supseteq Dem]$ , where the possessor-noun behaves as a tonosyntactic island, see  $[[\acute{u}^{HL}l\acute{e}s\grave{u}]m\check{u}:b\grave{e}]$  '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 {L} or {HL} overlay depending on what X is, and is L+{HL} with (segmentally zero) 1Sg possessor. In any case, [X's Y] ends in an L-tone, and as a possessor it controls {L} on the following possessum Z. Examples are in (104).

```
L+HL nărnà
                                               L<sub>bà:</sub>
(104)
               1SgPoss. HL mother
                                               father
               'my mother's father'
                                                    L<sub>bà:</sub>
                               HL nár nà l
          b. /ú
                               HL mother]
                                                    <sup>L</sup>father
               [2SgPoss
                'your mother's father'
                               Lnàr<sup>n</sup>àl
                                                    Lbà:
          c. [á:mádù
```

Lmother] 'Amadou's mother's father'

#### 6.3 Noun plus adjective

#### 6.3.1 Noun plus regular adjective

[Amadou

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.

<sup>L</sup>father

Simple examples are in (105). When an adjective is added, it controls {L} on the noun (105b-c). When two adjectives follow the noun, the final adjective controls {L} on the two preceding words (105d).

```
(105) a. màngórò
           'mango'
       b. màngòrò L dùgû-w
           '(a) big mango'
       c. màngòrò L bár nà-w n
           '(a) red (= ripe) mango'
       d. [màngòrò L dùgù-w] L bár nà-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 Cv(:), noun stems, the common pattern is (106a), with consistent long vowel. A few nouns with  $\langle HL \rangle$  or  $\langle LH \rangle$  tone (106b) are Cv- before animate singular -m and (often) when  $\{L\}$  is imposed on them by a controller to the right. However, all of these nouns happen to have contour tones. Without the {L} overlay, or when unsuffixed, these nouns lengthen their vowel to *Cv:* by Contour-Tone Mora-Addition (§3.7.4.1).

### (106) Monosyllabic animate nouns

```
P1
                                                before adjective
    gloss
                      Sg
a. underlying Cv:, length retained in all positions
     'cow'
                      nă:-m
                                                nà: L èsú-m 'good ...'
                                    nă:
                                                sù: L dùgû-m 'big ...'
    'francolin'
                      sû:-m
                                    sû:
                                                \hat{a}: \hat{p} \hat{l} \hat{\epsilon}-m 'white ...'
    'monitor liz.'
                      ă:<sup>n</sup>-m
                                    ă:n
                                                à:nL mòsû-m 'nasty ...'
    'honey bee'
                      \hat{a}: ^{n}-m
                                    \hat{a}^{n}
  reduplicated
                                                sì-sì: L dâ:-m 'small ...'
     'grub, worm'
                      sì-sĩ:-m
                                    sì-sĩ:
                                                cì-cè: L mòsû-m 'beetle sp.'
    'beetle, bug'
                      cì-cɛ̃:-m
                                    cì-cề::
                                                tì-tà: L pílé-m 'white (i.e. striped) hyena'
    'hyena'
                                    tì-tã:
                      tì-tã:-m
b. underlying C\check{v}, C\hat{v}, lengthened when contour tone audible
  <LH>-toned
                                                nù<sup>L</sup> ἐsú-m 'good ...'
     'person'
                                    nŭ:
                      nŭ-m
                                                và L èsú-m 'good ...
     'woman'
                      yǎ-m
                                    yă:
                                                sò i jéw e-m 'black ...'
    'horse'
                      sŏ-m
                                    sŏ:
  <HL>-toned
                                    ô:
                                                \partial^{L} jéw<sup>n</sup>è-m 'black ...'
    'mouse'
                      ô-m
                                                tì-tè L dùgû-m 'big ...'
    'hawk'
                                    tì-tê:
                      tì-tê-m
c. irregular monosyllabic
  like (b) but H-toned singular
                                                yì: L ἐsú-m 'good ...'
                      ví-m
                                    yî:
    (human 'children' expressed by irregular yì-tɛ̃:)
```

While 'person', 'woman', 'horse', and 'mouse' are regularly  $C\hat{v}$  before adjectives, they have long vowels when plural and preceded by a possessor ending in an L-tone:  $g\hat{a}n\hat{a}^{L}n\hat{u}$ : 'people of Ghana',  $b\hat{e}:n^{L}y\hat{a}$ : 'women of Beni',  $b\hat{e}:n^{L}s\hat{o}$ : 'the horses of Beni',  $b\hat{e}:n^{L}\hat{o}$ : 'the mice of Beni'. See §6.2 and §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 (107c-d) also considering the preceding tone. Contour-Tone Mora-Addition ( $\S 3.7.4.1$ ) lengthens the vowels of the unsuffixed plurals in (107b,d). This lengthening is pre-empted in (107c) by Final-Cv <LH>-to-H Reduction ( $\S 3.7.4.3$ ), which fails to apply here because of the H-tone in the preceding syllable.

### (107) Nonmonosyllabic animate nouns

```
P1
                                                  with {L} overlay
    gloss
                     Sg
a. final short level H- or L-tone, no lengthening in plural
    'left-hander'
                     bàríyà-m
                                     bàríyà
                                                   bàrìyà L èsú-m 'good ...'
                                                   ìsì i jéw nè-m 'black ...'
    'fish'
                     ísì-m
                                     ísì
                                                   kì-kèrè bár nà-m 'red ...'
    'cricket'
                     kí-kéré-m
                                     kí-kéré
b. final <HL>, lengthened in plural (§3.7.4.1)
                                                   cèŋgù L èsú-m 'good ...'
    'agama lizard' cèngû-m
                                     cèŋgû:
                                                   ni:y^ni^L bár^na-m 'red ...'
    'bird'
                     ni:v^n\hat{i}-m
                                     ni:v^n\hat{i}:
                     m\dot{u}-m\dot{u}r^n\hat{u}-m\dot{u}-m\dot{u}r^n\hat{u}: m\dot{u}-m\dot{u}r^n\dot{u} ^L m\dot{o}s\hat{u}-m 'nasty ...'
    'scorpion'
                                                   èkùnjù L dùgû-m 'big ...'
                                     èkùnjû:
    'frog'
                     èkùnjû-m
c. final short <LH> after L, flattened to H in plural (§3.7.4.3)
                                                   úrò Lbòngò 'house owner'
    'owner'
                     bàηgǯ-m
                                     bàngá
                                                  àrgàlà mòsû-m 'bad ...'
                     àrgàlă-m
    'wasp'
                                     àrgàlá
                                                   àwà L bár nà-m 'red ...'
    'snake'
                     àwǎ-m
                                     àwá
d. final short <LH> after H, lengthened in plural (§3.7.4.1)
                                                  jèmbè Esú-m 'good ...'
    'blacksmith'
                     jémbě-m
                                     jémbě:
                                                  pùlà<sup>L</sup> èsú-m 'good ...'
    'Fulbe'
                     púlš-m
                                     púlš:
e. final underlying long vowel (never shortened)
  < LH >
                                                   àrsè: Esú-m 'good ...'
    'animal'
                     àrsě:-m
                                     àrsě:
```

Inanimates lack the -m and  $-y\hat{e}$  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

```
independent
    gloss
                                    tone-dropped
                                                           gloss
a. underlying Cv:, length retained in all positions
                                    nà: L dùgû-w
    'hand'
                                                           'big ...'
                  nă:
                                    nì: L tâm
                                                           'cold ...
    'water'
                  nî:
                                    bì:<sup>nL</sup> gâw-∅
                   bĭ:n
                                                           'tall ...'
    'tree sp.'
                                   yù: <sup>L</sup> èsû-w
    'millet'
                                                           'good ...'
                  vû:
                                    gò: L dùgû-w
    'fire'
                                                           'big ...'
                  gŏ:
                                    kù: L dâ:-w
                                                           'small...
    'head'
                  kû:
  reduplicated
                                    sù-sò: L párù-m
     'sweat'
                  sù-sŏ:
                                                           'sour ...'
  iterated
                                   gù:-gù:<sup>L</sup> dùgû-w
                                                           'big ...'
    'shrub sp.' gù:-gǔ:
```

b. underlying  $C\check{v}$ ,  $C\hat{v}$ , lengthened when contour tone audible [none]

For  $k\hat{u}$ : 'head' (especially as abstraction), tone-dropped  $k\hat{u}$ : Let is productive, as in  $k\hat{u}$ : Let L-bôr L is productive, as in L

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

```
gloss independent with \{L\} overlay gloss a. consistent final short vowel with level tone (among many)
```

'eyes' jìré jìrè<sup>L</sup> pílé 'white eyes' 'soap' sămnà sàmnà<sup>L</sup> jéw<sup>n</sup>è-w<sup>n</sup> 'black soap'

b. final underlying long vowel preserved before adjective

```
<HL>-toned final syllable
```

```
jèlè: L dâ:-w
'leaf'
                                                          'small ...'
               jèlê:
                                àyà: L Èsû-w
                                                          'good ...'
'medicine'
               àyâ:
                                 ìsè: L Èsû-w
'village'
               ìsê:
                                                          'good ...'
                                 àtè: L érù-m
'tea'
               átê:
                                                         'sweet ...
                                sàwà: <sup>L</sup> òrú
kùrò: <sup>L</sup> gâw-Ø
                                                         'fresh ...'
'grass'
               sàwâ:
                                                         'tall ...'
'wild grape' kùrô:
                                 bìyà:-[lìy-î:]
                                                         'cooked ...'
'leaves'
               bìyâ:
                                yì-tè: L bì-bànî:
'children'
               yì-tề:
                                                         'newborn babies'
                                 sàmbà: L sîm-Ø
'spear'
                                                         'sharp ...'
               sàmbâ:
                                 sèŋgù: L kó:ró-Ø
'waterjar'
                                                         'worn-out ...'
               sèngû:
                                 lèmdè: L dâ:-w
'tongue'
                                                         'small ...'
               lèmdê:
                                 màrpà: L dùgû-w
'rifle'
                                                         'big ...'
               màrpâ:
                                 òmdò: L ésé-Ø
               òmdô:
                                                         'clean ...'
'waterskin'
                                 (gì-)gàsà: <sup>L</sup> pĕ:-Ø
dà:mbà: <sup>L</sup> èsû-w
                                                         'old ...'
'pick-hoe'
               (gì-)gàsâ:
'daba'
               dà:mbâ:
                                                         'good ...'
                                sàrì: L pě:-Ø
tòŋgò: L èsû-w
'plow'
                                                         'old ...'
               sàrî:
                                                          ʻgood ...
'grindstone'
               tàngô:
                                 àsàgùsò: <sup>L</sup> gâw-Ø
                                                         'tall ...'
'tree sp.'
               àsàgùsô:
                                 gàrà: L è èsû-w
                                                         'good ...'
'indigo'
               gàrâ:
```

```
<H>-toned final syllable
                                     bàlpà: L èsû-w
                                                              'good ...'
     'tomtom'
                    bàlpó:
c. underlying final short <HL> syllable (/kɔ̀sû/ etc.)
                                     kòsù <sup>L</sup> pě:-Ø
lòsò <sup>L</sup> èsû-w
     'calabash'
                                                              'old ...'
                    kàsû:
     'foot'
                    làsâ:
                                                              'good ...
                                     sèngù L èsû-w
                                                              'good ...
     'pottery'
                    sèngû:
```

For *ènjî*: 'roselle', tone-dropped *ènjî*: is productive, as in *ènjî:-tèwêy* 'stray roselle'. Another compound, *ènjí-kŏ: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  $g \grave{a} m b \acute{u}$  to  $g \check{a} m$ . It is treated syntactically like a cardinal numeral, so both  $g \grave{a} m b \acute{u}$  and the preceding NP keep their usual tones.

```
(110) 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. y\hat{u}: b\acute{e}l\acute{e} g\grave{a}mb\acute{u} n\acute{e}=\acute{n}, millet part certain eat=and, b\acute{e}l\acute{e} g\grave{a}mb\acute{u} d\grave{u}w\grave{o}-y.: part certain leave.Pfv-1PlSbj 'We ate some of the millet and left some (=the rest).'
```

```
c. [[5r<sup>n</sup>3 gàmbú] wó] ló-ẁ dè

[[place certain] in] go.Pfv-2SgSbj if

'if you-Sg go to certain spots' [2005.1a.10]
```

Further examples of paired  $g \grave{a} mb \acute{u} \sim g \check{a} m$  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  $C\acute{v}C\acute{v}-C\acute{v}C\acute{v}$  is found when  $C_2=C_4$  is an obstruent, versus  $C\acute{v}C-C\acute{v}C$  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.

```
associated stem
(111)
             form
                                    gloss
         a. CvCvC-CvCvC, H-toned
                                                                 kálà 'new'
             pár<sup>n</sup>áy-pár<sup>n</sup>áy
                                     'shiny new'
                                     'very dry'
                                                                 mă: 'dry/hard'
              káláŋ-káláŋ
         b. CvCv-CvCv, final C = obstruent, H-toned
              bédú-bédú
                                     'very fine (powder)'
                                                                 bútò 'fine'
              bédú-bédú
                                     'very supple (hide)'
                                                                 yòrú 'supple'
              bódú-bódú
                                     'very soft'
              cétú-cétú
                                     'very short'
                                                                 gồ:w- 'short', cété 'runty'
                                                                 (2nd /i/ influenced by the preceding
              cítí-cítú
                                     'nauseating'
                                                                 /c/)
             kátú-kátú
                                     'very bitter'
                                                                 gárìm 'bitter'
              kúsú-kúsú
                                     'glare at'
             kúsú-kúsú
                                     'very black'
                                                                 jéw<sup>n</sup>è- 'black'
             légé-légé
                                     'sharply pointed'
                                                                 sîm 'pointed'
             púlá-púlá
                                     'very hot'
                                                                  ôw 'hot'
                                     'very dusty, lots of dust' kù-kòrŏy 'dust'
             túká-túká
                                     'very dusty, lots of dust' kù-kòrŏy 'dust'
              tégú-tégú
             párú-párú
                                     'very white'
                                                                 pílε 'white'
         c. CvC-CvC, final C = sonorant, H-tone
                                     'very thick (linear object)
              bóm-bóm
              búy<sup>n</sup>-búy<sup>n</sup>
                                     'very red'
                                                                  bárnà- 'red'
              céw-céw
                                     'very lightweight'
                                                                 nèr<sup>n</sup>ú 'lightweight'
              dím-dím
                                     'very straight'
                                                                 dém⇒ 'straight' (adverb)
              dém-dém
                                     'very straight'
                                                                 dém⇒ 'straight' (adverb)
              dóŋ-dóŋ
                                     'furious, seething'
                                                                  célè bàr<sup>n</sup>á 'be angry'
              dúy-dúy
                                     'very rotten'
                                                                  òmbú 'rotten'
              gáy<sup>n</sup>-gáy<sup>n</sup>
                                     'very full (sated)'
                                                                 bá '(meal) sate (sb)'
              gáy<sup>n</sup>-gáy<sup>n</sup>
                                     'very tight (rope)'
                                                                 Ew 'tight (rope)'
                                     'very tight (tomtom)'
                                                                 Ew 'tight (rope)'
              géŋ-géŋ
              káy<sup>n</sup>-káy<sup>n</sup>
                                     'very crowded'
                                                                 έηgί '(market) be crowded'
              káy<sup>n</sup>-káy<sup>n</sup>
                                                                 m(^b)\tilde{a}w 'hard'
                                     'very hard'
              kéy-kéy
                                     'very tight (tomtom)'
                                                                 Ew 'tight (rope)'
                                                                 mă: 'dry'
              kéy-kéy
                                     'very hard'
              kúy-kúy
                                     'very stocky'
             péy-péy
                                     'very unripe (fruit)'
                                                                 cèsú 'unripe'
             pém-pém
                                     'very tight (garment)'
                                                                 ɛ̃w 'tight (rope)'
```

```
ôw 'hot'
     pál-pál
                               'very hot'
                                                                dùw<sup>n</sup>5 'be finished'
                                'completely used up'
     péw-péw
                                                                kálà 'new'
                               'brand new'
     púl-púl
                               'very tall'
     sél-sél
                                                                gùrô- 'long, tall'
     sél-sél
                                'very long and thin'
     sél-sél
                               'very long and thin'
     sól-sól
                               'very long'
                                                                gùrô- 'long, tall'
     táw-táw
                               'very hot (sun)'
                                                                ôw- 'hot'
                                                                ôw- 'fast'
     táw-táw
                               'very fast'
                                                                píté 'be inflated'
     tém-tém
                               'fully inflated'
                                'very unfertilized (field)' ésé 'be unfertilized'
     èsè-[téw-téw]
     èsè-[téw-téw]
                               'very bland (meal)'
                                                                ésé 'be unfertilized'
d. CvC-CvC, final C = sonorant, rising tones
     tăy<sup>n</sup>-tăy<sup>n</sup>
                                'very sweet'
                                                                érim 'sweet'
e. CvCv-CvCv, final C = sonorant, L.H-L.H toned
     lòró-lòró
                               'clean-shaven (head)'
     lèré-lèré
                               'cleaned up completely'
     n \hat{\epsilon} w^n \hat{\epsilon} - n \hat{\epsilon} w^n \hat{\epsilon}
                               'very smooth/sleek'
                                                                órù-m 'smooth, sleek'
     cir^n \acute{\varepsilon} - cir^n \acute{\varepsilon}
                               'very thin'
                                                                mènjé- 'thin'
f. CvCvCv-CvCv, L.L.H-L.L.H toned
     c \grave{\epsilon} r^n \grave{i} y^n \acute{\epsilon} - c \grave{\epsilon} r^n \grave{i} y^n \acute{\epsilon}
                               '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 ésè 'light'). Others are unrelated to any ordinary lexical item.

```
(112)
                                                            associated stem
               form
                                 gloss
          a. type \dot{v}_1 C_x \dot{v}_2 C_x \dot{v}_2
                                  'well-branched'
                                                            jàw<sup>n</sup>y<sup>n</sup>i- 'ramify'
               ísásá
                                 'very bright (light)' ésè 'light' (noun)
               óyóyó
               ásásá
                                 'very bright (light)' ésè 'light' (noun)
          b. type C \dot{v} C_x \dot{v} C_x \dot{v} C_x \dot{v} (with r^n/n and r/l alternations)
                                                            dùsú 'heavy'
               dùsúsúsú
                                 'very heavy'
               cèr<sup>n</sup>énéné
                                 'very cold'
                                                            tâm 'cold'
                                 'foul, stinking'
               pòrólóló
                                                            pórùm 'strong (odor)'
                                 'very sour'
                                                            párìm 'sour', pálé-ré- 'be sour'
               pàrálálá
          c. type \dot{v}C_x\dot{v}C_x\dot{v}C_x\dot{v}C_x\dot{v} (with r/l alternation)
               èlèrélélé
                                 'very sweet'
                                                            érim '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 *lèrè-gèdéw* may be related to *lèré-lèré* in (111e), above.

```
form gloss associated stem
a. lèrè-gèdéw 'absolutely everything' náŋánà: or dà n-wôy 'all'
b. kápár náná '(running) very fast' ôw 'fast'
```

The remaining examples have no reduplicative features. Those in (114a) are of shape  $C\delta C(\hat{u})$ , 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  $p\acute{u}t\acute{u}m\rightarrow$ , which is attested with two distinct senses (114b), these are of the shape  $C\acute{v}C\rightarrow$  with a final sonorant. None of the intensifiers in (114a-c) is phonologically related to the corresponding semantically related stem.

```
(114)
               form
                                                                     associated stem
                                     gloss
          a. interjection-like
              jśfù
                                     'very wet'
                                                                     ờrú 'wet'
               cék
                                     'completely, every bit'
                                      'sole, lone'
                                                                     tùw<sup>n</sup>5 'one'
               lók, lóŋ
                                     'very full (container)'
                                                                     bá 'be full'
               pέp
          b. prolongation, final sonorant, bisyllabic (CvCvC →)
                                     'with many flowers'
               pútúm→
                                                                     pùr<sup>n</sup>ŭy 'flower'
              pútúm→
                                     'very foggy'
                                                                    μάηά 'mist, fog'
          c. prolongation, final sonorant, monosyllabic H-toned (C\acute{v}C\rightarrow)
              póm→
                                     'enormous'
                                                                     díy<sup>n</sup>à 'big'
              jáy<sup>n</sup>→
                                     'very uncooked (meat)' cèsú 'raw, uncooked'
               táv<sup>n</sup>→
                                     'very full (sated)'
                                                                     bá '(meal) sate (sb)'
          d. prolongation, final sonorant, monosyllabic \langle LH \rangle-toned (C\check{v}C \rightarrow)
               c\check{\varepsilon}v^n \rightarrow
                                     'tiny'
               k\check{\delta}y^n \rightarrow
                                     'emaciated'
                                                                     kómbó 'lean'
               kăv<sup>n</sup>→
                                     'oversized (eyes, teeth)' sàlâ:, dâ:, tɛ̃:, ìlâ: 'small'
              jìré dăm→
                                     '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.).

```
(115) a. úrò wă:w/sòsú bû:-Ø house distant/near be-3SgSbj 'The house is far away/nearby.'
```

```
b. úrò [îsê: __này^n] wă:w/sòsú bû:-Ø house [village with] distant/near be-3SgSbj '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-VblN] 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).

```
(116) [kì-kã: Lkùw-ì:] érúm
[Rdp-grasshopper Leat.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 tone-dropping on 'cow' is due to the adjective, not the numeral.

```
(117) a. nă: tà:nú cow three 'three cows'
```

```
b. [nà: L díy nà] tà:nú [cow 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  $k\dot{u}$ , 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.

(118) 
$$\dot{u}r\dot{o}^L$$
  $díy^n\dot{a}-w^n$   $k\acute{u}r\dot{o}y$   $(k\dot{u})$  house big-Inan **six** (Def) 'six big houses' (inverted  $\#\dot{n}d\dot{o}$   $k\dot{u}r\dot{o}y$   $díy^n\dot{a}-w^n$   $(k\dot{u})$  was rejected)

(119) a. 
$$[\hat{u}r\hat{o}^L \quad d\hat{i}y^n\hat{a}-w^n \quad k\hat{u}r\hat{o}y]^L \quad \hat{n}g\hat{u} \quad b\hat{e}$$
  
 $[\text{house}^L \quad \text{big-Inan} \quad six]^L \quad \text{Prox.Inan} \quad Pl$   
'these six big houses'

b. 
$$\begin{bmatrix} \hat{u}r\hat{o}^L & k\hat{u}r\hat{o}y & d\hat{i}y^n\hat{a}-w^n\end{bmatrix}^L$$
  $\hat{n}g\hat{u}$   $b\hat{e}$  [house  $\hat{u}$  six big-Inan] Prox.Inan Pl [=(a)]

(120) a. 
$$\acute{u}$$
  $\stackrel{\text{HL}}{}$   $[\acute{u}r\grave{o} \qquad d\grave{i}y^n\grave{a}-w^n \qquad k\grave{u}r\grave{o}y] \qquad k\grave{u}$   $2\text{SgPoss}$   $\stackrel{\text{HL}}{}$  [house big-Inan six] Def 'your-Sg six big houses'

(121) a. 
$$[\hat{u}r\hat{o}^L \quad d\hat{i}y^n\hat{a}-w^n \quad k\hat{u}r\hat{o}y]^L \quad y\hat{a}y\hat{a}-\hat{w} \quad k\hat{u} \quad b\hat{e}$$
[house big-Inan  $six$ ] fall-Partpl.Inan Def Pl 'the six big houses that fell'

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  $k\acute{u}r\grave{o}y$  as in (118), is tone-dropped to  $k\grave{u}r\grave{o}y$  in all of the (a) as well as (b) examples in (119-21). However, in §6.2.3 above I showed that inalienably possessed [Poss N<sup>L</sup> Adj Num] (102c) can be inverted to [[Poss N Num]<sup>L</sup> Adj] (102d), which does allow the adjective to control {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 §4.3.2, above, that the inanimate pronoun  $k\dot{u}$  may be used to resume a proposition or other abstraction from preceding discourse. As a (pseudo-)possessor, i.e. in NP-initial position,  $k\dot{u}$  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,  $k\acute{u}$  controls a tone overlay on the "possessed" noun and its immediate modifiers.

The {HL} tone overlaid on the noun  $b\acute{u}n\acute{u}g\acute{o}y$  'group' shows that  $k\acute{u}$  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,  $k\acute{u}$  basically functions here as a discourse-definite demonstrative, stronger than the simple NP-final definite morpheme  $k\grave{u}$ . Pseudo-possessor  $k\acute{u}$  and the postnominal definite  $k\grave{u}$  (or other determiner) often co-occur, as in (123).

### 6.5.2 Postnominal demonstratives

[woman<sup>L</sup>

A postnominal demonstrative pronoun controls tone-dropping on a preceding string within an NP, beginning with the noun. (124a) shows N<sup>L</sup> Dem, (124b-c) show [N Adj]<sup>L</sup> Dem.

```
(124) a. \grave{u}r\grave{o}^L \grave{\eta}g\acute{u}
house Prox.Inan
'this house' (\acute{u}r\grave{o})

b. [\grave{u}r\grave{o}^L b\grave{a}r^n\grave{a}-w^n]^L \grave{\eta}g\acute{u}
[house red-Inan] Prox.Inan
'this red house' (\grave{u}r\grave{o} b\acute{a}r^n\grave{a}-w^n)

c. [v\grave{a}^L b\grave{a}r^n\grave{a}]^L m\check{u}:
```

red]L

'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 ku. See §4.4.1 for discussion.

Prox.An

If a N-Adj combination (core NP) is followed by a numeral and then a demonstrative pronoun, the demonstrative controls {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]<sup>L</sup> ŋgú
[house six]<sup>L</sup> Prox.Inan
'these six houses'
```

### 6.6 Free plural (bè)

Postnominal plural particle  $b\dot{e}$  is morphosyntactically quite unlike the regular plural marking for animate nouns, which is zero suffix versus singular -m, as in  $n\check{a}$ :-m 'cow' versus  $n\check{a}$ : 'cows' and in  $y\check{a}$ -m 'woman' versus  $y\check{a}$ : 'women'. Free plural  $b\dot{e}$  occurs late in the NP, often well-separated from the noun. It follows demonstrative pronouns:  $[C\check{u}^{HL}l\acute{e}s\grave{u}) m\check{u}$ :  $b\dot{e}$ ] 'these uncles of yours'  $[C2SgPoss^{HL}uncle)$  this Pl]. It also occurs after the verb-participle in relative clauses.

Free plural  $b\dot{e}$  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  $k\dot{u}r^n\dot{u}$  'stone' or 'stones', alternatively  $k\dot{u}r^n\dot{u}$  bè to clearly specify plural 'stones'.

```
(126) yâ: òmdò: <sup>L</sup> íyà-w bè
there tamarind stand.Stat-Ppl.Inan Pl
'the tamarind trees that are standing there' [2005.1a.05]
```

 $b\grave{e}$  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  $\acute{u}^{\rm HL}l\acute{e}s\grave{u}$ , and its plural 'your-Sg uncles' is  $\acute{u}^{\rm HL}l\acute{e}s\grave{u}$  bè.

When **accusative** clitic  $=n\hat{i} \sim =\hat{n}$  or **locative** postposition *wo* is added to  $b\hat{e}$ , the results are  $b\hat{e}:=n\hat{i} \sim b\hat{e}:=\hat{n}$  and  $b\hat{e}:w\hat{o}$ , respectively, with a long vowel and an H-tone. The lengthening is difficult to analyse.

```
(127) a. [3m3:
                           ínjírí:-rè-Ø
                                                       dè]
             [morning
                           get.up-Pfv1a-3SgSbi
                                                      if
             [sèytà:n<sup>L</sup>
                          mŭ:
                                      b\acute{e}:=\grave{n}
                                                  tó:rú-m
                                                                           wà
             [seytan<sup>L</sup>
                          Prox.An Pl=Acc] instruct.Ipfv-3SgSbj
                                                                           Ouot
             '(It is said:) if he gets up in the morning, he gives orders to these seytans'
             [2005.1b.11]
```

```
    b. [bû: yĕ [[úlì bé:] wó] b-ê:<sup>n</sup>-bò]
    [3Pl come [forest Pl] 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  $b\dot{e}$ , we get [...  $b\hat{e}$ :]= $\varnothing$  (§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)**  $b\acute{e}$  before the dative postposition  $m\hat{a}$ : (128a) and before  $w\hat{o}y$  'all' (128b) and optionally in other contexts where the relevant NP is closely grouped prosodically with some following material.

```
(128) a. [cèrêy jë:]

[money bring]

[[â: Lbò: bé] mâ:] ní-yè

[[3ReflPlPoss Lfather Pl] Dat] give.Ipfv-3PlSbj

'They bring money and give (it) to their fathers.' [2005.1b.06]
```

```
b. [[bû: Ltà: bé wôy] nî: yí-yè] wà
[[3Pl Lpond Pl all] water see.Ipfv-3PlSbj] Quot

'(It is said:) they (=short people) even see water in their (=dwarves') ponds.'
[2005.1b.11]
```

Therefore plural  $b\dot{e}$ , like definite  $k\dot{u}$ , 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,  $b\dot{e}$  is at best marginal. This statement does not apply to conjunctions of the type  $[[y\check{a}:b\acute{e}\rightarrow][\acute{a}r^n\grave{a}\ b\grave{e}\rightarrow]]$  'men and women' (§7.1.2).

#### 6.7 Definite (*kù*, *bû*:)

The definite morpheme is  $k\dot{u}$  for (animate) singular and for inanimates:  $n\dot{a}:-mk\dot{u}$  'the cow',  $k\dot{u}r^n\dot{u}$   $k\dot{u}$  'the stone'. Inanimates are optionally pluralized by adding plural  $b\dot{e}$  to  $k\dot{u}$ , as in  $k\dot{u}r^n\dot{u}$   $k\dot{u}$   $b\dot{e}$  'the stones'. (Animate) plural has a special definite form,  $b\hat{u}:$ , as in  $n\dot{a}:b\hat{u}:$  'the cows', though  $k\dot{u}$  can also be used in this context.

Unlike the demonstrative pronouns, definite  $k\dot{u}$  and  $b\hat{u}$ : do not interact tonally with the preceding words in the NP.

Definite  $k\dot{u}$  does not usually co-occur with demonstrative pronouns ('this', 'that') at the end of a noun-headed NP. However,  $k\dot{u}$  does occasionally follow demonstratives that function as referential-tracking devices, where  $k\dot{u}$  indicates that the referent is the same as one previously introduced; see  $m\dot{b}\acute{a}$   $k\dot{u}$  'that (same) other one', with far-distant demonstrative in obviative function, in (660) in the sample text.

 $k\dot{u}$  can also follow a personal pronoun, as in  $[\acute{e}r^n\acute{e} k\grave{u}]$  'he' (reactivating a previously introduced discourse referent) in the second line of (666) in the sample text.

 $k\hat{u}$  may occur before other NP-final discourse particles such as  $n\acute{e}y$  (and variants) 'now' and topic  $k\grave{a}y$ . In this non-NP-final position,  $k\grave{u}$  may appear as H-toned  $k\acute{u}$ . However, in specific textual passages it can be difficult to distinguish between e.g. [noun  $k\acute{u}$  X], where X is a discourse particle added to a definite noun, from [noun]  $[k\acute{u}$  X], where  $k\acute{u}$  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' ( $w\hat{o}y$ , $d\hat{a}^n$ - $w\hat{o}y$ , $c\hat{\varepsilon}m \sim c\hat{\varepsilon}w$ )

The stylistically unmarked quantifier for 'all' and 'each' is  $w\hat{o}y$ , which is often extended as  $d\hat{a}^n$ - $w\hat{o}y$  (variants  $d\hat{o}$ - $w\hat{o}y$ ,  $d\hat{e}^n$ - $w\hat{o}y$ ), 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 (120b-c), with the universal-quantifier sense 'all', the nouns are marked as plural (if morphologically possible) and allow definite determiners.

- (129) a. [[ár<sup>n</sup>à-m wôy] <sup>L</sup>mà:] [yû: <sup>L</sup>sà:gù]
  [[man-AnSg each] <sup>L</sup>Dat] [millet <sup>L</sup>sack]

  tùw<sup>n</sup>ó-tùw<sup>n</sup>ó ní-ȳ<sup>n</sup>.:

  one-one give.Ipfv-1PlSbj

  'We will give one sack of millet to each man.'
  - b. [nă: bû: dà<sup>n</sup>-wôy] sá:té:-r-à: [cow.Pl Def.Pl all] animal.die-Pfv1a-3PlSbj 'All of the cows died (without being slaughtered).'
  - c.  $\int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} t \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring{a}^n w \hat{o} y \int_{-L}^{L+HL} y \check{t} \hat{c} : d \mathring$

For *wôy* as right-edge marker in regular conditional antecedents, see §16.1.1 below.

Another 'all' quantifier is  $c\hat{e}m \sim c\hat{e}w$ , 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 ( $ci-c\hat{e}w$ ,  $c\hat{e}w-c\hat{e}w$ ) it means 'equal(ly)' (§12.2.3).

For the more emphatic *sóy* 'entirely' and noun *nàŋàná*: 'entirety' (becoming <sup>HL</sup>*náŋànà*: when "possessed"), see §8.6.7.5.

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

The combination  $[X \ w \in \to X]$ , 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'.

(130) a. àsùw<sup>n</sup>è-yî-m wé→ àsùw<sup>n</sup>è-yî-m, tǎ: 16-m̀ 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→ démdé]
[roofing to roofing]
[bɔ:-úrò mɔ:lì=náy<sup>n</sup>] dèmbí-yè
[father-house assemble=then.SS] cover.Ipfv-3PlSbj

'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  $w \neq \rightarrow$  is a variant of  $w \neq e$ :y 'as well as' (§7.1.3).

```
6.8.3 '(Not) any X' (kâ:<sup>n</sup>)
```

The stem  $k\hat{a}:^n$  '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,  $k\hat{a}:^n$  resembles a nominal compound final, see §5.1.1.

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

The verb (or other predicate) is negated.

```
(131) a. [yì<sup>L</sup> kâ:<sup>n</sup>-m] nàr<sup>n</sup>ú-m̀-dó-ỳ
[child<sup>L</sup> any-AnSg] call-Ipfv-Neg-1SgSbj
'I will not call (= summon) any child(ren).'
```

- b. [ùrò L kâ:n] & wé-m-dó-ỳ
  [house L any.Inan] buy-Ipfv-Neg-1SgSbj
  'I will not buy any house.'
- c.  $[k\hat{\sigma}:^{nL}] = r\hat{a}-\emptyset$   $[thing^{L}] = not.be-3SgSbj$ 'It isn't anything.'

 $k\hat{\sigma}^{L}$ :  $k\hat{a}^{R}$  'nothing, anything',  $n\hat{u}^{L}$ :  $k\hat{a}^{R}$ : 'nobody, anybody', and  $\hat{\sigma}^{R}$ : 'nowhere, anywhere' are common combinations.

 $k\hat{a}$ : may be used in the sense 'any' in a conditional antecedent clause in the absence of negation, like English any (132).

```
(132) [[k\hat{\sigma}]^{n}]^{L} k\hat{a}: n] y\check{t}-j\acute{e}-\hat{w} d\grave{e}], ... [[thing^{L}] any] see-RecPf-2SgSbj if], ... 'if you-Sg see anything, ...'
```

In several other Dogon languages, cognates of  $k\hat{a}$ :  $n < *k\acute{a}$  also occur in positive contexts in distributive sense 'each X'. I have not observed this in BenT. For the possible relationship between  $k\hat{a}$ : n < n (not) any' and relative morpheme n < 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.

(133) 
$$\begin{bmatrix} \acute{a}r^n\grave{a} & y\grave{a} \rightarrow \dagger \end{bmatrix}$$
  $\begin{bmatrix} y\check{a}: & y\acute{a} \rightarrow \dagger \end{bmatrix}$  [woman.Pl and] 'men and women'

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 ') 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 '). In careful speech (in elicitation sessions), the intonational differences between the first and the second  $ya \rightarrow$  tend to level out.

The same construction is used with two pronouns (134a), or with a pronoun and a nonpronominal NP (134b).

# 7.1.1.1 Conjunction with final quantifier

A concluding 'all' quantifier, such as emphatic  $s \acute{o} y$  '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  $ya \rightarrow$  conjunction itself.

```
(135)
        [ár<sup>n</sup>à
                  yà→1
                            [yǎ:
                                          vá→1
                                                   [yì-tề:
                                                                và→1
                                                                          sóv
        [man.Pl
                  and]
                            [woman.Pl
                                         and]
                                                   [children
                                                                and]
                                                                          all
        ló-yè
        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!

```
(136) [[ăm yá→] [tà-dùngú-m yá→]]— 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 $(X b \grave{e} \rightarrow, Y b \grave{e} \rightarrow)$

The conjunctive particle  $ya \rightarrow$  is optionally replaced by  $b\grave{e} \rightarrow$ , 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.

- (137) a.  $[\acute{a}r^n\grave{a} & b\grave{e}\rightarrow]$   $[y\check{a}: b\acute{e}\rightarrow]$  [woman.Pl and] 'men and women'
  - HL tángày] b. [[kɔ́r<sup>n</sup>íyɔ́m ŋgú] HL side] Prox.Inan] [K] $^{\mathrm{HL}}n\hat{u}$ : bè→1 1ó-w dè ſî: bè→] [pèrgé <sup>HL</sup>people [1Pl and] [P and] go.Pfv-Ppl.Inan 'If this Koriyom side (=area) goes (=extends) between us (=Beni) and the people of Pergué (a village)' [2005.1a.06]
  - bè→], [nà:<sup>L</sup>-sùw5  $b\dot{e} \rightarrow [k\dot{o}\eta g\dot{o}l^{L}-y\hat{i}]$ c. [[gâw *bè*→*]*, [[onion and] [doum<sup>L</sup>-child and], [cow L-excrement and]. nây<sup>n</sup>] [hâl cé:lé-m] úgúró-ỳ∴ give.scent.Ipfv-1PlSbj [until be.good.Ipfv-3SgSbj] Inst] '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  $n\hat{a}y^n$  takes scope over the conjoined sequence, but is set off prosodically. This is typical of such conjoined NPs.

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

```
[ár<sup>n</sup>à-m
(138)
                                        bè→
                                                    ár<sup>n</sup>à-m]
                                                                         kày]
         ſî:
         [1P]
                   [man-AnSg
                                        and
                                                    man-AnSg]
                                                                        Top]
                                jàrà<sup>L</sup>-ré:]
         [jórà
                                                    ló:-rà-ŵ
                                seek<sup>L</sup>-Purp]
         [search(n)
                                                    go-Prog-Ppl.Inan
          'The fact that all of us men go in order to search (for work)' [2005.1b.06]
```

## 7.1.3 *wê:y* 'as well as'

A phrase-final morpheme  $w\hat{e}:y$  is recorded in the sense 'as well as, along with' (French ainsi que). The phrasing is  $[[X \ w\hat{e}:y] \ Y]$  'X, as well as Y' (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 (§12.3). It can be intonationally prolonged as  $w\hat{e}:y\rightarrow$ , and could perhaps be transcribed  $w\acute{e}y$ : with dying-quail intonation. It may be related to  $w\acute{e}\rightarrow$  in the  $[X \ w\acute{e}\rightarrow X]$  'from X to X' construction (§6.8.2).

### 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 *ma* 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' ( $ma \rightarrow$ ) 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).

```
HL átì yà-m]
(140)
       a.
             ú
                          má→
                                     ſú
                                                  HLfriend-AnSg]
                                     [2SgPoss
             2Sg
                          and
             'you or your friend'
        b. [nàw<sup>n</sup>â:
                          mà→
                                     nùw<sup>n</sup>î:]
                                                     èsú
                                                                bû:-Ø
             [meat
                                     cow.peas]
                                                                be-3SgSbj
                          or
                                                    good
             '(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' ( $ma \rightarrow$ ) with adverbs

An example is (141), with temporal adverbs.

```
(141) [\acute{t}y\acute{e} m\acute{a} \rightarrow] [\acute{e}y^n m\acute{a} \rightarrow] y\check{e} - m [today or] [tomorrow of] come-Ipfv.3SgSbj 'He/She will come today or tomorrow.'
```

My assistant also gave a version of this with 'it is' clitic on 'today' and 'yesterday', beginning  $[iy\acute{e} = \grave{m} \ m\grave{a} \rightarrow ] \dots$ 

### 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
                           mir^n \hat{\varepsilon} - r^n i - \emptyset
         [rain(n)
                           rain.fall-PfvNeg-3SgSbj
                                                               or]
         \int m i r^n \varepsilon
                          lóyó:-rè-Ø
                                                               mà→†]
         [rain.fall
                         overflow-Pfv1a-3SgSbj
                                                               of]
                         gô-m-dó-∅
         yû:
                          go.out-Ipfv-Neg-3SgSbj
         millet
         '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) [y\check{e}-\dot{y} \quad m\grave{a} \rightarrow {}^{\dagger}] [come-Ipfv.1SgSbj or] [n\check{u}-m \quad t\acute{1}-\dot{y} \quad m\grave{a} \rightarrow ] [person-AnSg send-Ipfv.1SgSbj or] '(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  $\acute{u}r\grave{o}$  'house' has the falling tone pattern of Jamsay tonal locative  $\acute{u}r\grave{o}$  'at home' (based on /H/-toned Jamsay noun  $\acute{u}r\acute{o}$  'house'). However, in BenT  $\acute{u}r\grave{o}$  shows the lexical melody.

#### 8.2 Accusative $= ni \sim = ni$

Accusative =ni (postvocalically also =i) 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  $2\text{Sg } \hat{u} = n\hat{u}$  and inanimate  $k\hat{u} = n\hat{u}$  where the clitic vowel has assimilated to the pronoun's back rounded vowel, see §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).

```
(144) [b\ddot{o}:(=n\dot{i})] y\dot{i}-\dot{y}

[1\text{SgPoss-}^{\text{HL}}\text{father}(=\text{Acc})] see.Pfv-1SgSbj

'I saw my father.'
```

The accusative morpheme is occasionally added to other nonsubject NPs that have some focal properties. See, for example,  $[\acute{u}s\acute{u}r\acute{u} \ w\acute{o}] = \grave{n}$  '(we come) on (=because of) a request' in (654) in the sample text, and  $y\^{a}:=\grave{n}$  '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  $=n\hat{\imath} \sim =\hat{n}$  added to nouns and pronouns, and **different-subject** chaining morpheme  $=n\hat{\imath} \sim =\hat{n}$  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).

(145) 
$$\int_{0}^{L+HL} b\tilde{\partial} \cdot (=n\tilde{\imath}) \int_{0}^{L+HL} b\tilde{\partial} \cdot (=n\tilde{\imath}) \int_{0}^{L+HL} suy \delta$$
  
[1SgPoss-HL father(=Acc)] hit.Imprt  
'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 $m\hat{a}$ : $\sim L$ $m\hat{a}$ :

This postposition has a basic form  $m\hat{a}$ :, becoming L-toned  $^Lm\hat{a}$ : after a segmentally nonzero NP (possessed or unpossessed) or pronoun that ends in L- or <HL>-tone. The L-toned variant  $^Lm\hat{a}$ : is homophonous with the L-toned form of quotative subject (QuotSbj) morpheme  $m\hat{a}$ :, which occurs in clause-initial NPs (chiefly subjects, §17.1.1.1). Its relationship to  $m\hat{a}$ : 'before' (§15.2.1.6) is unclear. The 1Sg dative form is <LHL> toned  $^{L+}m\hat{a}$ : with no segmentally overt pronominal (146c).

- (146) a. [sùmáylà Lmà:] bú:dù ní-tî:-∅ [Soumaila LDat] money give-Pfv1b-1SgSbj 'I gave the money to Soumaila.'
  - b.  $\hat{\epsilon} w^n r^n \hat{\epsilon}$  [ $\hat{u}$   $m\hat{a}$ :]  $\hat{i}$ - $\hat{i}$ - $\hat{\epsilon} w^n r^n \hat{u}$ - $\hat{m}$  story [2Sg Dat] Rdp-narrate.Ipfv-3SgSbj 'He/She will tell you-Sg a story.'
  - c.  $b\acute{u}:d\grave{u}$  L+ $m \grave{a}:$   $n\grave{i}-\mathcal{O}$  money Dat.1Sg give.Pfv-3SgSbj 'He/She gave me the money.'
  - d. [[ú HL úrò-jèŋgì:] Lmà:] ní-ŵ<sup>n</sup>
    [[2SgPoss HL house-neighboring] LDat] 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) [[yëy kù] mâ:] àŋây ká: "-rà-ẁ.:

[[honey Def] Dat] how? do-Prog-2PlSbj

'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]'.

```
(148) [kú mâ:] tòy-bìsí gú^n-ỳ^n.: [DiscDef Dat] sowing-moist say.Ipfv-1PlSbj 'We call that (activity) "toy-bisi." '[2005.1a.10]
```

# 8.3.2 Instrumental *nây*<sup>n</sup>

Standard instrumental senses ('with/by means of a stick') and more abstract extensions ('by force') are expressed by the postposition  $p\hat{a}y^n$ . It appears as  $^Lp\hat{a}y^n$  after an undetermined noun or core NP ending in L- or <HL>-tone.

```
(149) a. [wárà Lnày<sup>n</sup>] wárá-ỳ
[daba Inst] farm.Ipfv-1SgSbj
'I do farming work with a daba (hoe).'
```

```
b. [isê: kù] [pàŋgá nây<sup>n</sup>] 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.

```
(150) a. [û: yà] [[ìsê: kù] nây<sup>n</sup>] wă:w bú-ẁ.: [2Pl too] [[village Def] Inst] distant be-2PlSbj 'you-Pl are far from the village.' [2005.1a.07]
```

```
b. [ésé nây<sup>n</sup>] tí-yè
[shoulderbag Inst] pour.out.Ipfv-3PlSbj

'They dump (the millet spikes) with (=from) the shoulderbags?' [2005.1a.10]
```

```
b. [[midi trente dògùrù L ngú] nây n]
[[noon thirty time L Prox.Inan] Inst]
'at 12:30 (PM)'
```

The high-frequency phrase  $[k\acute{u} \ p\^{a}y^n]$  '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.  $g\check{o}$ - 'go out, exit, leave' expresses the ablative ('from') when combined with a preceding locational expression. In its absence,  $l\acute{o}$ - 'go' or other motion verb normally implies allative ('to') when combined with a locational.

The most general locative postposition is wo, appearing as wo or wo. 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  $p\acute{i}r\grave{e}$  'inside' (§8.4.3, below).

- (151) a. [jìr<sup>n</sup>ěy<sup>n</sup> HLwó] bíré èsí<sup>n</sup> bíré-ỳ.: [rainy.season HLin] work(n) very work-Ipfv.1PlSbj 'During the rainy season we work a lot (=work hard).'

  - c. séwè [tŏ: HL wó] tárá-tí-ỳ
    paper [wall HLin] affix-Pfv1b-1SgSbj
    'I stuck (pasted, pinned) the paper on the wall.'
  - d. [[isê: bè] wò] ná-ỳ∴ [[village Pl] in] spend.night-1PlSbj '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 {HL} overlay, wo appears in L-toned form as  $^{L}w\dot{o}$  in these combinations.

# 8.4.3 'Inside, within' ( $X^{HL}pire$ )

This postposition, based on noun  $pir\acute{e}$ : 'interior' but with final short vowel, is sometimes interchangeable with locative wo (see above). However,  $^{HL}p\acute{n}r\grave{e}$  is more concrete, meaning 'inside, within', with reference to a container-like entity (house, sack, etc.) capable of enclosing something. The form is  $^{L}pir\grave{e}$  after L- or <HL>-tone.

- (152) a. [úrò Lpìrè] b-è:<sup>n</sup>
  [house Linside] be-3PlSbj
  'They are in(side) the house.'
  - b. súkórð [jémé HL pírè] gǎy n-tí-ŷ sugar [bag HL inside] put-Pfv1b-1SgSbj 'I put-Past the sugar in(side) the sack.'

## 8.4.4 'On; on the head of' $([X]^{HL}kú]^{L}w\grave{o})$

This composite postposition is historically related to  $k\hat{u}$ : 'head', though it is now phonologically distinct from  $k\hat{u}$ :  $^Lw\hat{o}$  'on the head'. For vestiges of short-voweled forms of 'head' see discussion of (108) in §6.3.1. In ( $[X]^{HL}k\hat{u}]^{L}w\hat{o}$ , I assume that monomoraic intermediate  $/k\hat{u}/$  is realized as  $[k\hat{u}]$  before a tightly phrased L-toned syllable. ( $[X]^{HL}k\hat{u}]^{L}w\hat{o}$  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.

```
HL dû:
                       kù]
                                                 nànàná:]
(153)
        [[kóró:jù
                                 <sup>HL</sup>burden
                                                 all]
        [[family
                       Def
                                      Lwò]
                                                 bù-Ø
        [[ú
                          HL head]
                                      Lin]
                                                 be-3SgSbj
        [[2SgPoss
        'The whole burden of (supporting) the family is on you-Sg.'
```

# 8.4.5 'On' ( $[X]^{HL}$ mánì: $]^{L}$ wò)

The complex postposition  $m\acute{a}n\grave{i}$ :  $^L w\grave{o}$  consists of locative wo and a form  $^{HL}m\acute{a}n\grave{i}$ : that has the  $\{HL\}$  tone pattern of a possessed noun. It is related to the adverb  $m\grave{a}n\^{i}$ : 'above'. The tonal form  $m\grave{a}n\grave{i}$ :  $^L w\grave{o}$  occurs after an L-tone.

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).

8.4.6 'Close to, near' (
$$[X]^{HL} d\acute{o} s\grave{u}]^{L} w\grave{o}$$
)

This complex postposition is frozen, there being no noun  $\#d\delta s\hat{u}$  or the like. Nevertheless,  $\#d\delta s\hat{u}$  has the HL pattern typical of bisyllabic possessed nouns.

(156) a. 
$$[[\acute{u} \qquad \stackrel{HL}{dos\grave{u}}] \qquad \stackrel{L}{w\grave{o}}] \qquad b\grave{u}-\varnothing$$
  $[[2SgPoss \qquad \stackrel{HL}{beside}] \qquad \stackrel{L}{in}] \qquad be-3SgSbj$  'He/She/It is near you-Sg'.

b. 
$$[[\acute{a}r^n\grave{a} \qquad \stackrel{L}{d\grave{o}s\grave{u}}] \qquad \stackrel{L}{w\grave{o}}]$$
  $[[man.Pl \qquad \stackrel{L}{beside}] \qquad \stackrel{L}{in}]$  'near the men'

## 8.4.7 'In front of' ( $X^{\text{HL}}$ jírè)

This postposition has the form HL jírè, becoming L jìrè after L- or <HL>-tone.

b. 
$$tiw^n \xi y^n$$
 HL jírè tree HL in.front.of 'in front of (the) tree'

'In front of the house' is generally expressed as 'at the doorway' (158).

# 8.4.8 'Behind, after' ([X HL túlù] Lwò)

The possessed form of the noun  $t \hat{u} l \hat{u}$  'rear (area)', cf.  $t \hat{u} l \hat{u}^L - k \hat{e} l \hat{e}$  'back (body part)', is the basis for a compound postposition, with locative wo. The regular possessed forms of  $t \hat{u} l \hat{u}$  are used.

b. 
$$[\acute{u}]{}^{HL}t\acute{u}l\grave{u}]$$
  $[2SgPoss]{}^{HL}rear]$   $^{L}w\grave{o}$   $^{L}in$  'behind you-Sg'

# 8.4.9 'Beside' ( $[X]^{HL}b\acute{e}l\grave{e}]^{L}w\grave{o}$ )

The noun  $b\acute{e}l\acute{e}$  'side (of object or body)' is the basis for  $[X]^{HL}b\acute{e}l\grave{e}]^{L}w\grave{o}$  'beside, at the side of'.

(160) a. 
$$[tiw^n \xi y^n]$$
 HL  $b \epsilon l \epsilon l$   $w \delta$  [tree HL side] Lin 'beside (the) tree'

8.4.10 'Under' (
$$[X \ ^{HL}b\acute{o}l\grave{o}]^{L}w\grave{o}$$
)

The noun  $b \partial l \delta$  'bottom, lower part' is used in the compound postposition  $[X \quad ^{HL}b \delta l \delta] \quad ^Lw \delta$  'under'. We get  $^Lb \partial l \delta \quad ^Lw \delta$  after a L- or <HL>-tone.

The noun *bìr*<sup>n</sup> 'rear end' is used in the sense 'at the base of', when the reference object is e.g. a tree or a mountain.

 $[[X \ Y^{HL} gálu] \ wo]$  is a compound postposition meaning 'between X and Y'. It can also mean 'within (a duration)'.

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).

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).

### 8.5 Purposive and causal postpositions

## 8.5.1 Purposive gin (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 gin, gin, gin, gin, and gin. The postposition is slightly mutated from  $giv^n = ni$  (variant  $giv^n = ni$ ), a same-subject clause-linking form of  $giv^n \sim gi$ : '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.

```
(166) a. [nàw<sup>n</sup>â: gǐn] yè-y
[meat Purp] come.Pfv-1SgSbj
'I came for the meat [focus].'
```

```
b. [ú gǐn] yè-y
[2Sg Purp] come.Pfv-1SgSbj
'I came on account of you-Sg.'
```

For  $g\check{i}n$  with a clausal complement (purposive or causal clause), see §17.5.3 and §17.5.2.2. In the latter section, I point out that native speakers are aware of the relationship between  $g\check{i}n$  (with its variants) and the 'say' verb  $g\check{u}y^n \sim g\check{i}y^n$  (§11.3.1), which combines with the same-subject clause chaining clitic =ni as  $g\grave{u}=ni$  or  $g\grave{i}=ni$ . So there is a connection between 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 HL déngèy has a {HL} overlay, cf. noun déngèy '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 (future-oriented).

```
(167) [bòlú HL déŋgèy] nù-bó
[ " gǐn] "
[rain because.of] go.in.Pfv-3PlSbj
'They went inside because of the rain.'
```

# 8.5.3 Causal $[[X]^{HL}n\hat{\imath}:]$ 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 ni:, either {HL} or {L}. The final tone segment of ni: is therefore always L, and this spreads into the locative postposition, which is therefore always L-toned wo.

 $[[X \ ^{HL}n\hat{\imath}:] \ w\hat{o}]$  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

 $[[X ^{HL}n\hat{\imath}:] w\grave{o}]$  usually expresses a human motivation rather than physical causality. That is,  $[[X ^{HL}n\hat{\imath}:] w\grave{o}]$  describes the background situation within which the following eventuality makes sense.

The most common combinations are  $[k\acute{u}^{HL}n\hat{i}:]$   $w\grave{o}]$  'because of that, for that (aforementioned) reason' and  $[[\hat{n}g\acute{u}^{HL}n\hat{i}:]$   $w\grave{o}]$  'because of this/that, for this/that reason'.  $[k\acute{u}^{HL}n\hat{i}:]$   $w\grave{o}]$  is always anaphoric, resuming prior discourse and establishing it as the motivational background for the following eventuality (168a).  $[[\hat{n}g\acute{u}^{HL}n\hat{i}:]$   $w\grave{o}]$  is based on the inanimate proximal deictic demonstrative  $(\hat{n}g\acute{u}^{i}$  '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).

```
^{\rm HL}nî:]
                                   [[kú
(168) a. tàrá:
                                                     HL causel in
              collective.hunt [[DiscDef
              t\acute{a}r-y\grave{\varepsilon}=b-\grave{a}:
              hunt.Ipfv-3PlSbj=Past-3PlSbj
              'They used to do the collective hunt for that purpose.' [2005.1b.01]
                                                                     HLnî:]
HLcause]
                                      Lnèw<sup>n</sup>è:1
         b. î:
                                                     [[ŋgú
                                                                                     wò1
                        [vì-tɛ̃:
              1P1
                        [children
                                      Lbenefit]
                                                     [[Prox.Inan
                                                                                     in]
```

ká:<sup>n</sup>-rà-ỳ: do-Ipfv-1PlSbj '(As for) us, the benefit of (having) children, <u>because of this</u> [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,  $d\hat{u}s\hat{u}$  'respectfulness' (i.e. to honor someone), and  $k\hat{a}l\hat{a}$  'sanction' (i.e. as a penalty), and both nouns occur in the frame  $f[X]^{HL}n\hat{i}$ :  $f[X]^{H$ 

```
HL nî:]
cause]
(169)
         n\acute{u}w^n\grave{\partial}v^n
                       [[dùsú
                                                                ſnŭ:
                                                                               mâ:1
                       [[respect(n)
                                                       in]
                                                                [people
                                                                               Dat]
         now
         bèr<sup>L</sup>
                        bû:
                                       s \in W^n \in -\dot{m}
         goat L
                        3PlSbj
                                       slaughter.Ipfv-Ppl
          'Now it's due to respectfulness that (there is) a goat that they slaughter for (other)
         people, '[2005.1b.04]
```

In (170),  $[[X]^{HL}n\hat{i}:]^{L}w\hat{o}]$  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'.

```
(170) ènjî: [[kòsŏy HL nî:] Lwò]
roselle [[harvest HL cause] Lin]
[ènjî: kùyó: íré-m]
[roselle first ripen.Ipfv-3SgSbj]
'Roselle, with respect to the (millet) harvest, roselle ripens first.' [2005.1a.10]
```

### 8.6 Other adverbials (or equivalents)

### 8.6.1 Similarity ( $g\hat{a}y^n \rightarrow \text{'like'}$ )

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

```
(171) y\check{a}-m g\hat{a}y^n \rightarrow woman-AnSg like 'like a woman'
```

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

```
8.6.2 Extent: \hat{\epsilon}s\hat{i}^n \rightarrow, d\hat{i}y^n\hat{a}-w^n wó 'a lot' illá, d\hat{\epsilon}m \rightarrow, d\hat{a}:-wó 'a little'
```

Adverbial 'a lot, greatly, thoroughly' is usually  $\grave{e}si^n \rightarrow$ . An occasional alternative is  $diy^n \acute{a} - w^n$  wó, cf. adjective  $diy^n \grave{a}$ - 'big', noun  $diy^n \check{a} - w^n$  'size', and locative wo. For 'a lot' in the quantitative sense ('many, much') see  $b \check{a}y^n \rightarrow$  and  $j \acute{o} \rightarrow$  (§4.5.1) See also the intensifiers used with specific adjectival concepts (§6.3.3.1). Adverbial (or nominal) 'a little' is either *illá* ~ u illá, u illá,

- (172) a.  $\grave{\varepsilon}si^n \rightarrow n\grave{i}:y^n\grave{i}-\varnothing$ a.lot sleep.Pfv-3SgSbj 'He/She slept a lot.'
  - b. *illá* nì:y<sup>n</sup>ì-Ø
    a.little sleep.Pfv-3SgSbj
    'He/She slept a little (=briefly).'
  - c. dêm→ nì:y<sup>n</sup>ì-Ø a.little sleep.Pfv-3SgSbj (= b)

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 15y5- 'overflow', see line 5 of (671) in the sample text.

#### 8.6.3 Specificity

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

Particle  $g\hat{a}y^n \rightarrow$  'like' (§8.6.1) may be used to indicate approximate quantity (173b).

```
b. [[\acute{u}r\grave{o} p\acute{e}r\acute{u}] g\^{a}y^n \rightarrow] s-\grave{\epsilon}:^n-b\acute{o}

[[house ten] like] have-3PlSbj-3PlSbj

'They have like (= approximately) ten houses.'
```

### 8.6.3.2 'Exactly' (cók)

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

```
(174) [[\acute{u}r\grave{o} \qquad p\acute{e}r\acute{u}] \qquad c\acute{s}k] \qquad s-\grave{\epsilon}:^n-b\acute{o} [[house \qquad ten] \qquad exactly] \qquad have-3PlSbj-3PlSbj 'They have exactly ten houses.'
```

For exactness of locations, see §4.4.2.2.

```
8.6.3.3 'Specifically' (t\acute{e}\rightarrow)
```

 $t\acute{e} \rightarrow$  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.

```
(175) [ú té→] lùgùró:-rà-ỳ
[2Sg specifically] look.for-Ipfv-1SgSbj
'I'm looking specifically for you-Sg.'
```

8.6.4 Evaluation

8.6.4.1 'Well' and 'badly'

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

```
(176) èsí<sup>n</sup>→ bèn<sup>L</sup>-têy júwó-m̀
well Beni<sup>L</sup>-language know-Ipfv.3SgSbj
'He/She knows Beni language well.'
```

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.

```
(177) [bìrè L mòsú] bíré-mì [work(n) L bad] work-Ipfv.3SgSbj 'He/She works does poor work (= works badly).'
```

### 8.6.4.2 'Appropriate, right' (jâ:w<sup>n</sup>)

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  $j\hat{a}:w^n$   $b\hat{u}:-\emptyset$  'it is normal, right' or just  $j\hat{a}:w^n$ . The negative is  $j\hat{a}:w^n=r\hat{a}$  'it isn't right'. For the morphosyntactic frames see §11.4.1 (positive) and §11.4.4 (negative).

### 8.6.5 Manner

### 8.6.6 Spatiotemporal adverbials

#### 8.6.6.1 Temporal adverbs

Some of the major temporal adverbs are in (178).

```
'today; nowadays'
(178) a.
              íyé
               íyà
                                                 'again'
               píníw<sup>n</sup>ú
                                                  'again' (verb 'do again')
                                                  'yesterday; formerly, in the old days'
               yéŋgù
                                                 'day before yesterday'
               íyé ùsú tà:nú
               n\acute{u}w^n\grave{\partial}v^n
                                                 'now
                                                 'now' (especially topicalizing)
               nέ: (and variants)
          b. \xi y^n, \xi y^n d\xi
                                                 'tomorrow; in the future'
                                                 'day after tomorrow'
               érénâ:
               èrènà: túŋgò
                                                 'second day after tomorrow'
                                                 'third day after tomorrow'
               túngò tî:
                                                 'fourth day after tomorrow'
               lég-tèré
               bà:nǎy
                                                 'fifth day after tomorrow'
          c. j\tilde{\varepsilon}y^n
                                                 'last year'
                                                 'next year'
               niy^n \dot{\varepsilon} w \sim n\dot{u}y^n \dot{\sigma}:^n \sim niy^n \dot{\sigma}:^n 'this year'
```

### 8.6.6.2 'First' (*kùyó:*)

'First' as adverb, in the sense of chronological sequencing of events, is  $k \dot{u} y \delta$ :. As in English, this is identical to the ordinal adjective 'first (of a series)'.

```
(179)
           bírέ
                                 kùyó:
                                                bìrέ
                                                            i\hat{\varepsilon} = n\acute{a}y^n
                                                           ExpPf=then.SS,
                                                work
           work(n)
                                 first
                                        n\acute{\varepsilon}-\grave{y}^n.:
            áηày<sup>n</sup>
                             лěy<sup>n</sup>
                                        eat.Ipfv-1PlSbj
           like.that
                             meal
            '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).

```
(180)
                                         'above, top, summit'
        a. mànî:
             bòlô:
                                         'below, bottom, down'
        b. dû: jìrè, dù dâ:
                                         'east'
             tènì dâ:, tèn dâ:
                                         'west'
             bòsòn dâ:, bósón
                                         'north'
             mùnjùrò dâ:, gàw<sup>n</sup> tớrò
                                         'south'
                 [mùnjùrò dâ: is now archaic]
        c. tùlì:-túlì:
                                         'going backward, in reverse'
                                         'in the rear'
             tùlú wó, tùlú dá:
            iìré:
                                         'forward; in front' cf. jìré 'eye'
```

Note the morpheme  $d\hat{a}$ : in several cardinal-direction terms, but  $d\hat{a}$ : in  $t\hat{u}l\hat{u}$   $d\hat{a}$ : in the rear' (cf. Jamsay  $d\hat{a}y\hat{a}$ ).

'Left hand' is  $n\grave{a}-b\grave{a}n\check{a}y^n$ , 'right hand' is  $n\grave{a}-p\check{\epsilon}y^n$  (with  $n\check{a}$ : '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  $b\hat{u}$ - 'be' to denote a state (181b), or the regular verb  $b\check{e}$ - (elsewhere 'remain') in the inchoative sense 'become'.  $\hat{\eta}g\acute{o}$ - '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.

```
(181) a. yí-m bê:n dém→ yògó lò-Ø child-AnSg Beni straight run go.Pfv-3SgSbj 'The child ran straight to Beni.'
```

- b. ósù dém→ bù-Ø road straight be-3SgSbj '(The) road is straight.'
- c. béré dém→ bě:-rè-Ø stick straight become-Pfv1a-3SgSbj 'The stick became straight.'
- d. ósù dém→ ngó-Ø
  road straight not.be-3SgSbj
  '(The) road is straight.'

### 8.6.7.1 'Straight' ( $d\acute{e}m \rightarrow , s\acute{e}^n \rightarrow$ )

'Straight' in the sense of a direct, non-meandering trajectory or path is expressed by the adverbial  $\frac{d\epsilon m}{d\epsilon}$ . The  $\frac{m}{\epsilon}$  is prolonged. Examples are in the immediately preceding section.

'Straight' in the context 'look straight at' is  $s \not\in {}^n \rightarrow$  or variant  $s \not\in \rightarrow$ .

(182) 
$$i=ni$$
  $s \in n \rightarrow tini-b \circ 1$  1Sg=Acc straight look.Pfv-3PlSbj 'They looked straight at me.'

### 8.6.7.2 'Apart, separate' ( $d\acute{e}y^n \rightarrow$ )

To indicate that two objects, or classes of object, are physically separated or are conceptually distinct, both NPs are followed by adverbial  $d\acute{e}y^n \rightarrow$  in a parallelistic construction.

(183) 
$$[\acute{ar}^n\grave{a} \qquad d\acute{ey}^n \rightarrow] \qquad [y\check{a}: \qquad d\acute{ey}^n \rightarrow]$$
 [man.Pl apart] [woman.Pl apart] 'Men and women are separate (or: are distinct).'

'Always, foreover, eternally' is  $\grave{a}s\acute{u} \rightarrow$ , which was perhaps originally a phrase including  $\grave{u}s\acute{u}$  '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 si-s5:<sup>n</sup> and cognates in other northwestern Dogon languages) was elicitable. Instead, a verb chain beginning with mb:lu '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, nànàná:)

 $s\acute{o}y$  (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  $w\acute{o}y$ ).

```
(184) [úrò kù] sóy nàw<sup>n</sup>á:-rè-Ø

[house Def] all.Emph be.ruined-Pfv1a-3SgSbj

'All (= every last one of) the houses were ruined.'
```

nàŋàná: '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  $[X^{HL}náŋànà:]$  or, if X is an undetermined and unquantified NP ending in an L-tone,  $[X^{L}nànànà:]$ .

```
(185) a. [L+HL ŭrò kù] HL náŋànà: nàw ná:-rè-Ø [1SgPoss-HL house Def] HL entirely be ruined-Pfv1a-3SgSbj 'My house was completely ruined.'
```

```
b. [bû: Lnàŋànà:] sèllè-r-á
[3PlPoss Lall] se.healthy-PfvNeg-3PlSbj
'They are all sick.'
```

```
c. [kú HL náŋànà:] dùw<sup>n</sup>5:-rè-Ø

[InanPoss HL all] be.finished-Pfv1a-3SgSbj

'It (e.g. sugar) is finished (= depleted).'
```

For nànàná: 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.

```
(186) a. yěy-yěy yè-bó
two-two come.Pfv-3PlSbj
'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<sup>n</sup>ò-ór<sup>n</sup>ò*)

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-Ø 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  $\delta r^n \partial - \delta r^n \partial$ , iteration of  $\delta r^n \partial$  'place'.

#### 8.6.8.3 Other adverbs with iterated stem

The iterations of adjective stems in (188), with L-toned initial and {HL} toned final, are used as adverbs. The formation is distinct (in form and sense) from distributive iterations.

(188) form gloss related adjective  $\begin{array}{ccc} n\grave{a}:r^n\grave{a}-n\acute{a}:r^n\grave{a} & \text{`easily'} & n\grave{a}:r^n\acute{a} \text{`easy'} \\ n\grave{u}m-n\^{u}m & \text{`with difficulty'} & n\widecheck{u}m \text{ `difficult'} \end{array}$ 

# 9 Verbal derivation

# 9.1 Reversive verbs (-rv-)

The reversive verb-to-verb derivation is like that with English un- (or dis-, etc.). The basic suffix is -r\(\vec{v}\)-. The derived stem preserves the lexical /H/ or /LH/ stem-level melody of the input verb, but /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 pi:y<sup>n</sup>i- and  $pi:-r^ni$ , to judge by imperatives  $pi:y^n\hat{a}$  'shut!' and  $pi:-r^n\hat{a}$  'open!', but the phonology is murky since  $pi:y^ni$  is usually pronounced  $[pi:^n]$ . Stative  $pi-piy^na-w^n$  it is shut clearly has a short i in the medial syllable, suggesting that an alternative representation of 'shut' as /píy<sup>n</sup>í/ may also be present. This would then suggest an alternative analysis of 'open' as /píyní-rní-/, and perhaps of  $pi:y^ni$  as /pi $y^ni$ -y<sup>n</sup>i-/. (189c) shows a dissimilation of /r/ to 1 before the suffixal r, see §3.5.4.5. In (189d), the end of the input stem is truncated before the suffix, and suffixal /r/ shifts to d after m (§3.5.4.7). In (189e), a final  $-y\dot{v}$ - is lopped off before  $-r\dot{v}$ -. 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 -yv- before another derivational suffix. The 'lock'/'unlock' case is synchronically messy and isolated (compare Nanga dàgá/dàgí-rì and Bankan Tey dă:"/dà:"-r"i). (189f) shows lengthening of Cv- stem to Cv:- before the derivational suffix (§3.5.3.1).

```
(189)
             input
                          gloss
                                                reversive
                                                              gloss
        a. bisyllabic stem as input (predominant type)
             dèwí-
                           'cover (object)'
                                                              'uncover (object)'
                                                dèw-rí-
             mèlí-
                           'fold'
                                                mèlì-rí-
                                                              'unfold'
                           'hook, hang up'
             kólí-
                                                kólí-rí-
                                                              'unhook, take down (sth hanging)'
             pégé-
                           'nail(v)'
                                                pégí-rí-
                                                              'remove (nail)'
             pέgέ-
                           'button'
                                               pégí-rí
                                                              'unbutton'
             páyá-
                           'tie'
                                               págí-rí-
                                                              'untie'
        b. phonology problematic (discussed above)
             pí:v<sup>n</sup>í-
                           'shut'
                                               pí:-r<sup>n</sup>í-
                                                              'open'
        c. /r/ to 1 (§3.5.4.5)
                           'cover (person)'
                                                gòlò-ró-
                                                              'uncover (person)'
             gòró-
             ìré-
                           'forget'
                                                ìlì-rí-
                                                              'remember'
             tárá-
                           'paste, affix'
                                                tálí-rí-
                                                              'unpaste, detach'
        d. syncope (§3.5.3.2), CCC simplification (§3.5.4.8), /r/ to d (§3.5.4.7)
             tímbí-
                          'cover (w lid)'
                                                tím-dí-
                                                              'uncover (remove lid)'
```

```
e. Mediopassive -vv- omitted
    néngí-yé-
                  'be caught in tree' néngé-ré-
                                                        'become uncaught'
    d\hat{a}: "-v^ní-
                  'lock'
                                         d\hat{a}: "-r^n\hat{i}-
                                                        'unlock'
                  [imperative d\acute{a}^n]
f. Cv- lengthened to Cv:- before suffix (§3.5.3.1)
    t5n-
                   'wind'
                                         t5:"-r"1-
                                                        'unwind'
                   'pull up (pants)'
    wă-
                                         wà:-rí-
                                                        'let (pants) down'
```

Some frozen reversives are used only in chained form before  $g \grave{o}$ - $l \acute{o}$ - 'remove, take away' if transitive (190a), and before  $g \check{o}$ - 'go out, exit' if intransitive (190b).

```
(190) a. gòŋgù-rú gò-ló-tî:-Ø fence.in-Rev remove-Pfv1b-3SgSbj 'He/She removed the fence (opened up the space).'
```

```
b. píré-rí gŏ:-rè-∅ get.bogged-Rev go.out-Pfv1a-3SgSbj 'It (e.g. truck) got unbogged.'
```

Reversive verbs attested only in this construction (with  $g\grave{o}$ - $l\acute{o}$ - or  $g\check{o}$ -) are in (191). As in (189f), Cv- verbs lengthen to Cv:-.

```
(191)
            input
                                             reversive
                           gloss
                                                           gloss
        a. transitive with gò-ló-
                           'wall/fence in'
                                                           'remove fence from'
            gàŋgí-
                                             gòŋgù-rú-
            níŋgí-
                           'tangle'
                                             níngí-rí-
                                                           'untangle'
            tó-
                                             tó:-rí-
                                                           'remove foot from'
                           'step on'
            kó-
                           'roll up (pants)' kó:-ró-
                                                           'let (pants) down'
                           'crumple'
                                             kúmjó-ró-
                                                           'uncrumple'
            kúmjó-
        b. intransitive with go-
                                                            'get unbogged'
            píré-
                           'get bogged'
                                            píré-rí-
```

# 9.2 Deverbal causative verbs

### 9.2.1 Productive causative suffix (-wú-)

The productive derivational suffix for deverbal causatives is -wu. It readily nasalizes to  $-w^nu$  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 /H/ or /LH/ melody is preserved in the  $-w\acute{u}$ - derivative. Cv inputs also have their vowels lengthened.

### (192) Causatives with -wú-

input gloss causative gloss

a. {H}-toned from /H/ toned input (2+ syllables or CvC-)

pété-'jump' pété-wú-'make jump' kúwó-'eat (meat)' 'feed (with meat)' kúwó-wúáw<sup>n</sup>y<sup>n</sup>í- $\acute{a}w^ny^n\acute{i}-w^n\acute{u}-$ 'be swollen' 'cause to swell' έrέ-'escape' éré-wú-'let escape'

b. {LH}-toned from /LH/ toned input (2+ syllables or *CvC*-)

```
jùwó-
              'know'
                                jùwò-wú-
                                                   'inform'
găy<sup>n</sup>-
                                gà: n-w nú-
              'put'
                                                   'cause to put'
wàsá-
              'remain'
                                wàsà-wú-
                                                   'let remain'
                                dìmbì-yì-wú-
              'follow'
dìmbì-yí-
                                                   'make follow'
bùró-
              'be reanimated' bùrò-wú-
                                                   'reanimate, bring back to life (e.g.
                                                   fire)'
dùw<sup>n</sup>5-
                                 dùw<sup>n</sup>ò-w<sup>n</sup>ú-
                                                   'cause to end'
              'end'
              'spin'
                                                   'make spin'
gòngìrí-
                                gòngùrù-wú-
```

c. {H}-toned from monosyllabic /H/ input

лέ-	'eat (meal)'	ɲέ:-w <sup>n</sup> ú-	'give food to'
<i>ló-</i>	ʻgo'	ló:-wú-	'allow to go'
nú-	'enter'	nú:-w <sup>n</sup> ú-	'make enter'

d. {LH}-toned from monosyllabic /LH/ input

bě-	'remain'	bè:-wú-	'cause to remain'
nŏ-	'drink'	nà:-w <sup>n</sup> ú-	'give drink to'
yŏ-	'weep'	yà:-wú-	'make weep'
gŏ-	'go out'	gò:-wú-	'take out' (uncommon)
nŭ-	'hear'	nù:-w <sup>n</sup> ú-	'make hear'

# 9.2.2 Minor causative suffix (-gí-)

The known cases of -gí- are in (193).

# (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  $-r\dot{v} \sim -l\dot{v}$  (§9.4 below) functions much like a causative in some combinations.

### 9.3 Passive (-*wú*-)

The verbal derivational suffix  $-w\hat{u}$ - is normally causative. It is, however, passive in a very small number of combinations. All known examples are in (194).

### (194) Passive -wú-

```
input
           gloss
                                  passive
                                                    gloss
témbú-
           'find, encounter'
                                  témbú-wú-
                                                    'exist, be found (findable, regularly
                                                    present)'
bὲrέ-
            'get, obtain'
                                  bèrè-wú-
                                                    'be available, obtainable'
                                                    'be understood'
pá:mέ-
            'understand'
                                  pá:mέ-w<sup>n</sup>ú-
            'be stronger than' g \partial r^n \partial - w^n \hat{u}-
                                                    'be mastered, dominated'
gàr<sup>n</sup>ó-
                                                    'be visible'
yĭ-
            'see'
                                  yì:-wú-
```

témbú-wú- and bèrè-wú- are often used in imperfective sentences, positive and negative: bèrè-wú-m-dó- $\emptyset$  '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  $g \partial r^n \partial - w^n u$ - is an impersonal passive (195).

```
(195) [íyé kálà] bû: gòr<sup>n</sup>ò-w<sup>n</sup>ú-m̀-dó-∅

[today even] 3Pl 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  $-w\acute{u}$  is a **special** form  $-w\acute{u}-\grave{w}$ , as in (with Nasalization-Spreading)  $p\acute{a}:m\acute{e}-w^n\acute{u}-\grave{w}^n$  'it has been understood' (a phrase used to acknowledge understanding what an addressee has just said). The ending might be compared with stative  $3Sg - \grave{w}$  and related forms. Alternatively, but less convincingly it could be transcribed  $-w\^{u}:-\varnothing$  and compared to other falling-toned 3Sg perfective-system forms (§3.2.1.3) as well as to perfective-1b  $-t\^{u}:-\varnothing$  and recent perfect  $-j\^{e}:-\varnothing$ . No distinct plural form is used, hence  $g\grave{u}r\acute{u}$   $t\acute{e}mb\acute{u}-w\acute{u}-\grave{w}$  'thieves were findable'. The negative counterpart, howerver, is the regular perfective negative:  $p\grave{a}:m\grave{e}-w^n\grave{u}-r^n\acute{t}-\varnothing$  'it has not been understood'.

# 9.4 Mediopassive $-y\dot{v}$ - and transitive $-r\dot{v}$ - $\sim -l\dot{v}$ -

There are a small number of verbs that alternate between a mediopassive in  $-y\dot{v}$ - and a causative-like transitive whose usual suffix is  $-r\dot{v}$ - (196a). Monosyllabic (C)v- 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  $-l\dot{v}$ - instead of  $-r\dot{v}$ - in the transitive form. This derivational pair ('go down', 'take down') is also irregular in several other Dogon languages. In (196c), an expected /dimbi-rí-/ syncopates to /dim-rí-/, then the tap /r/ (which can only occur intervocalically) hardens to d (see §3.5.4.7).

## (196) Mediopassive/transitive alternations

```
MP
                    gloss
                                      Tr
                                                    gloss
a. -r\dot{v}- replaces -y\dot{v}- to form transitive
                    'stand, stop'
                                                    'make stop/stand'
    í:-yí-
                                      í:-rí-
    ú:-yí-
                    'fear, be afraid' ú:-rú-
                                                    'scare, frighten'
    dì-yé-
                    'bathe'
                                      dì-ré-
                                                    'bathe (sb)'
                    'sit'
    éw-yé-
                                      éw-ré-
                                                    'seat, cause to sit'
                                                    'cause to lie down'
    bì-yé-
                    'lie down'
                                      bì-ré-
                                                    'cause to kneel'
    túŋgú-yú-
                    'kneel'
                                      túŋgú-rú-
b. -l\acute{v}- is added to bisyllabic stem minus mediopassive -v\acute{v}- ending
    sí-yé-
                    'go down'
                                      sí-lé-
                                                    'take (bring) down'
c. -dv- after m
    dìmbì-ví-
                    'follow'
                                      dìm-dí-
                                                    'cause to follow'
```

Nasalization-Spreading can apply:  $t \circ r'' \circ y'' \circ squat'$ ,  $c \circ r'' \circ y'' \circ squat'$ ,  $c \circ r'' \circ y'' \circ squat'$ , the suffix is unnasalized, as often after m from \*mb.

There are also a handful of cases where  $-l\dot{v}$  is added directly to an unsuffixed monosyllabic intransitive (197a), with Cv- lengthened to Cv:- (§3.5.3.1) before the suffix, or where  $-r\dot{v}$  is added directly to an unsuffixed bisyllabic intransitive (197b).

### (197) Transitive suffix added to unsuffixed intransitive

```
MP
               gloss
                                    Tr
                                                     gloss
a. -l\(\vec{v}\)- added directly to (monosyllabic) stem
                'learn (a trade)'
                                    bà:-lí-
                                                     'teach (sb, a trade)'
    bă-
    dž-
                'arrive'
                                    dà:-lí-
                                                     'deliver'
b. -rv- added directly to unsuffixed stem
    ùró-
                'go up'
                                    ùlù-rú-
                                                     'take up'
```

For l...-r instead of expected r...-r in 'take up' in (197b), see §3.5.4.5. For other cases of  $-r\dot{v}$ -or  $-l\dot{v}$ - being added to a stem without  $-y\dot{v}$ -, see deadjectival factitives in §9.7.

There are many other verbs ending in ...  $y\vec{v}$ - that may be frozen derivatives that originally contained the mediopassive suffix. Examples are  $n\vec{i}:y^n\vec{i}$  'sleep' (regular causative  $n\vec{i}:y^n\vec{i}-w^n\vec{u}$ -) and  $t\vec{o}r^n\vec{i}y\vec{i}$  'squat'.

Transitivity alternations of this type are much more common in Najamba, where  $-y\dot{\varepsilon}$  is clearly identifiable as a mediopassive suffix.

### 9.5 Passive $(-y \varepsilon y)$

A morpheme that is often heard as  $[j\hat{\epsilon}j]$  can be added to an  $\{H\}$ -toned form of the unsuffixed verb stem to produce a **resultative passive**. I take this to be  $-y\acute{\epsilon}y$  (with H-tone) plus the 'it is'

The initial y of  $-y \not \in y$  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.

```
(198) a. [\text{\'uro} \quad k\text{\'u}] \quad c\text{\'ew}^n\text{\'i}-y\text{\'e}y = \emptyset [house Def] build-Pass=it.is.Inan 'The house was built.'
```

- b. yéŋgù bă: tớŋgú-yêy = Ø-bớ yesterday since write-Pass=it.is-3PlSbj 'They (=letters) have been written since yesterday.'
- c. L+HL  $tiy\grave{a}$ -m  $jiy\acute{e}$ - $y\acute{e}y$  =  $\grave{m}$ 1SgPoss. HL friend-AnSg kill-Pass=it.is.3SgSbj 'My friend has been killed.' ( $jiy\acute{e}$ -)
- d. [áŋày<sup>n</sup> tí:-yéy kù] bû: = m [like.that sell-Pass Def] 3Pl=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. - $y \not\in y$ - has H-tone in these combinations.

```
(199) a. i jíyé-yéy-m=m-îy dè
1SgSbj kill-Pass-AnSg=it.is-1SgSbj if
'if I am killed, ...'
```

```
b. î: jíyé-yéy=m-îy.: dè
1PlSbj kill-Pass=it.is-1PlSbj if
'if we are killed, ...'
```

In at least one combination, the form with -yéy functions as a modifying adjective. This is èlèy wá:mbú-yéy 'roasted peanuts' (local French cacahuètes), where éléy 'peanut' is {L}-toned (as it should be before a modifying adjective). This term for 'roasted peanuts' competes with èlèy tìgà-lâm-lâm (partially borrowed from Fulfulde). I did not record -yéy in other such expressions; 'roast meat' (local French viande grillée) is nàwnà: sìmbú (cf. verb símbé-'roast').

The construction is negated by adding stative negative clitic  $= r\acute{a}$  after  $-y\acute{e}y$ , which again takes the falling-toned form  $-y\acute{e}y$ - suggesting the presence of the 'it is' clitic (§11.2.1.4).

```
(200) [\acute{u}r\grave{o} & k\grave{u}] & c\acute{\varepsilon}w^n\if-y\^{\varepsilon}y = \varnothing = r\acute{a}-\varnothing

[house Def] build-Pass=it.is=StatNeg-3SgSbj '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  $m\partial: l\hat{u}$ , 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:  $p\epsilon$ - 'become (=get) old',  $p\epsilon$ :- $w\epsilon$ - 'make (sb, sth) old, age (sth)'.

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'	pĕ:	pέ-	pέ:-wú-
'ripe'	ìrĕy	íré-	íré-wú-
'half-ripe'	bòlòrŏy	bòlòró-	bòlorò-wú-
ʻplump'	ãm	áw <sup>n</sup> á-	áw <sup>n</sup> á-w <sup>n</sup> ú-
'red'	bár <sup>n</sup> à-	bàr <sup>n</sup> á-	bàr <sup>n</sup> à-w <sup>n</sup> ú-
'empty, bare'	kòrŏy	kóró-	kóró-wú-
'weak, diluted'	sèré	séré-	séré-wú-
'crooked'	gàlú	gàlÍ-	gɔ̀lù-wú-
'skinny'	kómbó	kómbó-	kómbó-wú-
'easy, cheap'	nà:r <sup>n</sup> á	ná:r <sup>n</sup> í-	ná:r <sup>n</sup> í-w <sup>n</sup> ú-
'rotten'	<i>òmbú</i>	ómbí-	ómbú-wú-
	'old' 'ripe' 'half-ripe' 'plump' 'red' 'empty, bare' 'weak, diluted' 'crooked' 'skinny' 'easy, cheap'	'old' 'ripe' 'ripe' 'half-ripe' 'bòlòrŏy 'plump' 'red' 'empty, bare' 'empty, bare' 'weak, diluted' 'sèré 'crooked' 'skinny' 'kómbó 'easy, cheap' 'ně: 'věy 'kòrŏy 'weak 'sèré 'crooked' 'sòré 'nà:r <sup>n</sup> á	'old' pě: pé- 'ripe' irěy íré- 'half-ripe' bòlòrŏy bòlòró- 'plump' äm áw <sup>n</sup> á- 'red' bár <sup>n</sup> à- bàr <sup>n</sup> á- 'empty, bare' kòrŏy kóró- 'weak, diluted' sèré séré- 'crooked' gòlú gòlí- 'skinny' kómbó kómbó- 'easy, cheap' nà:r <sup>n</sup> á ná:r <sup>n</sup> í-

In the more isolated cases in (202), **factitive suffix**  $-l\dot{v}$ -  $\sim -r\dot{v}$ - (probably identical to the transitive suffix) is used instead of the usual causative suffix  $-w\dot{v}$ -.

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  $-l\hat{v}$ - in the inchoative (203a). If the input contains a medial liquid  $\{lr\}$ , the inchoative has l in the stem, and has  $-r\hat{v}$ - instead of  $-l\hat{v}$ - as suffix (203b). In other words, the only liquid sequence allowed in inchoatives is l...r, compare §3.5.4.5. If the input contains medial  $r^n$ , the output has n in the stem and  $-r^n\hat{v}$ - as the suffix (203c). A medial  $y^n$  in the stem is associated with suffix  $-n\hat{v}$ - in the only relevant example (203d). If the stem ends in m, including m from underlying  $/w^n/$  after Syncope, the inchoative suffix is  $-d\hat{v}$ - (203e). In some but not all cases, suffix allomorphs  $-r\hat{v}$ - and  $-d\hat{v}$ - are associated with a stem-wide vowel-harmonic shift from  $\varepsilon$  to e; note especially 'sweet; sharp' and 'white' in (203b).

```
(203)
          gloss
                                     adi
                                                    inchoative
                                                                         factitive
          a. Inchoative -l\hat{v}-, stem with no \{l r\}
               'squeezed'
                                     pèŋgú
                                                    péngí-lí-
                                                                         péngí-lí-wú-
               'thin'
                                                    mènjì-lí-
                                                                         mènjì-lì-wú-
                                     mènjé-
               'fat'
                                     dùgú-
                                                    dùgù-ló-
                                                                         dùgù-lò-wú-
                                                    kúnjú-ló-
                                                                         kúnjú-ló-wú-
               'coarse'
                                     kúnjù-m
               'short'
                                     gɔ̃:w-
                                                    gà:-lí-
                                                                         gà:-lù-wú-
               'good'
                                     èsú-
                                                    έsí-lí-
                                                                         ésí-lú-wú-
                                                                         mósí-lí-wú-
               'bad, ugly'
                                                    mósí-lí-
                                     mòsú-
               'heavy'
                                                                         dùsù-lò-wú-
                                     dùsú-
                                                    dùsù-ló-
               'half-sweet'
                                                    ásí-lí-
                                                                         ásí-lí-wú-
                                     ásù-m
          b. Inchoative -r\dot{v}- after stem with l (from l or r)
               'sweet; sharp'
                                     έrù-m
                                                    élé-ré-
                                                                         élé-ré-wú-
               'white'
                                     pílέ
                                                    pílé-ré-
                                                                         pílé-ré-wú-
                                     gùrô-
               'long, tall'
                                                    gùlù-rí-
                                                                         gùlù-rù-wú-
               'smooth, sleek'
                                                    óló-ró-
                                                                         óló-ró-wú-
                                     órù-m
               'salty, sour'
                                     párù-m
                                                    pálé-ré-
                                                                         pálé-ré-wú-
               'soft (skin)'
                                     yòrú
                                                    yòlì-rí-
                                                                         yòlù-rù-wú-
               'moisten'
                                                    ólí-rí-
                                                                         ólú-rú-wú-
                                     э̀rú
               'bitter'
                                                    gàlè-ré-
                                                                         gàlè-rè-wú-
                                     gárù-m
          c. Inchoative -r^n \acute{v}- after stem with n (from r^n)
               'lightweight'
                                     nèr<sup>n</sup>ú-
                                                    nènì-r<sup>n</sup>í-
                                                                         n \hat{\epsilon} n \hat{\imath} - r^n \hat{\imath} - w^n \acute{u}
               'deep'
                                     w^n \acute{\jmath} r^n \grave{\jmath}-
                                                     w<sup>n</sup>ànì-r<sup>n</sup>í-
                                                                         w<sup>n</sup>ànù-r<sup>n</sup>u-w<sup>n</sup>ú-
          d. Inchoative -n\hat{v}- after stem with v^n
               'big, adult'
                                     dìy<sup>n</sup>á-
                                                    dìy<sup>n</sup>à-ní-
                                                                         dìy<sup>n</sup>à-nì-w<sup>n</sup>ú-
          e. Inchoative -d\vec{v}- after stem with m (from w^n or m)
               'black'
                                     jéw<sup>n</sup>è-
                                                    jèm-dé-
                                                                         jèm-dè-wú-
               'pointed'
                                     sîm
                                                    sím-dé-
                                                                         sím-dé-wú-
               'difficult, costly' num
                                                    núm-dó-
                                                                         núm-dó-wú-
```

A few adjectives containing a labial (including w) have an inchoative in  $-y\dot{v}$ - (204).

(204)	gloss	adj	inchoative	factitive
	'dry'	mă:	mà-y <sup>n</sup> á-	mà-y <sup>n</sup> à-w <sup>n</sup> ú-
	'cold'	tâm	táw <sup>n</sup> -y <sup>n</sup> í-	táw <sup>n</sup> -y <sup>n</sup> í-w <sup>n</sup> ú-
	'hot, fast'	$\hat{\jmath} w$	ów-yí-	ów-yú-wú-

Various idiosyncratic cases are lumped together in (205).

(205)	gloss	adj	inchoative	factitive
	'spacious'	káwà-w	kám-dí-	kám-dí-
	'distant'	wă:w	wàn-gí-	wàn-gù-wú-
	'dirty'	<i>l</i> όγὸ	lóg-gí-	lóg-gú-
	'clean'	ésè	ésé-	ésí-lí-wú-

For 'spacious', the inchoative fits pattern (203e), above, but the factitive lacks an additional derivational suffix. For  $w\check{a}$ : (<\*wàgá) 'distant', inchoative  $w\grave{a}$ - $\eta g\acute{\iota}$ - 'go far away' is now quite opaque morphologically, but the g was originally transposed (metathesized) from the \*g of the stem; compare Jamsay  $w\grave{a}y\acute{a}$  'distant',  $w\grave{a}n\grave{a}$ - $\eta\acute{a}$ - 'go far away'.  $l\acute{g}$ - $g\acute{\iota}$ - 'become dirty' is the other case I know of with g in the suffix; compare Jamsay  $l\acute{s}y\acute{s}$ - $j\acute{o}$ - 'become dirty' (and  $l\acute{s}y\grave{s}$  'filth'). One could argue for a denominal rather than deadjectival inchoative here (see the following section). The factitive is  $l\acute{s}g$ - $g\acute{u}$ -, irregularly contracted from \* $l\acute{s}g$ - $g\acute{u}$ -w $\acute{u}$ -. For 'clean', the factitive is morphologically the causative of a putative inchoative with suffix  $-l\acute{v}$ -, but the inchoative in common use is unsuffixed  $\acute{e}s\acute{e}$ -.

Adjectives with no corresponding derived verbs, or that have a suppletive inchoative and/or factitive, are in (206).

### (206) Adjectives

gloss	adj	inchoative	factitive
a. suppletive 'small'	dâ:-	sálírí-	sálírú-wú-
b. no verb attested			
'young'	jókkólè-	_	_
'unripe, raw'	cèsú	_	_
'other'	<i>l</i> ăw	_	_
'new'	kálà	_	_

### 9.8 Denominal verbs

A few scattered cases of verbs apparently derived from nouns (rather than adjectives) are in (207a-c). 15yò 'filth' (207d) can also be an adjective 'dirty', so 15g-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 -rý-
                          'load'
                                            dù:-rú-
                                                         'load (e.g. cart)'
             dû:
        b. suffix -1\(\vec{v}\)-
                          (greeting)
                                            pó:-lí-
                                                         'greet'
             pŏ:
        c. suffix -gý-
                          'forest'
                                            úlú-gó-
                                                         '(zone) become densely vegetated
             úlì
                                                         (e.g.after rains)'
             Ιόγὸ
                          'filth; dirty'
                                                         'get dirty'
                                            lóg-gí-
        d. bármè
                          'injury'
                                            bármέ-
                                                         'injure, wound'
                                                         'be in pain'
                          'pain'
             ùrùyĭ:
                                            ùrùyó-
             kèrìyêy
                          '(a) share'
                                            kéríyé-
                                                         'share, divide up'
             tìrâ:
                          'family name'
                                                         '(griot) chant the ancestry of (sb)'
                                            tírí-
```

# 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<sup>n</sup>í-
'pàw<sup>n</sup>á-
'malfunction' pàŋgì-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 ( $-t\hat{i}$ -,  $-s\hat{o}$ -,  $-t\hat{a}$ -,  $-j\hat{e}$ -) 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 §14.1.7. For resultative  $s\hat{o}$ -, experiential perfect  $t\hat{a}$ -, and recent perfect  $j\hat{e}$ -preceded by subject pronouns, see (441a-c). For perfective-1b  $t\hat{i}$ - preceded by a subject pronoun, see (497). However, perfective-1a -: $r\hat{e}$ - and progressive -: $r\hat{a}$ - 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 Ci- or  $Cv_i$ - (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).

```
(209)
        a. perfective positive system
             unsuffixed perfective
                 regular type with tone-dropped bare stem (§10.2.1.1)
                 type with lexical melody, 3\text{Sg} - \dot{w}, 3\text{Pl} - m\dot{a} (§10.2.1.2)
                 other variants for 3Sg/3Pl only (§10.2.1.10)
             reduplicated (unsuffixed) perfective (bare stem with {HL} tone)
             stative
                 unreduplicated, final nonhigh vowel, 3Sg -w, {H} tone (§10.2.1.10)
                 reduplicated, {HL} tone on stem (§10.2.1.11)
             perfective-1a :-rè- 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 -s\hat{o}- after bare stem (§10.2.1.6)
            experiential perfect -tâ- after bare stem (§10.2.1.7)
             recent perfect -i\hat{\epsilon}- after bare stem (§10.2.1.8)
        b. perfective negative system (§10.2.3.2)
             perfective negative -rí- after {L}-toned bare stem
             experiential perfect negative -tà-lí- after {L}-toned bare stem
            recent perfect negative -j\hat{\epsilon}-r\hat{\imath} after {L}-toned bare stem
             stative negative (§10.2.3.4)
        c. imperfective positive system
             unsuffixed imperfective (bare stem, bisyllabic /LH/ shifted to {H}, 3Sg -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 -m-dó- after bare stem, bisyllabic /LH/ shifted to {H}
        e. deontic modal categories
             imperative
                 imperative (positive) (§10.5.-4)
                     singular addressee: imperative stem, no suffix
                     plural addressee: -\hat{n} \sim -n\hat{i} added to imperative stem
```

```
prohibitive (imperative negative) (§10.5.5)
         singular addressee: -ré after bare stem
         plural addressee: -r\acute{\epsilon}-\grave{n}\sim -r\acute{\epsilon}-n\grave{i} after bare stem
hortative (§10.5.6)
    hortative (positive)
         singular addressee: -m after \{L\}-toned stem
         plural addressee: -m\hat{a}y^n after {L}-toned stem
    hortative negative
         singular addressee: -rè-m after bare stem
         plural addressee: -r\hat{\epsilon}-m\hat{a}y^n after bare stem
quoted imperative (QuotImprt) (§10.5.7-8)
    quoted imperative (positive)
         singular subject: -\dot{v} or -\dot{v}
         plural subject: -b5 added to 3Sg form
    quoted imperative negative
         singular subject: 3Sg: -ré-ý after bare stem
         plural subject: -ré-ý-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 §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) Cv-. 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  $C\hat{v}C\hat{v}C\hat{v}$  (as in e.g. Jamsay, but unlike e.g. Bankan Tey or Nanga where the tone shift occurs after the first mora, hence trisyllabic  $C\hat{v}C\hat{v}C\hat{v}$ ). 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 /LH/ melody, and those with initial voiceless obstruent  $\{b\ d\ j\ g\}$  have /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: *jɛ̃*: '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
                     'drink'
        nš
                      'send'
        tí
                     'shave'
        káyá
        tíwέ
                      'die'
        bì-yé
                     'lie down'
                     'knock together'
        jàŋgí
        dùsùró
                      'poke'
```

### 10.1.3.2 Monosyllabic verbs

A full list of Cv- 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  $\mathcal{E}$  verbs as lacking the C. All oral vowel qualities are represented, though Ci and Ci- 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  $C\dot{v}$ - verbs, see §10.1.3.5, below.

```
(211) form gloss
```

```
a. /H/-toned Cý- after voiceless obstruent
    cέ
                    'take (handful of food)'
    cé
                    '(grasshopper) bite off (grain)'
    kś
                    'eat (crushed millet)'
    kó
                    'yawn' (mò:-kô: kó)
    kó
                    '(snake) slough (skin)' (kô: kô)
                    'get a mate for'
    pá
                    'break off (protrusion)'
    pέ
                     'get old'
    pέ
    pέ
                    'spend the first half of the day' (\partial m \partial y - p \hat{\epsilon}: p \hat{\epsilon})
                    'skin and butcher (animal)'
    рó
                    'heap up (firewood)' (tìr"ì-pŏ: pó)
    pó
                    'whistle' (pŏ: pó)
    pó
                    'reply' (mŏ: sá)
    sá
                    'strain off water from'
    sá
                    'uproot (large plant) with daba'
    sá
                    'trim (hair, shrub)'
    sέ
                    'scoop'; 'shovel up'
    sś
                    'dip briefly'
    só
                    'breathe' (sǔ: "sú")
    sú^n
                    'avoid (taboo)' (tă: tá)
    tá
                    '(ripening fruit) begin to turn color'
    tá
    tá
                    'shoot'
```

```
'(trap) be sprung'; '(bone) be fractured'
    tá
    té
                   '(muddied water) become clear'
    té
                   'be worried' (tê: té)
                   'send'
    tí
                   'build (wall)' (tŏ: tó)
    tó
                   'sow (by slashing earth)' (tǒy tɔ́)
    tś
    tś
                   'step on'
    tś
                   '(millet) grow a stem'
    t \delta^n
                   'coil up'
b. /JH/-toned Cý- after sonorant or with zero initial consonant
    έ
                   'become tight'
    έ
                   '(woman) marry (man)'
    ló
                   'go'
                   'eat (meal)' (něy né)
    Ŋέ
                   'choose, reserve'
    lá
                   'spend night'
    ná
                   'give'
    ní
                   'go in'
    пú
c. /LH/-toned Cv- after voiced obstruent
    bă
                   'learn'
    bă
                   '(container) be full'; '(person) be sated'
    bě-
                   'remain'
    bš
                   'unsheathe'
                   'sip'
    bŏ
                   'endure'
    dă
    d\check{a}^n
                   'lock' (also dà:y<sup>n</sup>i)
    dě
                   'be tired'
    dž
                   'arrive, reach'
    dž
                   'roast, burn'
                   'carry (on head)'
    dŭ
                   'cut (grass, rice) with sickle'
    gă
    gŏ
                   'go out'
                   'jab'
    gš
    jš
                   'pick (out)'
    jĚ
                   'take out (hot coals)'
                   '(man) marry (woman)'
   jĚ
d. /LH/-toned Cv- after sonorant or with zero initial consonant
                   'shape (pottery)'
    mǎ
    пŭ
                   'hear'
                   'drink'
    nš
                   'see'
    ΥĬ
                   'come'
    yĚ
    γž
                   'weep' (yŏ: yŏ)
                   'catch'
    wŏ
```

```
b. <LHL> toned Cv:

jɛ̃: '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  $b\dot{u}$ - 'be (somewhere)' and  $s\acute{o}$ - 'have' may also be mentioned. I treat perfective-1b  $-t\hat{i}$ -, resultative  $-s\acute{o}$ -, experiential perfect  $-t\hat{a}$ -, and recent perfect  $-j\hat{e}$ -, as inflectional suffixes, but they could alternatively be analysed as chained auxiliary verbs as mentioned above.

### 10.1.3.3 'Come' ( $v\tilde{\epsilon}$ )

Representative inflected forms of this verb are in (212).

```
(212)
             form
                           category
                                                        comment
        a. regular
                           bare stem (in chains)
            VĚ
            yὲ-rí-
                           perfective negative
        b. irregular
                           imperative
                                                        vowel shift
            yá
            yĕ:-rè-
                           perfective-1a
                                                        rising stem-tone
                           reduplicated imperfective /\epsilon/ \rightarrow e
            yì-yé-m
```

Although this is a monosyllabic Cv- verb in BenT, it may have originated as a bisyllabic stem with rising tone (cf. Jamsay  $y \grave{e} r \acute{e}$ ). 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  $j\tilde{\epsilon}$ : 'bring' is the functional equivalent of a causative.

```
10.1.3.4 'Bring' (jɛ̃:)
```

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 {L} stem tone, likewise retains the full lexical <LHL> tone for this verb: ...  $j\tilde{\epsilon}:-\mathcal{O}$  'he/she brought ...'.

When the  $\langle LHL \rangle$ -toned form  $j\tilde{\epsilon}$ :- is followed by suffix or clitic with H-, but not  $\langle HL \rangle$ , tone, tone sandhi applies. If the stem is followed by an H-toned suffix/clitic syllable, the verb simplifies to  $\langle LH \rangle$ , 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 <HL>-toned, but my assistant pronounces the full <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  $C\vec{v}$ -verb, and shifts the stem vowel quality from  $\varepsilon$  to e.

```
(213)
            form
                          category
                                                            comment
        a. unsuffixed (no audible AN suffix)
           įἒ:
                          bare stem
                                                            <LHL>
                          imperative
           jã:
           j̃€:-
                          unsuffixed perfective
        b. imperfective jé-
           jì-jé-m
                          reduplicated imperfective
                                                              \rightarrow e
           jé-m-dó-
                          imperfective negative
           jé-m
                          inanimate imperfective participle
        c. suffix- or clitic-controlled tone-dropping resisted
          < LHL >
           j̃e:-rí-ỳ
                          1Sg perfective negative
                                                            <LHL><HL>
          <LH> plus downstepped H
           iĕ:-⁴rí-Ø
                          3Sg perfective negative
                                                            <\LH><\H>
           jě:-⁴náy<sup>n</sup>
                          same-subject
        d. non-tone-dropping suffixes and clitics
          <LHL> before <HL>
                          perfective-1b
           j̃e:-tî-
                                                            <LHL><HL>
          <LHL> before <L>
           j̃̃:-rà-
                          progressive
                                                            <LH><L>
           įĕ-ma
                          plural perfective participle
                          1Sg unsuffixed perfective
                                                            <LHL>
                          3Sg quoted imperative
           iě-ŵ
                          inanimate perfective participle
           jě-m̀
                          singular perfective participle
          <LH> plus downstepped H
           jě:-⁴ní
                          same-subject
                                                            <LH><L>
```

The causative is  $j\hat{\epsilon}:-w\hat{u}$  (less often  $j\hat{\epsilon}:-w\hat{u}$ -) 'cause to bring'. The more common variant treats the stem as <LH> rather than as <LHL>.

Like  $y\check{\epsilon}$ - 'come',  $j\check{\epsilon}$ :- 'bring' may have descended directly from a bisyllabic stem (cf. Jamsay  $j\grave{\epsilon}$ : $r\acute{\epsilon}$ ). In Toro Tegu, several paradigmatic forms are based on a tonally irregular <HL>H toned stem  $z\acute{\epsilon}$ : $r\acute{u}$ -. At an earlier time, all of these 'bring' forms derive from a two-verb combination 'take, pick up' plus 'come'. The 'take' verb survives in BenT in specialized senses:  $j\check{\epsilon}$  '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 Cy verbs

Cv verbs (i.e. those with a single mora) distinguish /H/ from /LH/ melodies as do nonmonosyllabic verbs. However, the difference is difficult to hear in Cv 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  $C\hat{v}-\hat{y}$  for some Cv- verbs and  $C\hat{v}-\hat{y}$  for others. See §10.5.7 for lists.

The distinction between /H/ and /LH/ monosyllables is also respected in suffixal derivatives from these Cv stems (214). The stem vowel is lengthened before such a suffix (214).

```
(214)
              stem
                         gloss
                                            derivative gloss
         a. reversive from /H/ input
                                                           'remove foot from'
               tś
                          'step on'
                                            tó:-rí-
         b. causative from /H/ input
                                                           'give food to'
              nέ-
                          'eat (meal)'
                                            n\acute{\varepsilon}:-w^n\acute{u}-
              1ó-
                          'go'
                                            ló:-wú-
                                                           'allow to go'
                                            n\acute{u}:-w^n\acute{u}-
                                                           'make enter'
              nú-
                          'enter'
               sá-
                          'reply'
                                            sá:-wú-
                                                           'make reply'
         c. causative from /LH/ input
               bě-
                          'remain'
                                            bè:-wú-
                                                           'cause to remain'
              nž-
                          'drink'
                                            n \grave{\partial}:-w^n \acute{u}-
                                                           'give drink to'
              vž-
                          'weep'
                                            yà:-wú-
                                                           'make weep'
                                                           'make hear'
              nŭ-
                          'hear'
                                            n\grave{u}:-w^n\acute{u}-
              VĬ-
                          'see'
                                            vì:-wú-
                                                           'cause to see'
               bă-
                          'learn'
                                            bà:-lí-
                                                           'teach (sb, a trade)'
              dŏ-
                          'arrive'
                                            dà:-lí-
                                                           'deliver'
```

The perfective-1a with suffix :-rè- and the progressive with suffix :-rà- also make a distinction between /H/ and /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.

```
(215)
             gloss
                                 stem
                                            perfective-1a progressive
                                 16-
                                            ló:-rè-
                                                             ló:-rà-
        a.
            'go'
             'spend night'
                                 ná-
                                            ná:-rè-
                                                             ná:-rà-
             'go in'
                                            nú:-rè-
                                                             nú:-rà-
                                 nú-
             'become tight'
                                 έ-
                                            έ:-rè-
                                                             έ:-rà-
             'send'
                                 tí-
                                                             tí:-rà-
             'shoot'
                                 tá-
                                                             tá:-rà-
             'reply'
                                 sá-
                                                             sá:-rà-
             'eat (meal)'
                                                             nέ:-rà-
                                 nέ-
```

```
b. '(food) sate (sb)' bă-
                                   bă:-rè-
                                                   bă:-rà-
    'fill [intr]'
                                   bă:-rè-
                                                   bă:-rà-
                        bă-
    'arrive'
                        dž-
                                   dŏ:-rè-
                                                   dž:-rà-
                       gŏ-
    'go out'
                                  gŏ:-rè-
                                                   gŏ:-rà-
    'remain'
                        bě-
                                   bě:-rè-
                                                   bě:-rà-
    'get tired'
                        dě-
                                   dě:-rè-
                                                   dě:-rà-
    'abound'
                       iŏ-
                                  jŏ:-rὲ-
                                                   iŏ:-rà-
    'see'
                       yĭ-
                                                   yĭ:-rà-
    'catch'
                       wŏ-
                                                   wŏ:-rà-
    'endure'
                       dă-
                                                   dă:-rà-
    'pick'
                       jŏ-
                                                   jš:-rà-
    'slash (rice)'
                       gă-
                                                   gă:-rà-
    'jab'
                       gž-
                                                   gă:-rà-
    'shape, form'
                       mǎ-
                                                   mă:-rà-
    'hear'
                       nŭ-
                                                   nŭ:-rà-
    'come'
                       yĕ-
                                                   yĕ:-rà-
    'drink'
                       nž-
                                                   nă:-rà-
    'weep'
                       yŏ-
                                                   yž:-rà-
```

### 10.1.3.6 Cvy<sup>n</sup> verbs

Usually a verb heard as e.g. Cv(:)y (v = vowel) with a final semivowel reflects optional (but very common) syncope or apocope from bisyllabic forms like /Cv(:)yi/. 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'	$pi:y^n \sim pi:y^ni$	pí:y <sup>n</sup> à	pí:y <sup>n</sup> í-m̀-
	'fart'	$g\check{\imath}:y^n \sim g\grave{\imath}:y^n\acute{\imath}$	gǐ:y <sup>n</sup> à	gì:y <sup>n</sup> í-m̀-
	'take'	ăy∼ àyí	áyâ	àyí-ṁ-
	'hold'	wăv~ wàví	wávâ	wàví-m-

There are, however, three very common verbs with **true**  $Cvy^n$  **shape**. All happen to have nasalized  $y^n$  (217). The imperative retains the  $Cvy^n$  shape rather than ending in a second-syllable a. The  $y^n$  disappears in the imperfective (and other inflections based on it), which is of the form  $(Ci)C\acute{a}-m$ , arguably from  $C\acute{a}^n-m$ / with nasalized vowel.

(217) gloss		bare stem	imperative	imperfective
	'put'	găy <sup>n</sup>	găy <sup>n</sup>	gì-gá-m
	'do, make'	káy <sup>n</sup>	káy <sup>n</sup>	kì-ká-m
	'say'	gŭy <sup>n</sup>	gŭy <sup>n</sup>	gù-gú-ṁ

The final  $y^n$  is also absent in the perfective negative:  $g\grave{a}-n\acute{\iota}$ ,  $k\grave{a}-n\acute{\iota}$ ,  $g\grave{u}-n\acute{\iota}$ . The  $-n\acute{\iota}$  allomorph of the suffix is unique to these verbs (other verbs have  $-r\acute{\iota}$ , or  $-r^n\acute{\iota}$  due to Nasalization-Spreading).

 $k\acute{a}y^n$  has a causative  $k\acute{a}:^n$ - $w^n\acute{u}$ - 'have (someone) do/make'.  $k\acute{a}y^n$  and  $g\check{a}y^n$  have agentive forms (with the complement in compound-initial form) with plural  $-k\check{a}:^n$  and  $-g\check{a}:^n$  and singular  $-k\check{a}^n$ -m and  $-g\check{a}^n$ -m.

## 10.1.3.7 Bisyllabic verbs

Bisyllabic verbs may be of the segmental shape CvCv, CvCCv, or Cv:Cv. The final vowel is always short. The initial C position may be vacant (vCv), etc. The lexical tone is /H/ or /LH/. In the case of /LH/, the normal tone break is at the syllabic boundary, hence  $C\dot{v}C\dot{v}$ ,  $C\dot{v}CC\dot{v}$ ,  $C\dot{v}:C\dot{v}$ . However, in  $C\dot{v}C\dot{v}$  and  $C\dot{v}:C\dot{v}$  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).

```
(218)
               chains
                              presuffixal
                                                imperative
                                                                      gloss
          a. vowels identical except \varepsilon: CaCa, C5C5, CoCo, CeCe
                              táwá-
                                                                      'touch'
               táwá
                                                 táwá
               nàr<sup>n</sup>á
                              nàr<sup>n</sup>á-
                                                                      'bear child'
                                                 nár<sup>n</sup>á
                                                                      'toss'
               pótó
                              pótó-
                                                 pótó
                                                 dómbó
                                                                      'roll on turban'
               dòmbó
                              dòmbó-
               tégé
                              tégé-
                                                 tégé
                                                                      'speak'
               cé:lé
                              cé:lé-
                                                 cé:lè
                                                                      'do or make well'
                                                                      'sit down'
               éw-yé
                              éw-yé-
                                                 éw-yè
          b. identical \varepsilon vowels: C\varepsilon C\varepsilon (shift to final a in imperative)
               \dot{\varepsilon}w\dot{\varepsilon}
                              έωέ-
                                                 έwá
                                                                      'buy'
               bèré
                              bὲrέ-
                                                 bérá
                                                                      'get'
          c. \{i \ u\} plus harmonic mid-height vowel except \varepsilon: CiCe, CuCo, CuCo
               sí-yé
                              sí-yé-
                                                 sí-yé
                                                                      'go down'
               gìyé
                              gìyé-
                                                 gíyé
                                                                      'dance'
               kúwó
                              kúwó-
                                                 kúwó
                                                                      'bite'
               nùw<sup>n</sup>5
                              nùw<sup>n</sup>⁄j-
                                                 núw<sup>n</sup>5
                                                                      'sing'
                                                                      'be cured'
               súsó
                              súsó-
                                                 súsź
                                                                      'insult'
               dùyś
                              dùyó-
                                                 dúyś
          d. i plus harmonic \varepsilon: CiC\varepsilon (shift to final a in imperative)
                                                                      'kill'
              jìyέ
                              jìyέ-
                                                jíyá
               bìrέ
                              bìrέ-
                                                 bírá
                                                                      'work'
          e. final high vowel (various preceding vowels)
                              làrí-
                                                 lărà
                                                                      'chase'
               làrí
               dà:yí
                              dà:yí-
                                                 dà:yí
                                                                      'encounter'
```

káwrú	káwrú-	káwrà	'split (nut)'
dèyí	dèyí-	děyà	'put down'
<i>ómjí</i>	óтjí-	<i>ómjà</i>	'urinate'
jàŋgí	jàŋgí-	jóŋgà	'cure'
tíní	tíní-	tínà	'look'
túmdí	túmdí-	túmdà	'begin'
témbí	témbí-	témbà	'find, inherit'

Although I have included *CvCCv*- and *Cv:Cv*- stems along with *CvCv*- in this section, the phonologically most relevant division of nonmonosyllabic verbs is into **prosodically light** *CvCv* and **prosodically heavy** *CvCCv*-, *Cv:Cv*-, 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 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
	eie			
	yègìsé	yègìsé-	yègísè	'cut up'
	<i>iie</i>			
	síríyé	síríyé-	síríyè	'cut into strips'
	bìlìré	bìlìré-	bìlírè	'roll over'
	jìgìré	jìgìré-	jìgírè	'sway'
	ouo			
	kógúsó	kógúsó-	kógúsò	'cough'
	<i>uuo</i>			
	dùlùró	dùlùró-	dùlúrò	'roll on ground'

Patterns e...e and 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, 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...o...o, I can cite dólóró- 'shape into balls'.

Additional stem-vowel sequences occur in **suffixal derivatives** of e.g. *CvCv-Cv*- shape when a final non-high vowel of the input *CvCv*- stem is not shifted to a high vowel in the

derivative. Examples are e...e...e in reversive  $p\acute{e}mb\acute{e}-r\acute{e}$ - 'ungird, remove (woman's) wrap)' and  $n\acute{e}ng\acute{e}-r\acute{e}$ - 'become uncaught (from tree)', and u...o...o in reversive  $k\acute{u}mj\acute{o}-r\acute{o}$ - '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  $\{u \circ v\}$ .

The general pattern with a final high vowel is obligatory when the vowel of the first syllable is from the set  $\{a \in o\}$ , 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  $\{a \ o\}$ , the vowel of the second syllable assimilates totally to this initial vowel (220).

(220)	chains	presuffixal	imperative	gloss
	e…i…i nèr <sup>n</sup> ìyí pédígí sésírí		nèr <sup>n</sup> íyà pédígà sésírà	'winnow (in wind)' 'winnow (by shaking)' 'filter (liquid)'
	ii/ui/u wìnjìwú píníw <sup>n</sup> í dìmbì-yí	píníw <sup>n</sup> í-	wìnjíwà píníw <sup>n</sup> à dìmbí-yà	'spin' 'go back' 'follow'
	ui/ui/u ɲùŋùr <sup>n</sup> ú	րùŋùr <sup>n</sup> í-	ກູນກູບ໌r <sup>n</sup> à	'quiver, move (while stationary)'
	a…i…i dàŋgìrí bàŋgìrí	dàŋgìrí- bàŋgìrí-	dàŋgárà bàŋgárà	'break in half' 'hide (something)'
	əii gəŋgìrí	gòŋgìrí-	gòŋgórà	'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 wasa-wa- 'let remain', e...e...u in causative eva-va- 'let escape', e...e...u in causative eva-va- 'cause to sit', eva-va- in reversive eva-va- 'get unbogged', eva-va- un causative eva-va- reanimate', and eva-va- unconstant eva-va- reanimate'.

#### 10.2 Positive indicative AN categories

10.2.1 Perfective positive system (including perfect and stative)

#### 10.2.1.1 Unsuffixed perfective with {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  $\{L\}$  tone overlay on the stem (tone-dropping). 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.

- (221) a.  $\tilde{a}m-\emptyset$   $y\hat{u}$ :  $d\hat{u}y\hat{\sigma}-\emptyset$  who?=Foc millet pound.Pfv-3SgSbj 'Who [focus] pounded the millet (ears)?'
  - b.  $f \ddot{a}: t \dot{u} m \dot{a} = m$   $y \hat{u}:$   $d \dot{u} y \dot{o} \emptyset$ Fatouma=Foc millet pound.Pfv-3SgSbj 'It was Fatouma [focus] who pounded the millet (ears).'
  - c. [kɔ̂:<sup>n L</sup> njé] dùyɔ̂-Ø
    [thing<sup>L</sup> what?] pound.Pfv-3SgSbj
    'What [focus] did she pound?'
  - d. án-dá: yû: dùyò-∅ where? millet pound.Pfv-3SgSbj 'Where [focus] did she pound the millet (grain spikes)?'

The **paradigm** is (222), using dùyó- 'pound (grain spikes)' and 16- 'go'. In the 1Pl and 2Pl, the dying-quail (in)tonation (...) 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.

### (222) Paradigm of unsuffixed perfective (after {L}-toned stem)

category	suffix	'pound'	'go
1Sg	-ŷ	dùyò-ỳ	lò-ỳ
2Sg	-ẁ	dùyò-ẁ	lò-ẁ
1Pl	-ỳ∴	<i>dùyò-ỳ∴</i> [dùjô→j]	<i>lò-ỳ∴</i> [lồ→j]
2Pl	-ẁ∴	<i>dùyò-ẁ∴</i> [dùjô→w]	<i>lò-ẁ∴</i> [lồ→w]

```
3Sg/Inan -\varnothing dùyò-\varnothing lò-\varnothing 3Pl -bó ~ -bò dùyò-bó ~ dùyò-bò lò-bó ~ lò-bò
```

Note the zero 3Sg, with no lengthening of the final vowel. The 3Pl suffix is often heard as H-toned  $-b\delta$  in elicitation, and it was heard as such in some textual examples. However, L-toned  $-b\delta$  is also possible, especially when clause-final (pre-pausal). One speaker featured in the texts pronounced the 3Pl suffix as  $-b\delta$  ( $-b\delta$ ) with  $-b\delta$  in the plains villages such as Dianwely and  $-b\delta$  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.

```
(223) a. i sìyò-Ø
1SgObj hit.Pfv-3SgSbj
'He/She hit me.'
```

```
b. ér<sup>n</sup>é sùyò-ỳ
3SgObj hit.Pfv-1SgSbj
'I hit-Past him/her.'
```

#### 10.2.1.2 Unsuffixed perfective with lexical tones, 3Sg -w, 3Pl -mà

A distinct unsuffixed perfective, this time with lexical tone melody, has the pronominal-subject paradigm (224). The pronominal endings are all L-toned.

#### (224) Paradigm of alternative unsuffixed perfective (lexical tones)

category	suffix	'pound'
1Sg 2Sg	-ỳ -ẁ	dùyó-ỳ dùyó-ẁ [homophonous with 3Sg]
1Pl 2Pl	-ỳ∴ -ẁ∴	dùyó-ỳ∴ dùyó-ẁ∴
3Sg/Inan 3Pl	-ẁ -mà	dùyó-w [homophonous with 2Sg] dùyó-mà

This paradigm is unusual. For some verbs, the 1st/2nd 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  $-\hat{w}$  (Sg) and  $-m\hat{a}$  (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 §16.1.2 for clauses ending in  $-\dot{w}$   $k\dot{u}$   $d\dot{e}$  and  $-\dot{w}$   $d\dot{e}$ . However, the distinction between main clause (in a narrative sequence) and a subordinated clause is not very great in BenT discourse.

In addition,  $-\dot{w}$  is the stative 3Sg subject suffix, and  $-m\dot{a}$  also appears in the 3Pl subject form of the experiential perfect.

A textual example of 3Pl -mà is ló-mà 'they went' in line 7 of (684) in the sample text. For more 3Sg and 3Pl examples see (550a-c) in §17.1.1.2.

The clearest 1st/2nd 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.

```
n\check{u}-\mathring{y}^n
(225)
                  kálà]
                          [ὴgú
                                         kày]
                                                                        dá:-wó,
        [1Sg
                 tool
                          [Prox.Inan
                                        Top]
                                                  hear.Pfv-1SgSbj
                                                                        a.little,
         Γú
                                   bàrù-m
                     mâ:]
        [2Sg
                     Dat]
                                   help-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.  $d\hat{u}w\delta$ - $\hat{y}$  'I (have) left' and  $t\delta r\delta$ - $\hat{y}$  'I (have) pounded'. All such 1st/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 ( $\delta y\delta$ - $\delta k$ - $\delta$ 

The greeting phrase  $j\hat{a}m \ d\hat{e}r^n \hat{\epsilon} - \hat{w}^n$  ('peace' plus 'you-Sg spent day'), see (653) in the sample text, is another probable example.

# 10.2.1.3 Variant third-person perfective *Cv*:- with <HL> tone

Some *Cv*- verbs have a variant third-person perfective with <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).

```
(226)
                     gloss
                                    <HL> perfective
         stem
                                                             comment
                     'give'
                                    nî:-
         ní-
                     'go out'
                                    gô:-
         gŏ-
                     'arrive'
                                    dô:-
         dž-
                     'be tired'
                                                             (see §15.2.1.4)
         dě-
                                    d\hat{\varepsilon}:-
                     'bring'
                                                             [2005.1b.06]
         į̃ε:-
                                    jê:-
```

A 3Pl subject form has the usual 3Pl perfective allomorph  $-b\hat{o}$ , as in  $n\hat{i}$ :- $b\hat{o}$  'they gave'. However, an informant rejected all potential 1st/2nd person subject combinations.

It is likely that the various  $\langle HL \rangle$ -toned perfective-system inflectional suffixes, such as perfective-1b  $-t\hat{\imath}$ :- $\varnothing$  and recent perfect  $-j\hat{\varepsilon}$ :- $\varnothing$  (shown here in their lengthened 3Sg forms), originated as similar formations (§10.2.1.5-8).

Textual examples are in (227). (227c) suggests that the <HL> form (like the regular unsuffixed perfective) may occur in clauses with a focalized constituent.

```
(227) a. s\grave{u}:-d\acute{t}y\acute{a}y [b\^{u}: \ ^Lm\grave{a}:] francolin^L-thigh [3Pl \ ^LDat] g\grave{o}-l\acute{o} go.out-Caus ^{HL}give.Pfv-3SgSbj 'She took out and gave them the francolin thigh.' [2005.2a.06]
```

```
^{\mathrm{HL}}d\hat{\mathfrak{I}}:-\emptyset,
b. iš:<sup>n</sup>-m
                     νě
                                  HLarrive.Pfv-3SgSbj
    hare-AnSg
                     come
    ſyĚ
                  á
                               dó-ŵ
                                                          kù
                                                                    dè]
                               arrive.Pfv-Ppl.Inan
    come
                  3ReflS
                                                          Def
                                                                    if]
     'Hare came and arrived. When he had come and arrived, ...' [2005.2a.07]
```

c. ngu = m [ $\partial r^n \partial : -[Io - v]$  ku]  $mL j\hat{e} : -\emptyset$  Prox.Inan=Foc [outback<sup>L</sup>-[go-VblN] Def]  $mL j\hat{e} : -\emptyset$  Prox.Inan=Foc [outback<sup>L</sup>-[go-VblN] Def]  $mL j\hat{e} : -\emptyset$  HL bring.Pfv-3SgSbj  $mL j\hat{e} : -\emptyset$  (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 §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  $t\acute{a}\eta g\ifmmode{i}$ - with a vague sense (here glossed simply as 'do'), combined with a preceding chained VP. The unusual feature here is the {HL} tone pattern, which is reminiscent of the monosyllabic  $C\acute{v}$ :- perfectives discussed in the preceding section. In (228b),  $t\acute{a}\eta g\ifmmode{i}$ - is phonetically reduced to  $t\acute{a}\eta$ - in allegro speech.

```
(228) a. [kú HL érìm kù]
[InanPoss HL sweetness Def]

lóyó láwá táŋgì-Ø
overflow pass do.Pfv-3SgSbj
'Its tastiness was extreme.' [2005.2a.07]
```

```
<sup>L</sup>này<sup>n</sup>]
b. bày
             [àŋây<sup>n</sup>
                                                           ti = n
                                     [bê:n
                                                dùwś
    well
             [how?
                          Inst]
                                     ſΒ
                                               leave
                                                           Perf=and.SS]
    bû:
                 ínjírí
                             yàyá
                                         tâη-bờ
                                        do.Pfv-3PlSbj
    3PlSbi
                 get.up
                             run
    '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 {HL} pattern in *tángì*- suggests a connection with Jamsay *táŋà*:, 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 *táŋá*- with similar meanings. In both languages the {HL}-toned perfective form of this verb is unique. Togo Kan *táŋá* yè with L-toned form of yě 'go' corresponds to Jamsay *táŋà*: in conditionals and points to an original verb-chain.

A variant 3Sg form, apparently perfective, with **final short** *i* replacing a lexical midheight vowel is attested in (229), if correctly analysed.

```
(229) áywà [lòsô: kù] dùr<sup>n</sup>ì-Ø
well [foot Def] follow.track.Pfv-3SgSbj
'Well, she went following the tracks.' [2005.2a.07]
```

# 10.2.1.5 Perfective-1a :-rè-, perfective-1b -tî-

The perfective-1 is a suffixally marked perfective. It has two versions, perfective-1a :-rè- (which lengthens the preceding vowel), and perfective-1b -tî-. 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 auxiliary 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.

```
(230) a. ló:-rè-Ø
go-Pfv1a-3SgSbj
'He/She went.' (ló-)
b. bàmàkó ló:-rè-Ø
Bamako go-Pfv1a-3SgSbj
'He/She went to Bamako.'
c. éw-yé:-r-à:
sit.down-MP-Pfv1a-3PlSbj
'They sat down.' (éw-yé-)
d. tégé:-rè-Ø
become.big-Pfv1a-3SgSbj
'He/She has grown up.' (tégé-)
```

Some other verbs taking :- $r\dot{e}$ - include  $\dot{u}r\dot{o}$ - 'go up',  $g\dot{o}$ - 'go/come out',  $y\dot{a}y\dot{a}$ - 'fall (down)',  $tiw\dot{e}$ - 'die', and adjectival inchoatives like  $j\dot{e}m$ - $d\dot{e}$ - 'become black' and  $b\dot{a}r^n\dot{a}$ - 'become red'.

Cv- verbs show their lexical /H/ or /LH/ melody in the perfective-1a. Examples of /H/ are  $n\acute{a}$ :- $r\grave{e}$ - 'spent night' ( $n\acute{a}$ -) and  $l\acute{o}$ :- $r\grave{e}$ - 'went' ( $l\acute{o}$ -). Examples of /LH/ are  $g\acute{o}$ :- $r\grave{e}$ - 'went out' ( $g\acute{o}$ -),  $d\acute{o}$ :- $r\grave{e}$ - 'arrived' ( $d\acute{o}$ -), and  $b\acute{e}$ :- $r\grave{e}$ - 'remained' ( $b\acute{e}$ -).

A handful of syntactically **transitive verbs** take :- $r\hat{e}$ -. They are noncanonical, non-impact transitives. An example is 'forget' (231).

```
(231) éwá: ìré:-rè-ỳ
market forget-Pfv1a-1SgSbj
'I forgot the market.' (ìré-)
```

The **paradigm** of  $:-r\hat{\epsilon}$ - has 3Pl  $:-r-\hat{a}$ :, but is otherwise regular (232).

**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', têy tégé- 'speak words', pìyê: píyé- 'shout (=give out) a shout', and má:ní- 'think (=have) a thought'. These verbs take -tî- whether or not the cognate nominal is overt.

```
(233) a. yû: dùyó-tî:-Ø millet pound-Pfv1b-3SgSbj 'He/She pounded the millet (spikes).'
```

- b.  $n\grave{a}:-[y\acute{l}-m]$   $p\acute{a}y\acute{a}-t\^{t}:-\mathcal{O}$  cow-[child-AnSg] tie-**Pfv1b**-3SgSbj 'He/She tied up the calf.'
- c. mánù màní-tí-ỳ.:
  laugh(n) laugh-**Pfv1b**-1PlSbj
  'We laughed.'
- d. sǔ:<sup>n</sup> sú<sup>n</sup>-tî:-∅ breathing breathe-**Pfv1b**-3SgSbj 'He/She breathed.'

VPs regularly expressed by a verb plus a noncognate nominal object also take -tî- (235).

```
(234) nî: dìyé-tú-ẁ water bathe-Pfv1b-2SgSbj 'You-Sg bathed.'
```

Among other verbs taking  $-t\hat{i}$  are  $n\hat{i}$  'give', perception verbs like  $y\hat{i}$  'see', reversives like  $p\hat{i}$ :- $r^n\hat{i}$  'open', and causatives like  $e\hat{w}$ -e 'cause to sit'.

The third person forms of  $-t\hat{i}$ - are 3Sg/Inan  $-t\hat{i}$ :  $\mathcal{O}$  (homophonous with 1Sg  $-t\hat{i}$ - $\hat{y}$ ), and 3Pl  $-t\hat{i}$ - $y\hat{a}$  (one could also segment this as  $-t\hat{i}y$ - $\hat{a}$ ). The 1st/2nd person forms are based on  $-t\hat{i}$ -, but the vowel assimilates to a following suffixal semivowel. Phonetically, the resulting homogranic vowel-semivowel combination monophthongizes. The **paradigm** is (235).

```
(235) category
                     form
       1Sg
                     -tí-ỳ
                               pronounced [tî:], homophonous to 3Sg
                               pronounced [tû:]
       2Sg
                     -tú-ẁ
                               pronounced [tî→]
       1P1
                     -tí-ỳ∴
       2P1
                     -tú-ẁ∴
                               pronounced [tû→]
       3Sg/Inan
                     -tî:-Ø
       3P1
                     -tí-yà (could also be written -tíy-à)
```

*péré*- or *pété*- 'jump' takes :- $r\hat{\epsilon}$ - when formally intransitive, but when a cognate nominal is added it shifts to - $t\hat{i}$ -.

```
(236) a. pété:-rè-Ø jump-Pfv1a-3SgSbj 'He/She jumped.'
b. à-pétù pété-tî:-Ø jump(n) jump-Pfv1b-3SgSbj 'He/She jumped (=made) a jump.'
```

Perfective-1b  $-t\hat{i}$ - (but not perfective-1a  $:-r\hat{e}$ -) could be interpreted morphophonologically as a chained auxiliary verb. An etymological connection with the verb  $t\hat{i}$ - 'send' or 'dump out' is likely ( $t\hat{i}$  'pour on' is an improbable candidate); Donno So has especially relevant comparative data. In some constructions, a perfective-like  $t\hat{i}$ - is separated from the main verb, or is treated as the final stem in a verb chain; see §15.1.11.

Both positive perfective suffixes, 1b  $-t\hat{i}$ - and 1a  $-:r\hat{e}$ -, correspond to  $-r\hat{i}$ - 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 urs:-re-vert 'he/she went up (=mounted)' leads to the resulting state expressed by (237a). An example with a more clearly transitive verb is (237b).

```
(237) a. sŏm ùró-só-ẁ horse go.up-Reslt-3SgSbj 'He/She is mounted on the horse.'
```

```
b. [ú HL bú:dù] né-só-ẁ [2SgPoss HL money] eat-Reslt-2SgSbj 'You-Sg have eaten (= spent) your money.'
```

Resultative  $-s\hat{o}$ - is added to the bare stem of the stem, with no modification to the lexical tone melody. The **paradigm** is (238). Because the 3Sg has suffix  $-\dot{w}$ , it is **homophonous with the 2Sg**. The 3Pl is irregular.

(238)	category	form	
	1Sg 2Sg	-só-ỳ -só-ẁ	homophonous with 3Sg
	1Pl 2Pl	-só-ỳ∴ -só-ẁ∴	pronounced [sô→j] pronounced [sô→w]
	3Sg/Inan 3Pl	-só-ẁ -s-ε̂: <sup>n</sup>	homophonous with 2Sg

This suffix is undoubtedly related historically to 'have' quasi-verb  $s\acute{o}$ -, but the 2Sg, 3Sg, and 3Pl differ tonally in the two paradigms (for 'have' we get 2Sg/3Sg  $s\acute{o}$ - $\acute{w}$  and 3Pl s- $\acute{e}$ :" with H-tones). A continuing synchronic connection between the two is suggested by the fact that resultative  $-s\^{o}$ - is sometimes negated as  $-s\grave{o}$ - $1\acute{o}$ -, i.e. with the (irregular) negative form of  $s\acute{o}$ - 'have' (239).

```
(239) sŏm ùró-sò-ló-Ø horse go.up-Reslt-3SgSbj 'He/She is not mounted on the horse.'
```

Resultative  $-s\hat{o}$ - is circumscribed by competition with recent perfect  $-j\hat{\varepsilon}$ -, 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  $-s\hat{a}$ - 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.

```
(240) a. bàmàkó ló-tá-ẁ
Bamako go-ExpPf-2SgSbj
'Have you ever gone to Bamako?'
```

```
b. tà-dùŋgú-m yǐ-tá-ỳ
lion-AnSg see-ExpPf-1SgSbj
'I once saw a lion.'
c. ŋgú nǔ-tá-mà
Prox.Inan hear-ExpPf-3PlSbj
'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	
	1Sg 2Sg	-tá-ỳ -tá-ẁ	homophonous to 3Sg
	1Pl 2Pl	-tá-ỳ∴ -tá-ẁ∴	pronounced [tâ→j] pronounced [tâ→w]
	3Sg/Inan 3Pl	-tá-ẁ -tá-mà	homophonous to 2Sg

Because the 3Sg is expressed by  $-\dot{w}$ , it is **homophonous with the 2Sg**. 3Pl  $-t\acute{a}-m\grave{a}$  has the  $-m\grave{a}$  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. nĕy<sup>n</sup> né-jé-ỳ
meal eat-RecPf-1SgSbj
'I have already eaten.' (hence: 'I am not hungry')
b. láwá-jê:-Ø
pass-RecPf-3SgSbj
'It (e.g. bus) has already gone past.' (hence: 'You'll have to wait')
```

 $-j\hat{\varepsilon}$ - can be used with **perception verbs**  $n\check{u}$ - 'hear' and  $y\check{i}$ - 'see', which avoid regular perfective  $-t\hat{i}$ - and resultative  $-s\hat{o}$ -. 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.

```
(243) a. sátálà yǐ-jé-ỳ kettle see-RecPf-1SgSbj 'I have (just) seen the kettle.'
b. cìwérù nǔ-jé-ẁ∴ news hear-RecPf-2PlSbj '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 3Sg form is not homophonous with the 2Sg form.

```
(244)
           category
                                form
            1Sg
                                 -j\dot{\varepsilon}-\dot{y}
           2Sg
                                 -jé-ŵ
            1P1
                                -jέ-ỳ∴
                                               pronounced [ʤê→j]
           2P1
                                 -jé-ẁ∴
                                               pronounced [ʤê→w]
                                -j\hat{\varepsilon}:-\varnothing
           3Sg/Inan
           3P1
                                 -j-\hat{a}: (-j\hat{\varepsilon}:-b\delta) also attested in a text)
```

For  $-j\hat{\epsilon} \rightarrow$  in durative clauses in narrative, see §15.2.1.4.

### 10.2.1.9 Reduplicated perfective (Ci-plus {HL}, 3Sg - Ø)

In this form, there is an initial reduplication of the form  $C_l \hat{i}$ - (with fixed vowel  $\hat{i}$ ) or  $C_l \hat{v}_l$ - (with a copy of the first stem vowel), depending on the speaker. If the first vowel of the stem is from the set  $\{u\ o\}$  (but not o), the i of the reduplicative segment shifts to u. If the verb begins with a vowel, there is no  $C_l$  in either the reduplicative segment or the base stem. A glottal stop is heard between the two occurrences of the vowel, as in  $\hat{u}$ - $\hat{l}$ ur $\hat{o}$ - 'go up' and  $\hat{l}$ - $\hat{l}$ ew $\hat{e}$ - (varying with  $\hat{e}$ - $\hat{l}$ ew $\hat{e}$ -) 'buy'.

The reduplicative segment has L-tone (as do all such reduplicative segments in verbal morphology). The **base stem has {HL} 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 *Cv*-monosyllable like *wŏ*- 'catch' has its short vowel lengthened to permit the <HL>-tone to be expressed; see Contour-Tone Mora-Addition (§3.7.4.1). The tone overlay is illustrated in (245).

(245)	gloss	stem	reduplicated perfective
	'take'	ăy-	ì- <sup>HL</sup> ?ây-
	'catch'	wŏ-	wì- <sup>HL</sup> wô:-
	'want'	jàrá-	jì- <sup>HL</sup> jớrò-
	'buy'	έωέ-	ì- <sup>HL</sup> ?´єw`є-
	ʻgo up'	ùró-	ù- <sup>HL</sup> ?úrò-
	'go back'	píníw <sup>n</sup> í-	pì- <sup>HL</sup> pínìw <sup>n</sup> ì-

The reduplicated perfective is not common in texts. An example is (246).

The **paradigm** is (247). The suffixes are the same as those of the unsuffixed perfective. Also shown are paradigms for  $w\check{o}$ - 'catch', illustrating the lengthening of the stem vowel in 3rd person forms for Cv- monosyllables, and  $\acute{e}w\acute{e}$ - 'buy' as a more typical bisyllabic verb.

(247)	category	suffix	'catch'	'buy'
	1Sg 2Sg	-ỳ -ẁ		ì- <sup>HL</sup> ?éwè-ỳ ì- <sup>HL</sup> ?éwè-ẁ
	1Pl 2Pl	-ỳ∴ -ẁ∴	wì- <sup>HL</sup> wó-ỳ∴ wì- <sup>HL</sup> wó-ẁ∴	$i^{\text{HL}}$ $?\acute{\epsilon}w\grave{\epsilon}-\grave{y}$ .: [w $\hat{\epsilon}\rightarrow j$ ] $i^{\text{HL}}$ $?\acute{\epsilon}w\grave{\epsilon}-\grave{w}$ .: [w $\hat{\epsilon}\rightarrow w$ ]
	3Sg 3Pl	-Ø -bó∼ -bò		ì- <sup>HL</sup> ?éwè-Ø ì- <sup>HL</sup> ?éwè-bó~-bò

This form is **partially homophonous to the reduplicated stative**, which 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 (\{H\}, 3Sg - \hat{w})
```

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  $3\text{Sg} \cdot \hat{w}$ , homophonous to  $2\text{Sg} \cdot \hat{w}$  (contrast L-toned  $1\text{Sg} \cdot \hat{y}$ ).

(248)	category	suffix	'lie down'	
	1Sg 2Sg	-ỳ -ẃ	(yá) bíyè-ỳ (yá) bíyé-ẃ	[suffix H-toned; homophonous to 3Sg]
	1Pl 2Pl	-ỳ∴ -ẁ∴	(yá) bíyè-ỳ (yá) bíyé-ẃ	[bíjê→j] [bíjê→w]
	3Sg 3Pl	-ẃ -ẃ-bś	(yá) bíyé-ẃ (yá) bíyè-ẃ-bó	[suffix H-toned; homophonous to 2Sg] [suffix H-toned]

Unless there is a preceding focalized constituent (see below), the verb stem itself is **H-toned** except for the final syllable of the 1Sg 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  $-y\acute{v}$ - is omitted if it is the third syllable of the underlying stem:  $j\grave{e}\eta g\grave{i}-y\acute{i}$  'come up next to (sth)',  $y\acute{a}$   $j\acute{e}\eta g\acute{e}-\acute{w}$  'it is up against (sth)'.

The verb is **preceded by a locational element**, such as presentational  $ng\delta y$  'here's ...', a demonstrative adverb ('here', 'there', etc.), or existential  $y\acute{a}$  (which is associated with predications of location). Examples:  $y\acute{a}$   $b\acute{i}$ - $y\acute{e}$ - $w\acute{w}$  'he/she is lying down' ( $b\grave{i}$ - $y\acute{e}$ -), and  $y\acute{a}$   $n\acute{a}y''\acute{a}$ - $w\acute{w}$  'it (e.g. teapot) is up on (e.g. burner)' from  $n\acute{a}y''\acute{i}$  'be put up on'.

From dêyí- 'put down, set', the stative is yá déyá-w 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).

```
(249) [[kú HL nî:] Lwò] [nă: kù] dìmbà-ŵ-bò [[DiscDef HL cause] Lin] [cow Def] follow.Stat-3SgSbj-3PlSbj 'It's for that reason [focus] that they follow (=tend) their cattle.' [2005.1a.15]
```

```
10.2.1.11 Reduplicated stative (Ci-plus {HL}, 3Sg -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 **{HL}** 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 3Sg subject is illustrated in (250).

```
(250) a. i-HL 2éw-yè-w Rdp-HL sit-MP.Stat-3SgSbj 'He/She is sitting (in sitting position)'. [stative]
b. i-HL 2éw-yè-Ø Rdp-HL sit-MP.Pfv-3SgSbj 'He sat down.' [perfective, uncommon]
c. i-2éw-yé-m 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).

```
(251) a. i^{-\text{HL}} ?\acute{e}w-y\grave{e}-\grave{y}
Rdp-sit-MP.Stat-1SgSbj
'I am sitting (in sitting position)'. [stative]

b. i^{-\text{HL}} ?\acute{e}w-y\grave{e}-\grave{y}
Rdp-^{\text{HL}}sit-MP.Pfv-1SgSbj
'He sat down.' [perfective, uncommon]

c. i^{-2\acute{e}w-y\acute{e}-\grave{y}}
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 3Sg and 1Sg forms for diyi- 'be connected' bring this out (252).

(252) 'be connected' 3Sg 1Sg reduplicated stative 
$$di^{-HL}díy\dot{a}-\dot{w}$$
  $di^{-HL}díy\dot{a}-\dot{y}$  reduplicated perfective  $di^{-HL}díy\dot{i}-\varnothing$   $di^{-HL}díy\dot{i}-\dot{y}$  reduplicated imperfective  $di^{-di}y\acute{i}-\dot{m}$   $di^{-di}y\acute{i}-\dot{y}$ 

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 (i:-ri- '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 -ví-/-vé- 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 -yi- suffix of the bare stem has been lopped off and the remaining f:- treated as though /iyi-/ (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 \*Cv(C)Cv-yv- with mediopassive suffix \*-yv-, but segmentation is now somewhat opaque (for  $t \circ r^n i y^n i$ - the causative elicited was  $t \circ r^n i y^n i - w^n u$ -). Even if we segment the stems in (253d), there is no basis for claiming that intransitive -yv- 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.

(253)		gloss	bare stem	reduplicated stative
	a.	'stand, stop'	í:-yí-	ì- <sup>HL</sup> í-yà-w
			(segme	entation arguably <i>ì-íyà-w</i> )
		'lie down'	bì-yé-	bì- <sup>HL</sup> bí-yè-w
		'sit'	éw-yé-	ì- <sup>HL</sup> ?éw-yè-w
		'kneel'	túŋgú-yú-	tù- <sup>HL</sup> túŋgà-w

```
jì-<sup>HL</sup>jéŋgà-w
kì-<sup>HL</sup>kólà-w
b. 'be tilted'
                                      jὲηgí-
                                      kólí-
      'be hanging'
                                                                tì-<sup>HL</sup>tévà-w
      '(mat) be laid out'
                                     téyí-
                                                               tì-<sup>HL</sup>tá:rà-w
tì-<sup>HL</sup>té:là-w
c. 'be right-side up'
                                      tá:rí-
      'be arranged'
                                      tέ:lí-
                                                               tì-<sup>HL</sup>tɔ́r<sup>n</sup>à-w
                                      tớr níy ní-
d. 'squat'
                                                               bì-<sup>HL</sup>bέηgà-w
      'sit up'
                                      bèngìyí-
```

The reduplicated stative pronominal-suffix **paradigm** is (254). The 2Sg and 3Sg are homophonous. The 3Pl is built by adding the (perfective) 3Pl suffix  $-b\delta$  ( $-b\delta$ ) to the 3Sg suffix  $-\dot{w}$ . All of the pronominal endings are L-toned, unlike the case with the unreduplicated stative where only 1Sg  $-\dot{y}$  is L-toned.

```
(254)
        category suffix
                                              'sit'
                                              ì-<sup>HL</sup> ?éw-yè-y
ì-<sup>HL</sup> ?éw-yè-w
         1Sg
         2Sg
                                              ì-HL?éw-yè-y.: [ì?éwjê→j]
                     -ỳ∴
         1P1
                                              i-HL?éw-yè-w.: [ì?éwjê→w]
         2P1
                      -ẁ∴
                                            ì-<sup>HL</sup>?éw-yè-w
         3Sg
                                             ì-HL ?éw-yè-w-bɔ́~ -bɔ̀
         3P1
                      -ẁ-b5 ~ -ẁ-b3
```

## 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 -Ø- in imperfective forms.

Historically, it is possible that the ending was \*-m- throughout the paradigm (except perhaps 3Pl), and that the nasal segment has vanished in the 1st/2nd person forms.

This is the normal all-purpose imperfective form used after an overtly focalized preverbal constituent, such as a WH-interrogative (255).

```
(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).

```
(256) a. n \ge w^n = a:
                         kúwó-ỳ
            meat
                         eat.Ipfv-1SgSbj
            'I eat meat.'
        b. nàw<sup>n</sup>â:
                         kù-kúwó-ỳ
                         Rdp-eat.Ipfv-1SgSbj
            meat
            'I will eat meat.'
        c. nó-m
            drink-Ipfv.3SgSbj
            '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 /H/ is preserved (all prosodic weights);
  - b. {H} overlay erases /LH/ melody:  $C\check{v}$  and  $C\check{v}y^n$  monosyllabics, prosodically light bisyllabics ( $C\hat{v}C\acute{v}$  and  $C\hat{v}NC\acute{v}$ , but not  $C\hat{v}:C\acute{v}$ ) ending in a non-high vowel;
  - c. no change in lexical /LH/ melody: all nonmonosyllabic stems ending in a high vowel; all heavy bisyllabic (*Cv*:*Cv*), 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 {H} overlay (258c). This overlay does not apply to the frozen causative  $g\grave{o}$ - $l\acute{o}$ - 'take out, remove' or to the parallel (and semantically close)  $j\grave{o}$ - $l\acute{o}$ - '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  $Cvy^n$  verbs that lose the final semivowel.

```
(258)
                                bare stem
                                                 unsuffixed imperfective
            gloss
        a. stem already /H/-toned, no audible change, all prosodic weights
            'go'
                                16-
                                                 16-
            'tie'
                                páyá-
                                                 páyá-
            'take down'
                                sí-lé-
                                                 sí-lé-
            'go back'
                                píníwú-
                                                 píníwí-
            'cough'
                                kógúsó-
                                                 kógúsó-
```

```
C\acute{v}y^n, becoming C\acute{v}^n-
     'do, make'
                             káy<sup>n</sup>-
                                                ká<sup>n</sup>-
b. irregular monosyllabics, shift of short or long \langle \epsilon(:) \rangle to e
     'come'
                             yě-
    'bring'
                            j̃̃:-
                                                jé-
c. prosodically light /LH/-toned stem, {H} overlay applies
  C\check{v}
     'go out'
                             gŏ-
                                                gó-
     'drink'
                                                nó-
                             nž-
                             nŭ-
     'hear'
                                                nú-
  C\check{v}y^n, becoming C\acute{v}^n-
                             gǎy<sup>n</sup>-
                                                gá<sup>n</sup>-
     'put'
     'say'
                             gŭy<sup>n</sup>-
                                                gú<sup>n</sup>-
  CvCv́
                                                dúyó-
     'pound (spikes)'
                             dùyó-
     'steal'
                             gùró-
                                                gúró-
     'dance'
                                                jíyé-
                            jìyé-
    'fall'
                             yàyá-
                                                yáyá-
  CѷBCѵ́
     'split'
                             gùmbó-
                                                gúmbó-
    'roll on turban'
                             dòmbó-
                                                dómbó-
     'place in basket'
                             dùmbó-
                                                dúmbó-
     'stutter'
                             bèmbé-
                                                bémbé-
d. exceptional CvCv verbs that resist {H} overlay
  transitive/causative -l\acute{v} \sim -r\acute{v}, mediopassive -y\acute{e}):
     'take out'
                             gò-ló-
                                                gò-ló-
     'take away'
                             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
   CvCv
     'receive'
                             àwú-
                                                àwú-
    'help
                             bàrí-
                                                bàrú-
     'call'
                            nàr<sup>n</sup>í-
                                                nàr<sup>n</sup>ú-
     'cover'
                                                dèwú-
                             dèwú-
    'put down'
                             dèyí-
                                                dèyí-
    'hold'
                             wàyí-
                                                wàyí-
    'laugh'
                             màní-
                                                mànú-
   CvNCv
                             wàmbú-
                                                wàmbú-
     'uproot'
```

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)'
                           bàngìrí-
                                              bàngìrí-
  'winnow in wind'
                          nèr<sup>n</sup>ìy<sup>n</sup>í-
                                              nèr<sup>n</sup>ìy<sup>n</sup>í-
  'follow'
                           dìmbì-yí-
                                              dìmbì-yí-
```

The pronominal **paradigm** is exemplified in (259), using  $l\acute{o}$ - 'go',  $d\grave{u}y\acute{o}$ - 'pound (millet ears)', and  $p\acute{a}y\acute{a}$ - 'tie'. The 1st/2nd person forms are regular. In the third person, we get 3Sg/inanimate -m and 3Pl - $y\grave{e}$  (dialectally also - $y\grave{a}$ ).

(259)	category	ʻgo'	'pound'	'tie'
	1Sg	ló-ỳ	dúyó-ỳ	páyá-ỳ
	2Sg	ló-ẁ	dúyó-ẁ	páyá-ẁ
	1Pl	ló-ỳ∴	dúyó-ỳ∴	$p\acute{a}\gamma \acute{a}-\grave{y}$ : $[\gamma \hat{a} \rightarrow j]$
	2Pl	ló-ẁ∴	dúyó-ẁ∴	$p\acute{a}\gamma \acute{a}-\grave{w}$ : $[\gamma \hat{a} \rightarrow w]$
	3Sg/Inan	ló-ṁ	dúyó-m	páyá-m̀
	3Pl	ló-yὲ	dúyó-yè	páyá-yè

3P1 - $y\hat{\epsilon}$  is not subject to Nasalization-Spreading, hence  $n\hat{i}$ - $y\hat{\epsilon}$  '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  $\{L\}$ , the unsuffixed imperfective stem always has at least one H-tone. Lexical /H/ melody is preserved, and lexical /LH/ is either preserved or overlaid to  $\{H\}$ .

### 10.2.2.2 Reduplicated imperfective (Ci-, 3Sg -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 /H/ or /LH/. Heavier stems keep their lexical melody, either /H/ or /LH/. There is no lengthening of the short vowel of a Cv- monosyllable like  $w\check{o}$ - 'catch'.

```
(260)
       a.
          lì-ló-ỳ
           Rdp-go.Ipfv-1SgSbj
           'I will go.' (ló-)
       b. ù-?úró-ỳ
           Rdp-go.up-1SgSbj
           'I will go up.' (ùró)
       c. sù-súvó-ỳ
           Rdp-hit.Ipfv-1SgSbj
           'I will hit (it).'
       d. ì-?éwé-ỳ
           Rdp-buy.Ipfv-1SgSbj
           'I will buy (it).' (éwé-)
       e. wì-wó-m
           Rdp-catch-Ipfv.3SgSbj
           'He/She will catch.' (wŏ-)
       f. gù-gùlù-rú-m
           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-∅
                                     dó
                                             wôy,
       wide-Inch-Pfv1a-3SgSbj
                                     if
                                            all,
       mò:-tímbí:
                              jóró-ỳ∴,
       mouth-covering
                               want.Ipfv-1PlSbj,
       tímbí-tí-ỳ∴
                                       ù-?úgúró-ỳ∴
                               dè,
       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 3Sg and 3Pl are noteworthy.

```
(262) category
                  suffix
                                'go'
        1Sg
                   -\dot{y}
                                lì-ló-ỳ
        2Sg
                                lì-ló-ẁ
        1P1
                   -ỳ∴
                                lì-ló-ỳ∴
                                                [lô→j]
        2P1
                   -ẁ∴
                                lì-ló-ẁ∴
                                                [lô→w]
        3Sg
                   -m̀
                                lì-ló-m
        3P1
                                lì-ló-yè
                   -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 /LH/ for heavy stems. The reduplicated perfective and the reduplicated stative have  $\{HL\}$  tone overlay on the stem. The third person endings also distinguish the reduplicated imperfective from the others.

The 3Sg form of the reduplicated imperfective (suffix  $-\dot{m}$ ) should not be confused with a temporal adverbial construction with initial H-toned reduplication, {HL} stem overlay, and final -m, type  $i-2iy\dot{a}-m$  '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.

```
(263) a. bíré
                            bìré:-rà-ỳ∴
                            work-Prog-1PlSbj
           'We are working (now).' (bìrέ-)
       b. dànní:-rà-w
           hunt-Prog-3SgSbj
           'He/She hunts (regularly).' (dànní-)
       c. bérù-m
                            wŏ:-rà-ỳ
           goat-AnSg
                            catch-Prog-1SgSbj
           'I am catching the goat.' (wŏ-)
       d. L+HL kŭ:
                                          ùrùyó:-rà-w
           1SgPoss. HL head
                              1SgObj
                                         hurt-Pfv1a-1SgSbj
           'My head is/was hurting me' (= 'I have/had a headache')
```

The **paradigm** is (264). The 3Sg is homophonous to the 2Sg, as in stative inflections. The 3Pl adds  $-b\hat{\sigma} \sim -b\hat{\sigma}$  to the 3Sg.

```
(264) category
                  suffix
       1Sg
                  :-rà-ỳ
       2Sg
                  :-rà-ẁ
       1P1
                              pronounced [râ→j]
                  :-rà-ỳ∴
       2P1
                  :-rà-ẁ∴
                               pronounced [râ→w]
       3Sg
                  :-rà-w
       3P1
                  :-rà-w-b5 (often heard as :-rà-w-b5)
```

Cv- verbs reveal their lexical /H/ or /LH/ tone in this form. Attestations of /LH/ tone are: yĕ:-rà- 'comes' (yĕ-), wŏ:-rà- 'catches' (wŏ-), gŏ:-rà- 'goes out' (gŏ-), nŭ:-rà- 'hears' (nŭ-), gă:-rà- 'slashes (rice)' (gă-), yĭ:-rà- 'sees' (yĭ-), yŏ:-rà- 'weeps' (yŏ-), dă:-rà- 'endures' (dă-), bă:-rà- 'fills' (bă-), jŏ:-rà- 'abounds' (jŏ-), dĕ:-rà- 'gets tired' (dĕ-), mă:-rà- 'gives shape to' (mă-), jŏ:-rà- 'picks' (jŏ-), and nŏ:-rà- 'drinks' (nŏ-).

Examples of /H/ tone are  $n\acute{u}:-r\grave{a}$ - 'goes in' ( $n\acute{u}$ -),  $1\acute{o}:-r\grave{a}$ - 'goes' ( $1\acute{o}$ -),  $t\acute{t}:-r\grave{a}$ - 'sends' ( $t\acute{t}$ -),  $t\acute{a}:-r\grave{a}$ - 'spends the night' ( $n\acute{a}$ -), and  $n\acute{e}:-r\grave{a}$ - 'eats (meal)' ( $n\acute{e}$ -).

/LHL/ toned jɛ̃:- 'bring' has jɛ̃:-rà- 'brings'.

The progressive verb form is optionally preceded by existential particle  $y\acute{a}$  (§11.2.2.1). For an example see (89a) in §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 -ri. Most imperfective positive categories correspond to imperfective negative -m- $(n)d\hat{o}$ -.

## 10.2.3.2 Perfective negative (-rí-) and related forms

The basic perfective negative is formed with suffix -rí-, before which a stem has {L} overlay.

The /r/ is subject to **Nasalization-Spreading**, becoming  $r^n$  after a nasal, in  $nu^L - r^n i - \emptyset$  'he/she did not hear',  $b \grave{a} r^n \grave{a}^L - r^n i -$  'did not beat (tomtom)',  $d \grave{u} w^n \grave{b}^L - r^n i -$  'did not finish (was not used up)', and  $n\grave{i} : y^n \grave{i}^L - r^n i -$  'did not sleep'. Nasalization-Spreading **does not apply to the 3Pl** form  $-r - \acute{a}$ , hence  $n\grave{u}^L - r - \acute{a}$  'they did not hear'.

Verbs of the shape  $Cvy^n$ - combine  $/y^n$ / and suffixal /r/ as  $n : g\dot{u}^L$ - $n\acute{l}$ - did not say'  $(g\check{u}y^n$ -),  $g\dot{a}^L$ - $n\acute{l}$ - 'did not put'  $(g\check{a}y^n$ -),  $k\dot{a}^L$ - $n\acute{l}$ - 'did not do'  $(k\acute{a}y^n$ -), see §3.5.4.3.

*bèré-* 'get, obtain' forms *bèl<sup>L</sup>-lí-* 'did not get' (showing syncope of the stem-final vowel and /rr/ replaced by *II*, §3.5.4.5). By contrast, other verbs with final r plus vowel have unsyncopated forms:  $tòrò^L-ri-$  'did not pound',  $sò:rù^L-ri-$  'did not slide in',  $p\`ere^L-ri-$  'did not clap'. The verb t'ali- 'transform, convert' has  $t\`al^L-li-$  as a variant of  $t\`ali-$  'c' 'did not

transform', showing that when a short high vowel is syncopated the resulting /lr/ cluster is realized as II. One might use this datum to argue that the conversion of /r...r/ to I...I in  $b\grave{e}I^L$ -II-(see beginning of this paragraph) has an intermediate (dissimilated) stage /l...r/.

```
(265) a. yè<sup>L</sup>-rí-Ø come<sup>L</sup>-PfvNeg-3SgSbj 'He/She didn't come.'
b. ú yì<sup>L</sup>-rí-ŷ 2SgObj see<sup>L</sup>-PfvNeg-1SgSbj 'I didn't see you-Sg.'
c. bû: pàyà<sup>L</sup>-rú-ẃ 3PlObj tie<sup>L</sup>-PfvNeg-2SgSbj 'You-Sg didn't tie them up.'
d. lò<sup>L</sup>-r-á go<sup>L</sup>-PfvNeg-3PlSbj 'They didn't go.'
```

The irregular /LHL/ toned 'bring' ( $j\tilde{\epsilon}$ :-) is not subject to the {L} overlay on the stem. Its perfective negative is 3Sg subject  $j\tilde{\epsilon}$ :-tri- $\varnothing$  prepausally, with <LH> tone on the stem and downstepped H-tone on the suffix. It is  $j\tilde{\epsilon}$ :-ri-, with <LHL> tone on the stem, before a clause-final particle or with a nonzero pronominal suffix.

The pronominal-subject paradigm is (266).

## (266) Paradigm of perfective negative

```
category suffix
1Sg
                         pronounced [rî:]
           -rú-ẃ
2Sg
                         pronounced [rú:]
P1
           -rí-ỳ∴
                         pronounced [\hat{r}] \rightarrow ]
                         pronounced [rû→]
2P1
           -rú-ẁ∴
3Sg/Inan
          -rí-Ø
3P1
                         (not subject to Nasalization-Spreading)
           -r-á
```

Note the phonetic monophthongization in the 1Sg and 2Sg, and the H-tone of the 2Sg form. 3Sg/Inan -rí-Ø does not lengthen its vowel.

The **experiential perfect negative** is formed by adding perfective negative allomorph -li-to an L-toned form of experiential perfect  $-t\hat{a}$ -, resulting in  $-t\hat{a}^L$ -li. The preceding stem also has  $\{L\}$  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 -ri-.

```
(267) a. bàmàkó lò-tà L-lí-ỳ
Bamako go-ExpPf-Neg-1SgSbj
'I have never gone to Bamako.'
b. ŋgú yì-tà L-l-á
ProxInan see-ExpPf-PfvNeg-3PlSbj
'They have never seen this (before).'
```

The synchronically puzzling shift of r to l is best explained historically, since cognates of  $-t\hat{a}$ - contain a rhotic (e.g. Jamsay  $-t\hat{\epsilon}r\hat{\epsilon}$ -), and since underlying /rv-r/ sequences in verbal morphology may shift one or both rhotics to l (§3.5.4.4-5).

Perfective negative -ri- may follow recent perfect  $-j\hat{e}$ -, in the sense 'have not finished VP-ing'. In this combination, the main verb stem keeps its lexical tone, but  $-j\hat{e}$ - drops its tone to  $j\hat{e}^L$ -. In other words, the main verb and  $j\hat{e}$ - behave tonally like two verbs in a chain. The pronominal endings are the same as for simple -ri-.

```
(268) wóngóró wàrá-jɛ̂¹-rí-ỳ
farming farm-RecPf-PfvNeg-1SgSbj
'I haven't (yet) finished farming.'
```

An explicit negation of resultative  $-s\hat{o}$ - (cf. quasi-verb  $s\hat{o}$ - 'have') is not common in texts, but it is elicitable. The negative paradigm is identical to that of 'have', thus  $-s\hat{o}$ - $l\hat{o}$ - 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

```
category
           suffix
1Sg
            -sò-ló-ỳ
2Sg
            -sò-ló-ẃ
1P1
            -sò-ló-ỳ∴
                           pronounced [lô→j]
2P1
            -sò-ló-ẁ∴
                           pronounced [lô→w]
3Sg/Inan -sò-ló-∅
3P1
            -sè-n€
                           alternative segmentaton: -s-\hat{\epsilon}-n-\hat{\epsilon}
```

#### 10.2.3.3 Imperfective negative $(-\dot{m}-d\acute{o}-, :-r\grave{a}=r\acute{a}-)$

The imperfective negative is based on  $-\dot{m}-d\acute{o}$ , except for an irregular 3Pl form  $-\dot{m}-n-\acute{e}$ . In careful speech,  $-\dot{m}-d\acute{o}$  is heard as  $[\dot{m}\dot{n}d\acute{o}]$ , 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 3Sg -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  $-\dot{m}$ - $d\acute{o}$ - is directly built on the unsuffixed imperfective (positive), specifically on the 3Sg form of the latter, merely adding a negative suffix  $-d\acute{o}$ . Thus  $d\grave{u}y\acute{o}$ - 'pound (millet ears)', unsuffixed imperfective (positive)  $d\acute{u}y\acute{o}$ - (3Sg form  $d\acute{u}y\acute{o}$ - $m\grave{m}$ ) with H-toned stem, and imperfective negative  $d\acute{u}y\acute{o}$ - $m\grave{m}$ - $d\acute{o}$ - with the same tones. In interlinears I gloss -m- in this combination as "Ipfv" and  $-d\acute{o}$ - as "Neg."

The **paradigm** is (270). Segmentation of the irregular 3Pl form is again difficult.

## (270) Paradigm of imperfective negative

```
category suffix

1Sg -m-dó-ŷ
2Sg -m-dó-ŵ

1P1 -m-dó-ŷ∴
2P1 -m-dó-ŵ∴
3Sg/Inan -m-dó-Ø
3P1 -m-n-é
```

A similar  $= \dot{m} = d\dot{a}$  is the negation of the 'it is' clitic  $= \dot{m}$  (§11.2.1.4).

The HLH tone sequence involving stem plus  $-\dot{m}-do$ - is pronounced with a lower pitch on -do- 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).

```
(271) a. tê: nó-m-dó-Ø tea drink-Ipfv-Neg-3SgSbj 'He/She doesn't drink tea.'
b. ŋgú-rù bíré bíré-m-n-é here work(n) work-Ipfv-Neg-3PlSbj 'They don't work here.'
```

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  $k \grave{o} y$ .

**Progressive** :- $r\dot{a}$ -, whose positive conjugation already shows stative features (3Sg - $\dot{w}$ ), is negated by adding conjugated stative negative = $r\dot{a}$ -, resulting in :- $r\dot{a}$  =  $r\dot{a}$ -. The verb stem retains the same tones as in the positive.

```
(272) a. iy\acute{e} d\grave{u}w^n\acute{o}:-r\grave{a}=r\acute{a}-\varnothing today leave-Prog=StatNeg-3SgSbj 'Nowadays it (=water) doesn't cease (=run out).' [2005.1a.04]
```

```
b. [èsù L bû: jɛ̃:-rà-w]
[good 3PlSbj bring-Prog-Pp.Inan]

yǐ:-rà = rá-ỳ.:
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

1Sg : -r\hat{a} = r\hat{a} - \hat{y}
2Sg : -r\hat{a} = r\hat{a} - \hat{w}

Pl : -r\hat{a} = r\hat{a} - \hat{y} : pronounced [r\hat{a} \rightarrow j]
2Pl : -r\hat{a} = r\hat{a} - \hat{w} : pronounced [r\hat{a} \rightarrow w]
3Sg/Inan : -r\hat{a} = r\hat{a} - \emptyset
3Pl : -r\hat{a} = r\hat{a} - \delta
```

### 10.2.3.4 Stative negative ( $=r\acute{a}$ - without reduplication)

Compare positive example (274a), from §10.2.1.11 above, with its negative counterpart (274b).

```
(274) a. i-?éw-yè-y
Rdp-sit-MP.Stat-1SgSbj
'I am sitting.'
b. èw-yè-ŵ = rá-ŷ
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 -ri. Negative clitic  $= r\acute{a}$ - is added to  $-\mathring{w}$ -, which could be identified morphemically with  $-\mathring{w}$ , the 3Sg subject allomorph used in the stative positive (cf. i-? $\acute{e}w$ - $y\grave{e}$ -w 'he/she is sitting'). However,  $-\mathring{w}=r\acute{a}$ - is the basis for the entire stative negative **paradigm** (275), not just the 3Sg, so I gloss it in this combination as "Stat" in interlinears.

```
(275) category suffix

1Sg 	 -\dot{w} = r\acute{a} - \dot{y}

2Sg 	 -\dot{w} = r\acute{a} - \acute{w} 	 note H-tone
```

```
1Pl -\dot{w} = r\acute{a} - \dot{y}: pronounced [r\hat{a} \rightarrow j]

2Pl -\dot{w} = r\acute{a} - \dot{w}: pronounced [r\hat{a} \rightarrow w]

3Sg/Inan -\dot{w} = r\acute{a} - \varnothing

3Pl -\dot{w} = r\acute{a} - b\acute{o}
```

The H-toned 2Sg 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).

```
(276) category suffix

\begin{array}{ccc}
1Sg & -\hat{y} \\
2Sg & -\hat{w} \text{ (sometimes H-toned } -\hat{w})
\end{array}

Pl -\hat{y}.:

2Pl & -\hat{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 3Sg 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 -ri- and in the stative negative with -ra-, but here the evidence is split. The 1Sg combination has falling tone in both (-ri- $\dot{y}$ , -ra- $\dot{y}$ ) suggesting an intrinsic L-tone on 1Sg -y. However, the 2Sg combinations have H-tone (-ru- $\dot{w}$ , -ra- $\dot{w}$ ), implying that the tone has spread from the negative suffix to the 2Sg suffix. The 1Pl and 2Pl 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.  $1\text{Sg} - \hat{y}$  undergoes monophthongization with a preceding i, both in the marked perfective  $-t\hat{i}-\hat{y}$  and in the perfective negative  $-r\hat{i}-\hat{y}$ . The original falling tone of the AN suffix is preserved in the <HL>-toned monophthong. A parallel monophongization with 2Sg - w occurs in the marked perfective-1b  $-t\hat{u}-\hat{w}$  and in the perfective negative  $-r\hat{u}-\hat{w}$ ).

For **3Sg/Inan**, the allomorphs are as in (277).

(277)		3Sg/Inan allomorph	AN category	suffix + 3Sg/Inan
	a.	-Ø	unsuffixed perfective reduplicated perfective perfective-1a perfective negative imperfective negative stative negative	-Ø -Ø :-rè-Ø -rí-Ø -m̀dó-Ø -ẁ-rá-Ø
	b.	-∅ (long vowel)	perfective-1b	-tî:-Ø
			recent perfect	<i>-jĉ:-∅</i>
	c.	$-\dot{W}$	experiential perfect resultative imperfective stative reduplicated stative	-tá-ẁ -só-ẁ :-rà-w -ẁ -ẃ
	d.	-m̀	unsuffixed imperfective reduplicated imperfective	-m̀ -m̀

The  $-\dot{w}$  in (277c) suggests a morphological connection with -w as an adjectival suffix (inanimate). In verbal morphology,  $3\text{Sg} - \dot{w}$  entails **homophony between 3Sg and 2Sg**. 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 1Sg, which monophthongizes from  $/-t\hat{\imath}-y/$  to phonetic  $[t\hat{\imath}:]$ .

As with the first/second person suffixes, one can argue whether the nonzero 3Sg allomorphs,  $-\dot{w}$  and  $-\dot{m}$ , 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  $3Pl :-r-\hat{a}$ : is from perfective-1a :-r\hat{e}- and not from progressive :-r\hat{a}-.

(278)		3Pl allomorph	AN category	AN suffix + 3P1
	a.	<i>-bó</i> ( <i>-bò</i> )	unsuffixed perfective progressive reduplicated perfective reduplicated stative stative negative	-bó ~ -bò :-rà-w-bó -bó -ẁ-bó -ẁ-rá-bó
	b1.	à (-yà)	perfective-1a perfective-1b recent perfect perfective negative	:-r-à: (< :-rè-) -tí-yà (< -tî-) -j-â: (< -jê-a) -r-á (< -rí-)
	b2	. <i>-y</i> è	unsuffixed imperfective reduplicated imperfective	-yè -yè

```
b3. -\hat{\epsilon} imperfective negative -\dot{m}-n-\hat{\epsilon} (< -\dot{m}-d\hat{o}-)
c. -m\hat{a} experiential perfect -t\hat{a}-m\hat{a}
```

One could perhaps group (278b1-b3) together into a set  $\{-\grave{a} - \grave{e} - y\grave{a} - y\grave{e}\}\$ , but the phonological relationships among the variants are opaque. The quite distinct form  $-b\delta$  (278a) resembles the 3Pl independent pronoun  $b\hat{u}$ ; while the allomorph  $-m\grave{a}$  (278c) could be identified with the plural perfective participal suffix (in relative clauses).

-b5 is basically H-toned. The other 3Pl 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 $= b\hat{\varepsilon}$ - ( $= b\hat{\varepsilon}$ -) and its conjugated forms

The past clitic  $=b\hat{\epsilon}$ - or  $=b\hat{\epsilon}$ - repositions the deictic center from which an eventuality is observed into a past time frame. The L-toned, always short-voweled form  $=b\hat{\epsilon}$ - is used in certain combinations where it follows an L-toned verb form. The form  $=b\hat{\epsilon}$ - with falling tone, which expands to  $=b\hat{\epsilon}$ :  $\varnothing$  when followed by zero 3Sg suffix (by Contour-Tone Mora-Addition, §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  $=b\hat{e}$ - might really just be a downstepped version of <HL>-toned  $=b\hat{e}$ -, but careful listening indicated that  $=b\hat{e}$ - is entirely L-toned. The pitch does not rise from the preceding L-tone, and there is no falling tone internal to the syllable  $=b\hat{e}$ -.

 $=b\hat{\epsilon} \sim =b\hat{\epsilon}$  is conjugated for pronominal subject, in two paradigms that occur in distinct constructions. The **regular paradigm** including tones is (279). The 1st/2nd person forms are based on  $=b\hat{\epsilon}$ - and are regular in form. 3Sg/Inan  $=b\hat{\epsilon}$ :—Ø has a long, <HL>-toned vowel. 3Pl  $=b-\hat{a}$ : can be interpreted as the contraction of  $=b\hat{\epsilon}$ :— (or presurface  $/=b\hat{\epsilon}$ -/) with 3Pl -a.

The paradigms of the two variant forms of the clitic are in (279).

```
(279) category <HL>-tone form L-tone variant
```

```
=b\acute{\varepsilon}-\grave{y}
                                                                      =b\hat{\varepsilon}-\hat{y}
1Sg
                           =b\acute{\varepsilon}-\grave{w}
                                                                      =b\hat{\varepsilon}-\hat{w}
2Sg
1P1
                           =b\acute{\varepsilon}-\grave{y}.:
                                                                      =b\hat{\varepsilon}-\hat{y}.: both pronounced [b\hat{\varepsilon}\rightarrow j]
                                                                      =b\hat{\varepsilon}-\dot{w}.: both pronounced [b\hat{\varepsilon}\rightarrow w]
2P1
3\text{Sg/Inan} = b\hat{\varepsilon}:-\emptyset
                                                                      =b\grave{\varepsilon}-\varnothing
3P1
                           =b-\hat{a}:
                                                                       =b-\hat{a}:
```

The first and second person forms are unremarkable. In the 3Sg, the  $\langle HL \rangle$ -tone form has a long vowel as noted above. The 3Pl forms involve a suffixed /-a/ that contracts with the  $/\epsilon$ / 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 3Sg and 3Pl 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 3Pl 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  $-\hat{m}$  suffix that, in the simple inflected paradigm, expresses 3Sg/inanimate subject, to all subject categories except 3Pl. So we see  $-\hat{m} = b\hat{\epsilon}$ - for example with 1Sg (280a), 1Pl (280b), and 3Sg subjects (280c). The past clitic is L-toned because it follows the L-toned suffix  $-\hat{m}$ . Before the past clitic, I gloss  $-\hat{m}$ - simply as "Ipfv" in interlinears. In the 3Pl, the regular 3Pl imperfective suffix  $-y\hat{\epsilon}$ - appears before the past clitic, so there is double marking of the 3Pl category (280d).

### (280) Past unsuffixed imperfective

```
a. b\acute{n}\acute{r}\acute{e} b\acute{n}\acute{r}\acute{e}-\grave{m}=b\grave{e}-\grave{y}
work(n) work-Ipfv=Past-1SgSbj
'I was working.'
```

```
b. bir\acute{e} bir\acute{e}-\grave{m}=b\grave{e}-\grave{y}. 'We were working.' c. bir\acute{e} bir\acute{e}-\grave{m}=b\grave{e}-\varnothing 'He/She was working.' d. bir\acute{e} bir\acute{e}-v\grave{e}=b-\grave{a}: 'They were working.'
```

The morpheme sequence  $-\dot{m} = b - \dot{a}$ : does not belong here; instead, it is a variant of  $-m\dot{a} = b - \dot{a}$ : (3Pl past perfect), §10.4.1.3.

A textual example of  $-y\hat{\epsilon} = b - \hat{a}$ : is (281).

```
(281) nàŋàná: ɔ̀ŋgɔ̀rɔ̀-urò yĕ táŋgú-mò,
entirely husband<sup>L</sup>-house come transfer.Ipfv-3SgSbj,
áŋày<sup>n</sup> ká<sup>n</sup>-yɛ̀ = b-à:
thus do.Ipfv-3PlSbj=Past-3PlSbj
'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  $-\dot{m}$ - $d\dot{o}$ -. This form of the suffix complex occurs in all subject categories except 3Pl. The latter adds the 3Pl form of the past clitic to the already 3Pl suffix complex  $-\dot{m}$ -n- $\dot{\varepsilon}$ -. Since  $-\dot{m}$ - $d\dot{o}$ - and 3Pl  $-\dot{m}$ -n- $\dot{\varepsilon}$ - end in a H-tones, the past clitic takes its falling-tone form.

### (282) Past imperfective negative

```
a. bíré bíré-m̀-dó = bé-ỳ work(n) work-Ipfv-Neg=Past-1SgSbj 'I was not working.'
b. bíré bíré-m̀-dó = bé-ỳ.: 'We were not working.'
c. bíré bíré-m̀-dó = bê:-Ø 'He/She was not working.'
d. bíré bíré-m̀-n-é = b-â: '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  $-\dot{w}$ -, which has generalized from 3Sg stative  $-\dot{w}$ , but here also has **H-tone**, so the past clitic has its falling-toned form. The 3Pl has  $-\dot{w}$ - before the past clitic, as do the other pronominal categories. The  $-\dot{w}$ - 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  $e\dot{w}$ - $\psi$ - 'sit'.

#### (283) Past stative

```
a. (î-?)éw-yé-ẃ=bé-ŷ
(Rdp-)sit-MP-Stat=Past-1SgSbj
'I was sitting.'
b. (î-?)éw-yé-ẃ=bé-ŷ.: 'We were sitting.'
c. (î-?)éw-yé-ẃ=bê:-Ø 'He/She was sitting.'
d. (î-?)éw-yé-ẃ=b-â: 'They were sitting.'
```

Negative counterparts add **stative negative** clitic =  $r\acute{a}$ - before the past clitic. The stative negative clitic controls {L} overlay on the preceding stem. Thus  $\grave{e}w-y\grave{e}-w=r\acute{a}=b\acute{e}-\grave{y}$  '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 (§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  $y\check{e}$ - 'come' that have /LH/ tones in some similar syllabic positions have **H-tone** (284).

### (284) Past perfect (first/second person)

- a.  $y\acute{\varepsilon}-\grave{w}=b\grave{\varepsilon}-\grave{w}$ come-2SgSbj=Past-2SgSbj 'You-Sg had come.'
- b.  $y\hat{\varepsilon}-\hat{y}$ .: =  $b\hat{\varepsilon}-y$ .: come-1PlSbj=Past-1PlSbj 'We had come.'
- c.  $k\acute{u}$   $g\grave{o}-l\acute{o}-\grave{y}=b\grave{\varepsilon}-\grave{y}$ Inan.Sg go.out-Caus-1SgSbj=Past-1SgSbj 'I had taken it out.'

In the past perfect, **special third person suffixes** are used in the verb preceding the clitic:  $3\text{Sg/inanimate} - \hat{w}$ - (285a), and  $3\text{Pl} - m\hat{a}$ - or less often  $-\hat{m}$ - (285b). The 3Pl suffix variant  $-m\hat{a}$ - is identical in form to the plural perfective participial suffix  $-m\hat{a}$ . In this light, one might connect the  $3\text{Sg} - \hat{w}$ - suffix to the inanimate perfective participial suffix  $-\hat{w}$ , though it seems odd that a specifically inanimate morpheme would generalize to animate 3Sg. The 3Pl variant  $-\hat{m}$ - could cause the uninitiated to misparse a 3Pl past perfect as a 3Pl past imperfective. Thus  $16-\hat{m}=b-\hat{a}$ : '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 3Sg  $16-\hat{m}=b\hat{\epsilon}-\emptyset$  'he/she was going'. However, the sense 'they were going' is actually expressed by  $16-\hat{y}\hat{\epsilon}=b-\hat{a}$ :.

### (285) Past perfect (third person)

- a.  $y\acute{\varepsilon}-\grave{w}=b\grave{\varepsilon}-\varnothing$ come-3SgSbj=Past-3SgSbj 'He/She had come.'
- b.  $y \not\in -m \hat{a} = b \hat{a}$ : come-3PlSbj=Past-3PlSbj 'They had come.'

A version of the past perfect in relative-clause form with suffix  $-\dot{w}$  is recorded in a text:  $y\not\in -\dot{w} = b\not\in -\dot{w}$  '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 {L} overlay on the preceding verb. The form in -rí- with no further suffix generalizes to all subject categories except 3Pl, which has its regular perfective negative form -r-á before the past clitic (286d).

### (286) Past perfect negative

```
a. yè-rí = bé-ỳ
come<sup>L</sup>-PfvNeg=Past-1SgSbj
'I had not come.'
b. yè-rí = bé-ẁ
c. yè-rí = bê:-Ø
d. yè-r-á = b-â:
'You-Sg had not come.'
'He/She had not come.'
'They had not come.'
```

### 10.4.1.4 Past of perfective-1a

Though the combination is uncommon, an explicitly perfective-1a form with suffix :- $r\hat{\epsilon}$ - 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.

```
HL ár nà-gùsù]
                                                  [[p \acute{\varepsilon}-n \grave{u} m \check{u} y^n
(287)
          [kú
                                                                        nùm\check{u}y^n
                                                                                        sâ:]
                           HL year]
           [DiscDef
                                                  [[ten-five
                                                                        five
                                                                                        plus]
           d\check{\sigma}:-r\grave{\varepsilon}=b\grave{\varepsilon}-\varnothing
                                                          gùy<sup>n</sup>-bà—
           arrive-Pfv1a=Past-3SgSbj]
                                                          say.Pfv-3PlSbj—,
                                                gùy<sup>n</sup>-bɔ́
           dž:-rè-∅
           arrive-Pfv1a
                                                say.Pfv-3PlSbj
           '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 :- $r\dot{a}$ - can be followed by the past clitic. In this combination, the form that generalizes throughout the paradigm has suffix - $\dot{w}$ - (as in the past stative) added to the progressive suffix. In the 3Pl, I recorded a form with - $r\dot{a}$ - $\dot{w}$ - $b\dot{\delta}$  before the clitic.

## (288) Past progressive

```
a. bíré bìré:-rà-ẁ = bé-ỳ work(n) work-Prog-Stat=Past-1SgSbj 'I was working.'
b. bíré bìré:-rà-ẁ = bê:-Ø 'He/She was working.'
c. bíré bìré:-rà-ẁ-bó = b-â: 'They were working.'
```

The past progressive negative adds stative negative  $= r\acute{a}$ - before the past clitic (289).

## (289) Past progressive negative

- a. bíré bìré:-rà = rá = bé-ỳ
  work(n) work-Prog=StatNeg=Past-1SgSbj
  'I was not working.'
- b.  $bir\acute{e}$   $bir\acute{e}:-r\grave{a}=r\acute{a}=b\hat{e}:-\varnothing$  'He/She was not working.'
- c.  $bir\acute{e}$   $bir\acute{e}:-r\grave{a}=r\acute{a}=b-\^{a}:$  'They were not working.'

For  $k\hat{a}^n - w^n = b\hat{\varepsilon}$  'it happened' and its negation  $k\hat{a}n - i = b\hat{\varepsilon}$ ; see §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  $y\acute{a}$ , and the 3Pl form is doubly conjugated.

## (290) Paradigms of 'was' and 'was not'

category	'was'	'was not'
1Sg 2Sg	$b\acute{u} = b\acute{\varepsilon} - \grave{y}$ $b\acute{u} = b\acute{\varepsilon} - \grave{w}$	
1Pl 2Pl	$b\acute{u} = b\acute{\varepsilon} - \grave{y} : .$ $b\acute{u} = b\acute{\varepsilon} - \grave{w} : .$	
3Sg 3Pl	$b\acute{u} = b\hat{\varepsilon}:-\emptyset$ $b-\acute{\varepsilon}^n:=b-\hat{a}:$	

 $b\hat{\varepsilon}$ - may also replace  $b\acute{u}$ -, as in  $y\acute{a}$   $b\hat{\varepsilon}$ :- $\varnothing$  'there used to be ... (3Sg)' in text 2005.1b.01.

For 'have', the positive forms (except the doubly-conjugated 3Pl) are based on  $s\acute{o}-\acute{w}$ , with stative  $-\acute{w}$ -.

## (291) Paradigms of 'had' and 'did not have'

category	'had'	'did not have'
1Sg 2Sg	$s\acute{o}-\acute{w}=b\acute{\varepsilon}-\grave{y}$ $s\acute{o}-\acute{w}=b\acute{\varepsilon}-\grave{w}$	$s\grave{o}-l\acute{o}=b\acute{\varepsilon}-\grave{y}$ $s\grave{o}-l\acute{o}=b\acute{\varepsilon}-\grave{w}$
1Pl 2Pl	$s\acute{o}-\acute{w}=b\acute{\varepsilon}-\grave{y}.$ $s\acute{o}-\acute{w}=b\acute{\varepsilon}-\grave{w}.$	$s\grave{o}$ - $l\acute{o} = b\acute{\varepsilon}$ - $\grave{y}$ :. $s\grave{o}$ - $l\acute{o} = b\acute{\varepsilon}$ - $\grave{w}$ :.

```
3Sg s\acute{o}-\acute{w}=b\hat{\varepsilon}:-\varnothing s\grave{o}-l\acute{o}=b\hat{\varepsilon}:-\varnothing
3Pl s-\acute{\varepsilon}:^n=b-\hat{a}: s\grave{\varepsilon}-n\acute{\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'.

```
(292) mòsú mà:ní-só-ẃ = bɛ́-ẁ 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  $\partial s u \rightarrow (also 'always')$ , optionally expandible as  $\partial s u \rightarrow (also 'always')$ , optionally expandible as  $\partial s u \rightarrow (also 'always')$ .

```
(293) [\hat{a}s\acute{u} \rightarrow d\grave{a}^n \quad w\^{o}y] \quad s\grave{e}ll\grave{e}-r\acute{i}-\varnothing \quad m\acute{a} [still all all] be.healthy-PfvNeg-3SgSbj Q 'Is he/she still sick?'
```

'Up to now, as of now' can be expressed as  $d\hat{\partial}m \ k\acute{a}l\grave{a}$  or as  $n\acute{u}w^n\grave{\partial}y^n \ k\acute{a}l\grave{a}$ , with  $k\acute{a}l\grave{a}$  'even'. (Not) yet' is expressed with a negative predicate plus  $d\hat{\partial}m$  '(up to) now'.

```
(294) dôm yè-rí-∅
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'  $(y\cancel{\varepsilon})$ . 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  $-r\cancel{\varepsilon}$ . In both cases, there is no further affixation for 2Sg addressee, while **2Pl addressee** is marked by a suffix -n.

```
(295) form gloss

yá 'come!-Sg'
yá-n 'come!-Pl'
yé-ré 'don't come!-Sg'
yé-ré-n 'come!-Sg'
```

Because basic reflexive-object pronouns ( $\hat{a}$ , plural  $\hat{a}$ :) 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 2Sg with no reflexive marking, compare (296b) with a disjoint subject. NPs with possessed  $k\hat{a}$ : '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. 2Sg imperative (296a) and 3Sg perfective (296e) is made only by tone overlay.

```
(296) a. u = ni suy5

2Sg=Acc hit.Imprt

'Hit-2Sg yourself!'
```

```
b. 
u = ni
 sùyò-bó

2Sg=Acc hit.Pfv-3PlSbj

'They hit-Past you-Sg.'
```

```
c. [\acute{u} ^{\text{HL}}k\hat{u}:] s\acute{u}y\acute{o} [2SgPoss ^{\text{HL}}head] hit.Imprt 'Hit-2Sg yourself!'
```

```
d. tǔ: súyó-ǹ
Recip hit,Imprt-Imprt.Pl
'Hit-2Pl each other!'
```

```
e. <u>ú=nì</u> sùyò-∅
2Sg=Acc 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  $C\acute{v}C\acute{v}$  stems (bimoraic, with light initial syllable) ending in  $\{a\ e\ o\ o\}$ , i.e. not ending in a high vowel or in  $\varepsilon$  (297b), and for  $Cvy^n$  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'	<i>l</i> ó	ló
'spend night'	ná	ná
'give'	ní	ní
'enter'	nú	<i>nú</i> (homophonous with 'hear')

```
b. light bisyllabic, final nonhigh vowel
    'jump'
                      pété
    'speak'
                      tégé
                                        tégé
    'go down'
                      sí-vé
                                        sí-yé
    'affix, paste'
                      tárá
                                        tárá
    'choke'
                      póró
                                        pźrź
c. Cay<sup>n</sup>
                      kávn
                                        kávn
    'do'
    'put'
                      găyn
                                        găyn
```

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.  $\ref{CvCv}$ , have {H} overlay in the imperative. Because of this, all  $\ref{Cv}$  and  $\ref{CvCv}$  stems (regardless of lexical tone melody) have H-toned imperatives. Therefore the identity between bare stem and imperative for the lexically /H/-toned  $\ref{Cv}$  and  $\ref{CvCv}$  stems described above is accidental (resulting from a phonetically inaudible {H} tone overlay on an already /H/ toned verb). (298) shows audible {H} overlay on lexical /LH/ melodies.

## (298) /LH/ melody, prosodically light

gloss	bare stem	imperative			
a. monosyllabic 'go/come out'	gŏ	gó			
'drink'	nž	nớ			
b. <i>CvCv</i> , final nonhigh vowel					
'pull'	bàsá	básá			
'stop up'	mùsó	músó			
'sprinkle'	mìsé	mísé			
'kill'	jìyέ	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 /H/, the result is an HL tone pattern (299a,c). If the lexical melody is /LH/, the result is an <LH>L pattern (299b,d). In the case of bimoraic lexical  $\ref{CvCv}$  stems (299d), the <LH> portion of <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 1Sg possessor forms of  $\ref{CvCv}$  noun stems (§6.2.2).

```
(299)
                             bare stem
                                                 imperative
           gloss
        a. prosodically heavy, /H/ melody, final nonhigh vowel
            'screw in'
                             pí:ré
                                                 pí:rè
            'sit'
                                                 éw-yè
                             éw-yé
            'do well'
                             cé:lé
                                                 cé:lè
        b. prosodically heavy, /LH/ melody
         final high vowel
            'think'
                             mà:ní
                                                 mă:nà
            'rake up'
                             yàwrú
                                                 yăwrà
                             dùmdú, dùmdí
            'finish'
                                                 dǔmdà
         final nonhigh vowel
            'sneak up on'
                             yò:ró
                                                 yŏ:rò
        c. prosodically light (CvCv, CvNCv), /H/ melody, final high vowel
            'look'
                             tíní
                                                 tínà
            'hang up'
                                                 kólà
                             kólí-
            'encounter'
                             témbí
                                                 témbà
        d. prosodically light (CvCv, CvNCv), /LH/ melody, final high vowel
            'put down'
                             dèyí
                                                 děyà
            'chase away'
                             làrí
                                                 lărà
            'help'
                             bàrí
                                                 bărà
            'take'
                                                 ăyà
                             àyí
            'dig'
                                                 gănjà
                             gànjí
```

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'	bìlìré	bìlírè
'hide'	bàŋgìrí	bàŋgárà
'go around'	gòŋgìrí	gòŋgórà

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 most whether a vowel mutation has occurred (301b). If it ends in  $\{e \circ o\}$ , there is no mutation to a (301c). 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

```
imperative
    gloss
                          bare stem
a. final \varepsilon \to a
  monosyllabic
    'come'
                          yĚ-
                                            yá
    'take (hot coals)'
                         jě-
                                           já
    'bring'
                         j̃̃:-
                                           jã:
  bisyllabic
    'hone'
                          nέr<sup>n</sup>έ-
                                            nér<sup>n</sup>á
    'kill'
                         jìyέ-
                                            jíyá
    'swallow'
                          mìr<sup>n</sup>έ-
                                            mír<sup>n</sup>á
b. stem already a-final
    'tie'
                          páyá
                                            páyá
    'bear (child)'
                          nàr<sup>n</sup>á
                                            nár<sup>n</sup>á
    'spend night'
                                            ná
                          ná
c. no change in final {e o o}
  monosyllabic
    'drink'
                          nš
                                            nś
    'catch'
                          wó
                                            wó
  bisyllabic
                          sí-lé-
    'take down'
                                            sí-lè
    'do well'
                          cé:lé
                                            cé:lè
    'file'
                          dì:sé-
                                            dĭ:sè
    'eat (meat)'
                          kúwó
                                            kúwó
    'hit'
                          súyś
                                            súyś
d. no change in final high vowel in monosyllabics with high vowel
    'see'
                          VĬ-
    'hear'
                                            nú (homophonous with 'enter')
                          nŭ-
e. final high vowel \rightarrow \hat{a}, bisyllabics
    'fill'
                          bà:lí-
                                            bă:là
    'push'
                          dàmbí-
                                            dămbà
    'tamp down'
                          dèngí-
                                            děngà
    'clean off'
                          ká:sí-
                                            kă:sà
    'caress'
                          pú:rú-
                                            pú:rà
```

```
'scare'
                        ú:rú-
                                        ú:rà
                        έmbí-
                                        έmbà
    'pinch'
                        lésí-
                                        lésà
    'push down on'
    'put up on'
                        náy<sup>n</sup>í-
                                        náy<sup>n</sup>à
f. trisyllabics with medial high vowel
  all vowels high
    'twist'
                        únjúwú-
                                        únjúwà
 final high vowel, initial nonhigh vowel, medial vowel changes
    'hide'
                        bàŋgìrí-
                                        bàŋgárà
    'go around'
                        gòŋgùrú-
                                        gàŋgórà
```

### 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 -n that resembles imperative plural suffix -n, but these greetings are somewhat irregular and difficult to parse; see §19.5.

## 10.5.4 Imperative plural (positive) $-\dot{n}(-n\dot{i})$

The (positive) plural-addressee imperative is expressed by adding  $-n \sim -n$  to the imperative stem. An imperative of the tonal type  $b \check{a} r \grave{a}$  'help!' simplifies to plural-addressee  $b \acute{a} r \acute{a} - n$ , which to my ear is homophonous to the corresponding form of  $b \acute{a} r \acute{a}$  'gather!' (302b).

(302)	gloss	bare stem	Imprt Sg	Imprt Pl
	a. various shape	S		
	ʻgoʻ	ló	<i>ló</i>	ló-'n
	'come'	yέ	y-á	yá-n
	'twist'	únjúwú-	únjúw-à	únjúwà-n
	'tie'	páyá	páyá	páyá-n
	'hide'	bàŋgìrí	bàŋgár-à	bàŋgár-à-n
	'think'	mà:ní	mǎ:n-à	mă:n-à-n
	'finish'	dùmdú ~ dùmdí	dŭmd-à	dŭmd-à-n
	'put down'	dèyí	dέy-â	déy-á-n
	b. distinct bare s	tems, homophono	us imperative	S
	'gather'	bàrá	bárá	bárá-n
	'help'	bàrí	bărà	bárá-n

### 10.5.5 Prohibitive $-r\dot{\epsilon} \sim -l\dot{\epsilon}$ , plural $-r\dot{\epsilon} - \dot{n} \sim -r\dot{\epsilon} - n\dot{i} \sim -l\dot{\epsilon} - \dot{n} \sim -l\dot{\epsilon} - n\dot{i}$

The prohibitive stem includes a suffix  $-r\epsilon$ , 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.

(303)	gloss	bare stem	prohibitive
	ʻgoʻ	ló	ló-ré
	'go in'	nú	nú-ré
	'come'	yĚ	yě-ré
	'hear'	nŭ	nŭ-ré
	'drink'	nž	nð-ré
	'take out'	gò-ló	gò-ló-ré
	'do well'	cé:lé	cé:lé-ré
	'hit'	súyó	súyó-ré
	'swallow'	$m i r^n \acute{arepsilon}$	mìr <sup>n</sup> é-ré
	'hide'	bàŋgìrí	bàŋgìrí-ré
	'pinch'	émbí-	έmbí-rέ
	'get up'	ínjírí	ínjírí-ré
	'twist'	únjúwú-	únjúwú-ré

The three  $Cvy^n$  stems have prohibitives with  $-l\dot{\epsilon}$ , whose l replaces the  $y^n$  of the stem, leaving no trace of nasalization. Thus  $g\check{a}y^n$  'put', prohibitive  $g\check{a}-l\dot{\epsilon}$  'don't put!'. Likewise  $k\acute{a}-l\acute{\epsilon}$  'don't do!',  $g\grave{u}-l\acute{\epsilon}$  'don't say!'.

The prohibitive stem is used without further modification as the singular-addressee prohibitive ('don't-Sg ...!'). For **plural addressee**, the suffix  $-\dot{n} \sim -n\dot{i}$  is added, as for the (positive) imperative. Thus  $n\dot{u}-r\dot{\epsilon}$  'don't-Sg go in!',  $n\dot{u}-r\dot{\epsilon}-\dot{n}$  'don't-Pl go in!'

## 10.5.6 Hortatives $(-\dot{m}$ , Pl $-m\hat{a}y^n$ ) and their negation $(-r\dot{\epsilon}-\dot{m}\sim -l\dot{\epsilon}-\dot{m})$

For a singular addressee, the **hortative** suffix is -m following the bare stem in  $\{L\}$ -toned form. Prototypically, the speaker encourages the addressee(s) to join the speaker in carrying out some action.

```
(304) a. lò-ḿ
go-Hort
'Let's-2 go!'

b. nĕy<sup>n</sup> nè-ḿ
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 *Cvy<sup>n</sup>* stems ('say', 'put', 'do') lose the final semivowel.

(305)	gloss	bare stem	hortative	
	a. final nonhigh vowel			
	'hit'	súyó	sùyò-m	
	b. final high vow	rel		
	'hide'	bàŋgìrí	bàŋgùrù-m	
	'go back'	píníw <sup>n</sup> í	pìnìw <sup>n</sup> ù-m	
	'pinch'	émbí-	èmbù-m	
	c. Cvy <sup>n</sup>			
	'say'	$g\check{u}y^n$	gù <sup>n</sup> -ḿ	
	'put'	gŭy <sup>n</sup> găy <sup>n</sup>	gà <sup>n</sup> -m	
	'do'	káy <sup>n</sup>	kà <sup>n</sup> -m	

The suffix  $-m\hat{a}y^n$  is added to a verb stem with  $\{L\}$  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).

```
(306) a. lò-mây<sup>n</sup>
go-Hort.Pl
'Let's-3+ go!'

b. nĕy<sup>n</sup>
meal
eat-Hort.Pl
'Let's-3+ eat (the meal)!'

c. èw-yè-mây<sup>n</sup>
sit-MP-Hort.Pl
'Let's-3+ sit down!'
```

A **hortative negative** is formed by adding  $-r\hat{e}-m$  or (plural)  $-r\hat{e}-m\hat{a}y^n$  to the stem (which has its regular tones). The negative element  $-r\hat{e}$ - has some similarity to perfective negative  $-r\hat{i}$ -, but  $-r\hat{e}$ - does not force tone-dropping on the verb stem, and its r is not subject to Nasalization-Spreading triggered by a nasal in the stem. It is therefore to be directly connected to prohibitive  $-r\hat{e}$ -.

```
(307) a. ló-rè-ḿ
go-Neg-Hort
'Let's-2 not go!'

b. nĕyn né-rè-ḿ
meal eat-Neg-Hort
'Let's-2 not eat (the meal)!'
```

```
c. \frac{\dot{\epsilon}w-\dot{\gamma}\dot{\epsilon}-\dot{m}}{\sin^2\theta} sit-MP-Neg-Hort 'Let's-2 not sit down!'
```

```
d. ló-rè-mây<sup>n</sup> go-Neg-Hort.Pl 
'Let's-3+ not go!'
```

For *nú*- 'enter' and *nǔ*- 'hear', I recorded *nú*-*rè*-*m*' 'let's-2 not go in!' and *nǔ*-*rè*-*m*' 'let's-2 not hear!'.

The r of  $-r\hat{e}-m$  combines with the final nasal of  $Cvy^n$ - verb stems as l. Thus  $k\acute{a}y^n$ - 'do, make' has  $k\acute{a}-l\hat{e}-m$  'let's not do!',  $g\check{a}y^n$ - 'put' has  $g\check{a}-l\hat{e}-m$  'let's not put!'.

The hortative form in -m can also be used as a **1Sg hortative**, where the speaker exhorts the addressee(s) to allow the speaker to do something. This requires an explicit 1Sg pronoun i preceding the verb, and the examples I have of this also involve a syntactic frame including either imperative  $d\hat{u}w\delta$  'leave (=let, allow)' or a special invariant form  $j\hat{\epsilon}$ : (cf. verb  $j\hat{\epsilon}$ : 'bring') with similar sense, as in (308a). The corresponding plural-subject form has 1Pl pronoun  $\hat{i}$ : and hortative plural  $-m\hat{a}y^n$ , which in this context may denote any number of persons from two up.

```
(308) a. í:yà, jɛ̃: í àyì-m
stand.Imprt, let! 1SgSbj take-Hort.1Sg
'Stand-2Sg (=wait), let me take (=get) it!'
```

```
b. f:yà-n, jɛ̂: î: ày-mây<sup>n</sup> stand.Imprt-Imprt.Pl, let! 1SgSbj 'Stand-2Pl (=wait), let us (instead of you-Pl) take (=get) it!'
```

A quoted form of a clause like (308), with logophoric  $\acute{a}$  instead of 1Sg  $\acute{t}$ , is attested in a text (2005.2a.07).

In (309), the 1Sg hortative construction is used to make an offer to help.

```
ùllà<sup>L</sup>
(309)
        ſί
                  kálà]
                          [yâ:
                                                         nŭ-w ]
                          [there
                                    a.little<sup>L</sup> 1SgSbj hear.Pfv-Ppl.Inan]
        [1Sg
                 too]
        [[ùllá
                                                     bàrù-m
                           sày]
                                        vâ:
                          only]
                                        there
                                                     help-Hort
        [[a.little
        '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 $(-\dot{y} \sim -\dot{y})$ and its negation $(-r\dot{\varepsilon}-\dot{y})$

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 3Pl 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 Nasalization-Spreading. There is no distinct plural-subject form, except in imprecations (which lack the quotative-subject construction).

For Cv- monosyllabic stems, the lexical tone melody is preserved (310a-b), so the suffix is H-toned - $\dot{y}$  (or nasalized - $\dot{y}^n$ ). 'Bring' keeps its lexical <LHL> tones, and the whole word comes out as <LHL> rather than <LHLH> (310c). The three  $Cvy^n$  verbs have QuotImprt forms homophonous to the bare stems (310d).

### (310) Monosyllabic

gloss	bare stem	QuotImprt
a. /H/ melody		
ʻgo'	ló	ló-ý
'eat'	лέ	лέ-ý <sup>n</sup>
'give'	ní	ní-ý <sup>n</sup>
'go in'	nú	nú-ý <sup>n</sup>
'sow'	tś	tó-ý
'spend night'	ná	ná-ý <sup>n</sup>
'reply'	sá	sá-ý
'shoot'	tá	tá-ý
'(woman) marry (man)'	llowbreak arepsilon	έ-ý
'choose, reserve'	lá	lá-ý
b. /LH/ melody		
'come'	$y \check{arepsilon}$	yè-ý
'drink'	nž	$n\hat{\jmath}$ - $\acute{y}^n$
'see'	yĭ	yì-ý
'go out'	gŏ	gò-ý
'catch'	wŏ	wò-ý
'arrive'	dš	dò-ý
'hear'	nŭ	nù-ý <sup>n</sup>
'learn'	<i>b</i> ă	bà-ý
'(food) sate (sb)'	<i>b</i> ă	bà-ý
'shape (pottery)'	mǎ	mà-ý <sup>n</sup>
c. /LHL/ melody (only examp	ole)	
'bring'	j̃̃є:	jĚ:-ỳ

```
d. Cvy^n (segmentation of QuotImprt ambiguous)

/LH/ melody

'put'

g\check{a}y^n

g\check{a}y^n

g\check{a}y^n-\emptyset (or: g\grave{a}^n-\acute{y}^n)

'say'

g\check{u}y^n

g\check{u}y^n-\emptyset (or: g\grave{u}^n-\acute{y}^n)

/H/ melody

'do, make'

k\acute{a}y^n

k\acute{a}y^n-\emptyset (or: k\acute{a}^n-\acute{y}^n)
```

Bi- and trisyllabic verbs ending in a non-high vowel are illustrated in (311). When the lexical melody is /H/, the QuotImprt remains H-toned if bimoraic (311a), but HL-toned with the low on the final syllable prosodically heavy (311b). Frozen causatives  $g\hat{o}$ - $l\hat{o}$ - 'take out' (cf.  $g\check{o}$ -'go out') and si- $l\hat{e}$ - 'take/bring down' (cf. si- $y\hat{e}$ - 'go/come down'), along with another verb of conveyance  $j\hat{o}$ - $l\hat{o}$ - 'convey, take (somewhere)', are treated for this purpose as prosodically heavy (311c). For bisyllabic stems (CvCv, CvCCv) with /LH/ melody, the QuotImprt has an L-toned stem followed by an H-toned suffix  $-\hat{y}$  (311d). 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, <i>CvCv</i> (light)					
'cut'	césé	césé-ý			
'hit'	súyó	súyó-ý			
'tie'	páγá	páγá-ý			
'go down'	sí-yé	sí-ye-ý			
b. /H/ melody, he	avy				
'do well'	cé:lé	cé:lè-ỳ			
'sit'	éw-yé	éw-yè-ỳ			
'destroy'	hálké	hálkè-ỳ			
'cough'		kógúsò-ỳ			
c. <i>CvCv</i> -, frozen causatives (all relevant examples)					
/H/ melody					
'take down'	sí-lé	sí-lè-ỳ			
/LH/ melody					
'take out'	gò-ló	gó-lò-ỳ			
'convey'	jò-ló	jó-lò-ỳ			
d. /LH/ melody, CvCv- and Cv(N)Cv- (light)					
'leave'	dùwś	dùwò-ý			
'work'	bìrέ	bìrè-ý			
'go up'	ùrớ	ùrò-ý			
CvNCv					
'roll turban'	dòmbó	dòmbò-ý			
'stutter'	bèmbé	bèmbè-ý			

```
e. /LH/ melody, heavy 'poke' dùsùró dùsúrô-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 /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, bi	syllabic		
'ignite'	tálí	tálì-ỳ	
'look'	tíní	tínì-ỳ	
'encounter'	témbí	témbì-ỳ	
'begin'	túmdí	túmdì-ỳ	
'split nut'	káwrú	káwrì-ỳ	
b. /LH/ melody, l	bisyllabic		
'help'	bàrí	bárì-ỳ	
'cover'	dèwí	déwì-ỳ	
'receive'	àwú	áwì-ỳ	
'hold'	wàyí	wáyì-ỳ	
'dig'	gànjí	gánjì-ỳ	
'finish'	dùmdú, dùmdí	dúmdì-ỳ	
'encounter'	dà:yí	dá:yì-ỳ	
c. /H/ melody, tri	syllabic		
'go back'		píníw <sup>n</sup> ì-ỳ	
d. /LH/ melody, t	trisyllabic		
'hide [tr]'	•	bàŋgí-rì-ỳ	
'hide [intr]'		bàŋgí-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 (§19.5).

```
(313) a. jǐnjè ú hálkè-ỳ
God 2SgObj 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.

```
jâm
(314) a. jǐnjè
                              ſú
                                     mâ:]
                                              ní-ý
           God
                    peace
                              [2Sg
                                     Dat]
                                              give-QuotImprt
           'May God give you-Sg peace (and well-being)!' (ní-)
       b. jĭnjè
                                  bárì-ỳ
           God
                     2SgObj
                                 help-QuotImprt
           'May God help you-Sg!' (bàrí-)
```

In such imprecations, which lack the quotative-subject construction, the 3Pl-subject QuotImprt (positive) adds  $-b\delta$  (i.e. the 3Pl subject allomorph used with the unsuffixed perfective and a few other inflected verb forms) to the QuotImprt suffix:  $g\delta - \acute{y} - b\acute{b}$  'may they go out!',  $g\acute{an}j\grave{i} - y - b\acute{b}$  'may they dig!',  $p\acute{a}y\acute{a} - \acute{y} - b\acute{b}$  'may they tie!'.

The **QuotImprt negative** is expressed by  $-r\acute{\epsilon}-\acute{y}$  added to the regular bare stem of the stem:  $g\acute{o}-r\acute{\epsilon}-\acute{y}$  'may he/she not go out!',  $g\grave{a}nj\acute{l}-r\acute{\epsilon}-\acute{y}$  'may he/she not dig!' Without further suffixation this functions as the 3Sg-subject QuotImprt.

The 3Pl-subject QuotImprt negative adds  $-b\delta$  to the QuotImprt negative suffix complex in imprecations:  $g\delta - r\epsilon - \dot{\gamma} - b\delta$  'may they not go out!',  $g \partial n j - r\epsilon - \dot{\gamma} - b\delta$  'may they not dig!'

## 10.5.8 Quoted imperative form with 1Sg 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 (315g).

```
(315) a. \epsilon w^n \hat{\epsilon} y
                           έwέ-ύ
                                                     má
                          buy.Ipfv-QuotImprt
                                                     Q
             milk
             '(Did you/they ask/tell/want) me to buy some milk?' (\varepsilon w \varepsilon-)
        b. yû:
                            dúvó-ý
                                                    má
                            pound-QuotImprt
             millet
                                                    0
             '(Did you/they ask/tell/want) me to pound the millet (ears)?' (dùy5-)
        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 jĕ:-ỳ mà
kettle bring.Ipfv-1SgSbj Q
```

'(Did you/they ask/tell/want) me to bring the kettle?' (¡ɛ̃:-)

- f.  $y\hat{e}$ - $\hat{y}$   $m\hat{a}$  come.Ipfv Q '(Did you/they ask/tell/want) me to come?' ( $y\hat{e}$ -)
- 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 1Sg 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 1Sg. 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 1Pl (exclusive) instead of 1Sg subject.

## 10.5.9 Quoted hortative

Quoted hortatives are based on the regular hortative forms -m and  $-may^n$  (§10.5.6). The two forms can be neutralized in quotations as the simpler form -m (316).

(316) [[î: 
$$s\acute{o}y$$
]  $l\acute{o}$ -m]  $giy^n$ -b $\acute{o}$  [[1Pl all] go-Hort] say.Pfv-3PlSbj 'They said, let's all go!'

# 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).

```
(317) a. pèrě-m
                        mã:
                                   ní-tî:-Ø
           sheep-AnSg 1Sg.Dat
                                   give-Pfv1b-3SgSbj
           'He/She gave me a sheep.'
                     Lmà:] pèrě-m
       b. [sĕydù
                                         ní-tî:-Ø
                     <sup>L</sup>Dat] sheep-AnSg give-Pfv1b-3SgSbj
           [S
           'He/She gave a sheep to Seydou.'
       c. mã:
                      ní-tî:-Ø
           1Sg.Dat
                      give-Pfv1b-3SgSbj
           'He/She gave (it) to me.'
cé:rí- 'show', however, takes two direct objects.
(318) a. pèrě-m
                                     cέ:rí-tî:-Ø
           sheep-AnSg 1SgObj
                                     show-Pfv1b-3SgSbj
```

```
'He/She showed me a sheep.'

b. i cε:ri-tî:-Ø
1SgObj show-Pfv1b-3SgSbj
'He/She showed (it) to me.'
```

Basic directional motion verbs  $g\check{o}$ - 'go out; leave, depart from',  $y\check{e}$ - 'come', and  $l\acute{o}$ - '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.

```
(319) a. [bê:n gò = ń] [dúwánsán yè-∅]
[B leave=and.SS] [D come.Pfv-3SgSbj]
'He/She left Beni and came to Douentza.'
(= 'He/She came from Beni to Douentza.')
```

```
b. isê: lò-Ø
village go.Pfv-3SgSbj
'He/She went to a/the village.'
```

'Say'  $(g\check{u}y^n \sim g\check{x}^n)$  takes a dative complement denoting the person addressed.

### 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.

```
(321) a. ∂s∂r∂<sup>L</sup>-nìŋgú í nê:-w<sup>n</sup>ì-Ø
baobab<sup>L</sup>-sauce 1SgObj eat-Caus.Pfv-3SgSbj
'He/She fed (= caused me to eat) millet cakes (with baobab sauce).'
```

```
b. pèrě-m í sèw<sup>n</sup>è-w<sup>n</sup>ì-Ø 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).

(322)		subject verb	gloss	comment
	a.	ùsú túmbó-	'sun rise'	<i>túmbó</i> - also 'emasculate by crushing (testicles)' and 'hammer with the butt of one's hand'
		ùsú yàyá-	'sun set'	yàyá- 'fall'
	b.	bòlú mìr <sup>n</sup> é	'rain fall'	mìr <sup>n</sup> é- '(water) submerge (sb)', also 'frustrate (sb) by being stingy', 'swallow'

```
c. y \check{a} r g \check{o} 'cloudy weather go out (= end)' (circa October)

y \check{a} r d \check{o} 'cloudy weather approach' (circa May-June)

[\sim y \grave{a} r \hat{u}]
```

d. X célè bàr<sup>n</sup>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 c'el'e (or k'el'e) '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 c'el'e are incorrect for a noun possessed by  $b\~o$ : 'my father' (which ends in an L-tone), cf.  $b\~o$ : 'c'el'e 'my father's liver' with {L}-toned 'liver'. In (323b), c'el'e 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.

```
(323) a. L+HL b5:
                                            célè
                                                           bàr<sup>n</sup>á:-rè-∅
              1SgPoss-HL father
                                                           be.angry-Pfv1a-3SgSbj
                                            liver
              'My father got angry.'
                       ^{L+HL}n\tilde{a}y^{n}
         b. b5:
                                            célè
                                                                bàr<sup>n</sup>á:-rè-∅
                        1Sg-with
              'My father got angry at me.'
                               y\check{i} = \acute{n}
                                                            bàr<sup>n</sup>á:-rè-∅
         c. [ŋgú
                                                  célè
              [Prox.Inan
                               see=and.SS]
                                                  liver
                                                            be.angry-Pfv1a-3SgSbj
              '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  $p \hat{a} r^n \hat{a}$   $g \check{o}$ - 'X show(s) off', X  $c \hat{i} n$ - $d \check{u} r \hat{u}$   $g \check{o}$ - 'X have a bloody nose (nosebleed)', and X  $m \hat{o}$ :- $n \hat{i}$ :  $g \check{o}$ - 'X slobber'. Although the blood and the saliva are what 'go out'  $(g \check{o}$ -), 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.

```
(324) a. with g \check{a} y^n 'put'
s \acute{e} : nj \grave{e} : g \check{a} y^n  'tell a story (tale)'
\acute{a} lb \grave{a} t \acute{a} r \grave{a} g \check{a} y^n  'tell a riddle'
```

```
gá:jè gǎy<sup>n</sup>
                               'tell (crack) a joke'
     só:rú găy<sup>n</sup>
                                'slip a stone (under)'; 'sheathe (knife)'
     háccílè găy<sup>n</sup>
                               'pay attention to'
     k5:r<sup>n</sup>3 găy<sup>n</sup>
                               '(e.g. lion) let out a roar'
     gùrò-gàdăy găy<sup>n</sup>
                                'tie hobbles on (quadruped)'
     tòròmbá:sù găy<sup>n</sup>
                               'tie a slipknot'
b. with káy<sup>n</sup> 'do, make' (complement may be nominal or adverbial)
     cé:rè káy<sup>n</sup>
                                'be amazing (to sb)'
                               'take actions'
     dăwrù káy<sup>n</sup>
     kútíbá káy<sup>n</sup>
                               '(imam) read fixed part of sermon'
     tábsî:r káy<sup>n</sup>
                                'give unofficial sermon'
     sírdì káy<sup>n</sup>
                               'do magic tricks'
c. others (among many)
     wóŋgóró wàrá-
                               'do (manual) farm work (in field)'
     něy<sup>n</sup> 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.

```
(325)
             noun
                              verb
                                                gloss of combination
        a. noun in form of verbal noun (§4.2.2)
                              sér<sup>n</sup>é-
                                                '(woman) emit cry of joy'
             s \hat{\varepsilon} r^n - \hat{\imath}:
                              tóngú-
                                                'write, do some writing'
             tòηg-î:
             těv
                              tégé-
                                                'speak'
                                                'lay egg'
             tàrî:
                              tárá-
        c. Cvy noun, Cv- verb (cf. §4.2.3)
          with ATR shift
                              tó-
                                                'sow (seeds); sow the seedstock'
             tŏy
        d. bisyllabic noun with final falling-tone vowel
             lèmdê:
                              lémdé-
                                                'request, beg'
             sè:njê:
                              sέ: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'
```

```
kósú-
    kàsšy
                                        'harvest (with knife), do the harvest'
 final y in noun corresponds to yv in verb
                     mòngùyó-
                                        '(insects) be one on top of the other'
    mòηgŏy
f. noun ends in long f: (cf. §4.2.3)
    úsúrí:
                     úsúrú-
                                        'ask a question'
    iéwí:
                     ièwé-
                                        'curse, utter a curse'
                     gòŋgùrú-
                                        'make a circuit (trip)'
    góŋgírí:
    tiw^n r^n i:
                     tíw<sup>n</sup>r<sup>n</sup>ú-
                                        'formally counsel'
g. /LH/-toned bisyllabic noun ending in u (possible old VblN)
    kòrú
                     kóró-
                                        'lie, tell a lie'
                     tír<sup>n</sup>έ-
    tìr<sup>n</sup>ú
                                        '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'
                                        'laugh, let out a laugh'
    mánù
                     màní-
    bémbù
                     bèmbé-
                                        'stutter'
    dómbù, dôm
                     dòmbó-
                                        'roll turban (on head)'
  with ATR shift
    yógù
                     γὸγό-
                                        'treat (medically), provide care to'
    jóŋgù
                     jàŋgí-
i. Cř: noun, Cŕ- verb
    yž:
                                        'weep'
                     ý5-
    pŏ:
                     pó-
                                        'give out a whistle'
    tă:
                     tá-
                                        'avoid, respect (a taboo)'
j. bisyllabic, verb and noun end in same non-high vowel
                                        'dance'
    jìyé
                     jìyé-
    sùwź
                     súwó-
                                        'defecate, take a shit'
    tìwέ
                     tíwέ-
                                        '(a) death occur'
    bírέ
                     bìrέ-
                                        'work, do a job'
    dùwś
                     dùwó-
                                        'perform black magic'
    gósò
                     gòsó-
                                        'divide into parts'
                                        'vomit'
    gúrà
                     gùró-
    bérè
                     bèré-
                                        'gain, make a profit'
                                        'have fun, stage festivities'
    cèmné
                     cémné-
    \grave{\varepsilon} w^n r^n \acute{\varepsilon}
                     \dot{\varepsilon} w^n r^n \dot{u}
                                        'converse, chat'
    nùw<sup>n</sup>5
                     nùw<sup>n</sup>5-
                                        'sing, perform a song'
k. trisyllabic, verb and noun end in same non-high vowel
    yímírè
                     yìmìrέ-
                                        '(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<sup>n</sup> gì:y<sup>n</sup>í- 'fart, let out a fart'
tă:y<sup>n</sup> tá:y<sup>n</sup>í- 'build a shed (stall)'
cĕl 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' dànnà dànní- 'hunt, go on a hunt'
```

o. CvCvCv, 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  $w\acute{a}:j\grave{\epsilon}$   $w\acute{a}:j\acute{\epsilon}$  '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.  $c \approx \omega$  'unripe; raw'), with the verb based on the noun only. In (326d), the noun contains a compound initial that is disregarded in the verb.

```
(326) noun verb gloss of combination
```

```
a. initial a- on noun but not on verb (§4.1.6), noun with final u
```

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 nà-t3:t5-'scold'jìrè-nî:ní:yní-'sleep' (jìré 'eye')cèlè-bégùbègé-'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).

- (327) a. jáy jàyá-tî:-Ø fight(n) fight-Pfv1b-3SgSbj 'He/She fought (= got into) a fight.'
  - b.  $[j\grave{a}y^L \quad d\acute{i}y^n\grave{a}-w^n] \quad j\grave{a}y\acute{a}-t\hat{i}:-\mathcal{O}$   $[fight(n)^L \quad big] \quad fight-Pfv1b-3SgSbj$ 'He/She fought (= got into) a big fight.'
  - c. [jáy yěy] jàyá-tî:-Ø [fight(n) two] fight-Pfv1b-3SgSbj 'He/She fought (= got into) two fights.'

## 11.1.6 'Do' or 'be done' káy<sup>n</sup>

The verb 'do, make', also used intransitively ('be done'), has bare stem  $k\acute{a}y^n$ , perfective  $k\acute{a}y^n$ - $t\^i$ -, unsuffixed imperfective  $k\acute{a}^n$ - (3Sg  $k\acute{a}^n$ - $m\grave{m}$ ), and imperative  $k\acute{a}y^n$ . The perfective negative is  $k\grave{a}$ - $n\acute{m}$ - $d\acute{o}$ -.

The intransitive forms of  $k\acute{a}y^n$  can also mean 'happen, take place', with reference to e.g. a celebration or other activity. Only 3Sg/Inan forms with inanimate subject are attested. In the positive example (328a), the verb is in stative form with stative 3Sg suffix  $-\mathring{w}$ . (328b) is perfective negative. Both have the past clitic, with (as usual)  $=b\grave{e}$  after an L-tone and  $=b\hat{e}$ : after an H-tone.

- (328) a.  $c \grave{e} m n \acute{e} \qquad k \acute{a}^n \grave{w}^n = b \grave{e} \varnothing$  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  $k\acute{a}y^n$  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 = \dot{m} (=\emptyset) '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 -O), 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  $-y \not\in y$ -, see §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 3Sg 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  $= \vec{m}$ , 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.

```
(329) a. \epsilon r^n \epsilon = \dot{m}
                3Sg=it.is
                'It's him/her.' (\epsilon r^n \epsilon)
          b. i = m
                1Sg=it.is
                'It's me.' (1)
           c. b\hat{u} = \hat{m}
                3Pl=it.is
                'It's them.' (bû:)
           d. \eta g \vec{u} - r \vec{u} = \vec{m}
                here=it.is
                'It's here.' (ngú-rù)
           Prox.Inan=it.is
                'It's this.' (ngú)
           i. [àr<sup>n</sup>à
                                      m\check{u}: ] = \grave{m}
                                      Prox.An]=it.is
                'It's this man.' (àrnà 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  $\partial r^n \partial z$ : 'bush (outback)' or  $b \partial l d$  'rain', it appears in the 'it is' construction with  $\langle HL \rangle$ -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  $\langle LH \rangle$ -toned, as in t d z 'water source', in the 'it is' combination it appears with bell-shaped  $\langle LHL \rangle$  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  $\langle HL \rangle$ -toned vowel, like  $\dot{l} s d z d z$  'village', its possessed form  $\dot{l} s d z d z$  'mountain' (330a-c). The final L-tone is audible in (330d-f).

```
(330) a. is\hat{e} := \emptyset
                 village=it.is
                 'It's a village.' (isê:)
                                    ^{HL} isè:]=\varnothing
           b. [ú
                                   HLvillage]=it.is
                 [2SgPoss
                 'It's your-Sg village.' (ú HL ísè:, from ìsê:)
           c. t \acute{\sigma} r \grave{\sigma} = \emptyset
                 mountain=it.is
                 'It's a mountain.' (tórò)
           d. \partial r^n \partial := \emptyset
                 outback=it.is
                 'It's the bush (=outback).' (\partial r^n \delta:)
           e. b \partial l \hat{u} := \emptyset
                 rain=it.is
                 'It's (the) rain.' (bòlú)
           f. t\tilde{a} := \emptyset
                 water.source=it.is
                 'It's a water source (pond etc.).' (tă:)
```

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  $\langle LH \rangle$ -toned syllable (331a-b). It is inaudible when the noun would otherwise already end in an L- or  $\langle HL \rangle$ -toned syllable (331c-d). Care must be taken to distinguish animate singular suffix -m (which has no intrinsic tone) from the 'it is' clitic allomorph =  $\dot{m}$ . However, historically it is likely that the 'it is' variant =  $\dot{m}$  was partially shaped by resegmentation of old animate singular forms.

```
(331) a. inj\tilde{\epsilon}-\tilde{m}=\emptyset
dog-AnSg=it.is
'It's a dog' (inj\tilde{\epsilon}-m)
```

```
b. tù:-búnúgôy = Ø age.group-group=it.is
'It's a group of age-mates.' (tù:-búnúgóy)
c. árnà-m = Ø man-AnSg=it.is
'It's a man.' (árnà-m)
d. [[ârnà L mǔ:] HL yâ-m] = Ø [[man L Prox.An] HL woman]=it.is
'It's the woman (= wife) of this man.' ([...HL yâ-m], from yǎ-m)
```

The (usually optional) plural particle  $b\dot{e}$  behaves as though H-toned  $b\dot{e}$ , and therefore appears (regularly) as  $b\hat{e} := \emptyset$  (lengthened to permit the <HL>-tone to be articulated).

```
(332) a. isê: bè
village Pl
'(some) villages'

b. isê: bê:=Ø
village Pl=it.is
'It's (some) villages.'
```

(333) a.  $\acute{a}r^n\grave{a}-m$ 

Definite particle  $k\dot{u}$  is treated as though it were H-toned inanimate pronoun  $k\dot{u}$ . We therefore get  $k\dot{u} = \dot{m}$  (333), homophonous to  $k\dot{u} = \dot{m}$  'that's it'.

```
man-AnSg Def
'the (aforementioned) man'

b. [árnà-m kú] = m
[man-AnSg Def]=it.is
'It's the (aforementioned) man'
```

kù

There are quite a few nouns that end in a long <HL>-toned vowel, whether underlying or due to lengthening by Contour-Tone Mora-Addition; see (109b-c) in §6.3.1. The 'it is' form is homophonous to the simple independent form, e.g.  $k \partial s \hat{u}$ : 'calabash',  $k \partial s \hat{u} := \emptyset$  '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  $\vec{m}$  even where the stem lacks this final consonant elsewhere. In (334a,c), 'father' lacks (animate) singular suffix  $-\vec{m}$  in other contexts, but a final  $\vec{m}$  appears in the 'it is' combinations (334b,d). (334d) shows final  $\vec{m}$  after a personal name in the 'it is' construction. One can argue whether the  $\vec{m}$  in (334b,d-e) is the 'it is' clitic itself, or a morphosyntactically specialized instance of (animate) singular suffix  $-\vec{m}$ . I will take it to be the 'it is' clitic.

```
(334) a. u HL b\hat{o}:
2SgPoss HL father
'your-Sg father'
```

- b.  $m\check{u}$ :  $[\check{u}]$   $\stackrel{\text{HL}}{b\hat{\sigma}}$ :  $]=\check{m}$  Prox.An [2SgPoss  $\stackrel{\text{HL}}{\text{father}}$ ]=it.is 'This (man) is your-Sg father'
- c. bš:
  father
  '(a) father'
- d.  $b\ddot{o}:=\dot{m}$ father=it.is 'It's a father.'
- e.  $\underline{a}: \underline{m}\underline{a}\underline{d}\underline{u} = \underline{m}$ A=it.is 'It's Amadou (man's name).'

Some other singular kin terms are more complex, since they have (animate) singular -m and {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 =m (335d), contrast (335c).

- (335) a. <u>ú</u> HL <u>nár nå-m</u> 2SgPoss HL mother-AnSg 'your-Sg mother'
  - b.  $m\check{u}$ :  $[\check{u}$   $^{HL}$  $n\acute{a}r^n\grave{a}-m]=\emptyset$ Prox.An [2SgPoss  $^{HL}$ mother-AnSg]=it.is 'This (woman) is your-Sg mother'
  - c. nàr<sup>n</sup>á mother '(a) mother'
  - d.  $n a r^n a = m$ mother=it.is 'It's a mother.'

In the plural, kin terms take plural particle  $b\hat{e}$ . In the 'it is' combination, we get the same  $b\hat{e}$ : =  $\varnothing$  described above.

```
b. \acute{u} ^{\text{HL}}b\^{o}: b\^{e}: = \varnothing]

2SgPoss ^{\text{HL}}father Pl]

'It's your-Sg fathers.'
```

Likewise, for '... are your-Sg mothers', ...  $u^{HL} n \acute{a} r^n \grave{a} b \acute{e} := \emptyset$ .

## 11.2.1.2 Conjugated positive forms (1st/2nd persons)

The simple clitic  $= \dot{m}$  can be conjugated for 1st/2nd person subject.

```
(337) category after H-tone after L-tone 1 \operatorname{Sg} = m - i - \hat{y}^{n} = m - i - \hat{y}^{n} \\ 2 \operatorname{Sg} = m - \hat{u} - \hat{w}^{n} = m - \hat{u} - \hat{y}^{n} \\ 1 \operatorname{Pl} = m - i - \hat{y}^{n} \\ 2 \operatorname{Pl} = m - \hat{u} - \hat{w}^{n} \\ = m - \hat{u} - \hat{y}^{n} \\ = m - \hat{u} - \hat{y}^{n} \\ = m - \hat{u} - \hat{w}^{n} \\ = m - \hat{u} - \hat{w} - \hat{w}^{n} \\ = m - \hat{u} - \hat{u} - \hat{w}^{n} \\ = m - \hat{u} - \hat{u} - \hat{w}^{n} \\ = m - \hat{u} - \hat{u
```

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 L-toned 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 1Pl and 2Pl clitics are added to a noun stem without singular -m, as in  $[b\hat{e}:n\ n\hat{u}] = m\hat{u}-\hat{y}^n$ : '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 plural-subject forms are (at least seemingly) added to nouns that are singular in form (with animate singular suffix -m), when the subject is 1Pl or 2Pl. 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  $[b\hat{e}:n\ n\hat{u}-m]=m\hat{i}-\hat{y}^n$ : '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. yí-m=m-í-ỳ
child-AnSg=it.is-1SgSbj
'I am a child.'
b. yí-m=m-í-ỳ.:
child-AnSg=it.is-1PlSbj
'We are children.' (cf. yì-tɛ̃: 'children')
c. púlò-m=m-ú-ẁ
Fulbe-AnSg=it.is-2SgSbj
'You-Sg are a Fulbe.'
```

```
d. púlò-m=m-ú-ẁ∴
Fulbe-AnSg=it.is-2PlSbj
'You-Pl are Fulbe.'
```

However, there are indications that the geminate [mm] may function for these speakers as an allomorph =mm- 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  $yi = mm - i - \hat{y}$ ,  $yi = mm - i - \hat{y}$ ... The best evidence for this is that the geminated mm is heard after vowel-final singular nouns (339).

```
(339) a. <u>á:mádù = mm-ì-ỳ</u>
A=it.is-1SgSbj
'I am Amadou.'

b. <u>[ér^né</u>
[3SgPoss
HL father]=it.is-1SgSbj
'I am his/her father.'
```

However, there is also some counterevidence to this (re-)analysis. In a case like  $p\acute{u}l\acute{o}-m$  'Fulbe person', plural  $p\acute{u}l\acute{o}$ : '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  $p\acute{u}l\acute{o}-m=m-\acute{u}-\grave{w}$ . 'you-Pl are Fulbe' resembles  $p\acute{u}l\acute{o}-m$  with short vowel. A similar example is  $n\check{u}-m=m-\acute{l}-\grave{y}$ .: 'we are people', cf.  $n\check{u}-m$  'person' and its long-voweled plural  $n\check{u}$ : 'people'. A partisan of the =mm- analysis of the clitic could respond that the shortening may be due to a (perhaps morphologized) phonological rule, e.g. /pùlò:  $=mm-\grave{u}-\grave{w}$ / with long /ɔ:/ shortening to o.

For the noun yi-m 'child' and (irregular) plural  $yi-t\tilde{\epsilon}$ : 'children', the idiomatic expressions seem to be based on yi-m, e.g.  $yi-m=m-i-\hat{y}$ .: 'we are children' (338b). However, in elicitation I also recorded  $yi-t\tilde{\epsilon}:=mm-i-\hat{y}$ : 'we are children', based on the irregular plural stem.

## 11.2.1.3 Conjugated positive forms (3Pl = $\emptyset$ -b $\delta$ )

The 3Pl conjugated form is  $=\emptyset-b5$ , with an ending that resembles 3Pl subject inflectional suffix -b5 (-b3) in certain verb paradigms including the unsuffixed perfective, see (278) in §10.3.1. Unlike the case with 1Pl and 2Pl clitics just illustrated, an animate noun takes its normal morphological plural form (without singular suffix -m), e.g. púl5: 'Fulbe (people)', before 3Pl  $=\emptyset-b5$ . However, the stem (if otherwise ending in H- or <LH>-tone) undergoes the tonal changes characteristic of the  $=\emptyset$  clitic allomorph (see above), for example in 'dogs' in (340e). Nouns (such as 'father' and 'village') that would otherwise take plural particle  $b\dot{e}$  omit this particle before  $=\emptyset-b5$ . In (340a), an H.<LH> noun is realized as H.L before the H-toned clitic; see §3.7.4.5 on the tones.

```
(340) a. púl\delta := \emptyset - b\delta
Fulbe.Pl=it.is-3PlSbj
'They are Fulbe.'
```

```
b. isê: = ∅-b5
village=it.is-3PlSbj
'They are villages.'
```

- c. [mŭ: bè] [ú HL bɔ̂:] = Ø-bɔ́ [Prox.An Pl] [2SgPoss HL father] = it.is-3PlSbj 'These (men) are your-Sg fathers'
- d.  $y\hat{\imath}-t\hat{\epsilon}:=\emptyset-b\delta$ children=it.is-3PlSbj 'They are children.' (never  $\#y\hat{\imath}-m=b\delta$ )
- e.  $inj\hat{e}: = \emptyset b\delta$ dogs=it.is-3PlSbj 'They are dogs.' ( $inj\hat{e}$ )

## 11.2.1.4 Unconjugated negative 'it is not ...' $(= \dot{m} = d\acute{a}, \varnothing = r\acute{a})$

Where the positive 'it is' form has = m, the corresponding negative is expressed by  $= m = d\acute{a}$ . The stem has the same tones as with the positive = m clitic. In slow speech, the negative morpheme is pronounced [...ndá], and native speakers correct the linguist's pronunciation when the [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  $= m = d\acute{a}$ , and I take  $= d\acute{a}$  to be a postnasal form of stative negative  $= r\acute{a}$ .

```
(341) a. k\acute{u} = \grave{m} = d\acute{a}
Inan=it.is=StatNeg
'It isn't that (discourse-definite).'
```

- b. i = m = da1Sg=it.is=StatNeg 'It isn't me.'
- c.  $\underline{a}: \underline{m} = \underline{d}\underline{a}$ A=it.is=StatNeg 'It isn't Amadou.'
- d.  $\mathring{\eta}g\mathring{u} = \mathring{m} = d\mathring{a}$ 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  $\eta g u$  'this' (inanimate) or discourse-definite ku 'that (aforementioned)' as the host of the clitic.

For inanimate nouns or adjectives, the 'it is not ...' construction is expressed by  $=\emptyset=r\acute{a}$ . As with the positive  $=\emptyset$ , the stem must end in an L-tone.

```
(342) a. is\hat{e}:=\emptyset=r\acute{a}
                 village=it.is=StatNeg
                 'It is not a village.' (isê:)
                                         ^{HL} isè:]=\emptyset=rá
           b. /ú
                                        HLvillage]=it.is=StatNeg
                 [2SgPoss
                 'It is not your-Sg village.' (u HL isè:, from isê:)
           c. t \acute{o} r \grave{o} = \emptyset = r \acute{a}
                mountain=it.is=StatNeg
                 'It is not a mountain.' (tórò)
           d. \partial r^n \hat{\partial} := \emptyset = r \hat{a}
                outback=it.is=StatNeg
                 'It is not the bush (=outback).' (\partial r^n \delta:)
           e. b \partial l \hat{u} := \emptyset = r \acute{a}
                rain=it.is=StatNeg
                'It is not (the) rain.' (bòlú)
           f. t\tilde{a} := \emptyset = r\tilde{a}
                 water.source=it.is=StatNeg
                 'It is not a water source (pond, etc.).' (tă:)
           g. k \partial s \hat{u} := \emptyset = r \acute{a}
                calabash=it.is=StatNeg
                 'It is not a calabash.'
```

## 11.2.1.5 Conjugated negative 'it is not ...' forms (1st/2nd persons)

This  $= \dot{m} = d\acute{a}$  'it is not' clitic sequence can be conjugated pronominally for 1st/2nd person subject (343).

```
a. injĕ-m = Ø = dá-ŷ dog-AnSg=it.is=StatNeg-1SgSbj 'I am not a dog.'
b. púlð-m = Ø = dá-ŵ Fulbe-AnSg=it.is=StatNeg-2SgSbj 'You-Sg are not a Fulbe (person).'
```

The **paradigm** for first and second person categories is (344). The 2Sg ends in H-tone.

(344) 'It is not' (1st.2nd person)  $1Sg = \dot{m} = d\acute{a} - \dot{y}$   $2Sg = \dot{m} = d\acute{a} - \dot{w}$  (H-toned)

```
1Pl = \dot{m} = d\acute{a} - \dot{y}.:
2Pl = \dot{m} = d\acute{a} - \dot{w}.:
```

#### 11.2.1.6 Conjugated negative 'it is not ...' forms (3Pl)

The 3Pl conjugated form is  $=\emptyset = r\acute{a}-b\acute{s}$ , with a 3Pl 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  $p\acute{u}l\acute{s}$ : 'Fulbe (people)' in (345c). However, the noun is subject to the usual final tonal modification associated with the  $=\emptyset$  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).

```
(345) a. injê: = Ø = rá-bó dog=it.is=StatNeg-3PlSbj 'They are not dogs.' (injê)
b. yì-tẽ: = Ø = rá-bó children=it.is=StatNeg-3PlSbj 'They are not children.' (yì-tẽ:)
c. púlŏ: = Ø = rá-bó Fulbe=it.is=StatNeg-3PlSbj 'They are not Fulbe (people).' (púlŏ:, cf. 340a and §3.7.4.5)
```

## 11.2.2 Existential and locational quasi-verbs and particles

#### 11.2.2.1 Existential ( $y\hat{a}$ )

The morpheme *yá* is used before a positive stative (quasi-)verb of existence or possession.

```
(346) a. nàwnâ: yá bú-Ø meat Exist be-3SgSbj 'There is some meat.'
b. bérù-m yá só-ŷ goat-AnSg Exist have-1SgSbj 'I have a goat.'
```

For  $b\dot{u}$ -  $\sim b\acute{u}$ - 'be', see §11.2.2.2-3 just below. For  $s\acute{o}$ - 'have' see §11.5.1, below.

The existential morpheme is disallowed if there is a **focalized constuent**, such as a WH-interrogative (347).

(347) a. 
$$[k\delta:^{nL}]$$
  $nj\epsilon]$   $bu-\emptyset$  [thing what?] be-3SgSbj 'What is there?'

```
b. \ddot{a}m = \emptyset bérù-m sò-\emptyset
who?=Foc goat-AnSg have-3SgSbj
'Who has a goat?'
```

In other words,  $y\acute{a}$  is disallowed before a defocalized 'be' or 'have' quasi-verb. These quasi-verbs occur only in a single (positive) series, and so cannot themselves express the distinction between ordinary and defocalized status. In effect,  $y\acute{a}$  rectifies this morphological gap. The form with  $y\acute{a}$  is the functional equivalent of a suffixally marked perfective, while the form without  $y\acute{a}$  is the equivalent of the (defocalized) unsuffixed perfective.

yá is also disallowed in **negative** clauses (348).

```
(348) a. nàw<sup>n</sup>â: ŋgó-∅

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) n \hat{a} w^n \hat{a}: y \hat{a} b \hat{u} - \emptyset d \hat{e} 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  $y\acute{a}$  even in positive contexts, whereby  $y\acute{a}$  só- indicates ownership or other lasting possession, and  $s\acute{o}$ - indicates temporary possession (custody). See §11.5.1-2, below.

 $y\acute{a}$  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  $y\acute{a}$  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 ( $b\dot{u}$ - ~ $b\acute{u}$ - 'be', $\dot{\eta}g\acute{o}$ - 'not be')

A locational predicate 'be (in a place)' is expressed by an inflected form of quasi-verb  $b\hat{u}$ - 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,  $b\hat{u}$ - is L-toned and has a short vowel (unless lengthened by a suffix). L-toned  $b\hat{u}$ - is also used to make expressive adverbials into predicates (§8.6.7). I will usually cite the stem as  $b\hat{u}$ -. However, in a number of other constructions we get H-toned  $b\hat{u}$ - or a form based on it. The H-toned form occurs after existential  $y\hat{a}$  (§11.2.2.3) and is the likely basis for <HL>-toned variant  $b\hat{u}$ - in adjectival predicates (§11.4.2) and for relative-clause participles like inanimate  $b\hat{u}$ - $\hat{w}$  (§14.1.6.3).

```
(350) a. dúw<sup>n</sup>ósán
                               bù-∅
             Douentza
                               be-3SgSbi
             'He/She/It is in Douentza'
         b. ŋgú-rù
                               bù-ỳ
             here
                               be-1Sg
             'I am here.'
                                                  b-\hat{\varepsilon}:^{n}
         c. [úrò
                               tùlù-dá:]
             [house
                               behind]
                                                  be-3PlSbj
             'They are behind the house.'
```

The **paradigm** is (351). Only the 3Pl 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
	1Sg 2Sg	bù-ỳ bù-ẁ
	1Pl 2Pl	bù-ỳ∴ bù-ẁ∴
	3Sg 3Pl	$b\dot{u}$ - $\varnothing$ $b$ - $\dot{\varepsilon}^n$ : $\sim b$ - $\dot{\varepsilon}$ : $^n$ - $b\acute{\circ}$

The **negative** counterpart is  $\dot{\eta}g\dot{\phi}$ - (352).

```
(352) bàmàkó ngó-ỳ
Bamako not.be-1SgSbj
'I am not in Bamako.'
```

The negative paradigm is (353). The 2Sg form (disregarding the nasal) is H-toned  $\eta g \delta - \hat{w}$ , not <HL>-toned  $\# \eta g \delta - \hat{w}$ . The other 1st/2nd person forms are regular. The 3Pl form  $\eta \epsilon - b \delta$  consists of 3Pl subject allomorph  $-b \delta$  plus a thoroughly irregular allomorph  $\eta \epsilon$  instead of  $\eta g \delta$ .

(353)	category	form	
	1Sg 2Sg	ŋ̀gó-y ŋ̀gó-ẃ	
	1Pl 2Pl	ŋ̀gó-ỳ∴ ŋ̀gó-ẁ∴	
	3Sg 3Pl	ŋ̀gó-Ø ɲé-bɔ́	

## 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  $y\acute{a}$ .

```
(354) a. súkórò
                                        bú-Ø
                          yá
             sugar
                          Exist
                                        be-3SgSbj
             'There is some sugar.'
        b. pèré
                                        b-\hat{\varepsilon}:<sup>n</sup>
                          vá
             sheep.Pl
                          Exist
                                        be-3PlSbj
             '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  $b\acute{u}$ -, and the 2Sg (for which we might expect <HL>-toned  $\#b\acute{u}$ - $\mathring{w}$ ) appears as H-toned  $b\acute{u}$ - $\mathring{w}$ . The 3Pl form b- $\grave{\varepsilon}$ :<sup>n</sup>, however, is L-toned, as it is in locational function without  $y\acute{a}$ .

## 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  $y\acute{a}$   $b\acute{u}$ - '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.).

```
(356) a. i-?éw-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-ŵ Rdp-lie.down-MP.Stat-2SgSbj 'You-Sg are lying down (=in prone position).'

## 11.2.5 'Doesn't connect' ( $dimba-\dot{w}=r\acute{a}-$ )

Parallel to Jamsay  $dig\hat{e}=l\acute{a}$ , BenT uses  $dimb\grave{a}-\grave{w}=r\acute{a}$  'does not follow' (which may take pronominal-subject suffixes). In form, this is the negative (with stative negative clitic  $=r\acute{a}$ ) of the stative, cf. positive di- $dimb\grave{a}-w$  '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).

```
(357) [nár^n u = \emptyset] dimba - w = ra - b5^{\dagger}]

[night=it.is follow-Stat=Neg-3PlSbj] [bmb : = \emptyset] dimba - w - ra - b5^{\dagger}]

[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-.

```
    (358) a. dàw<sup>n</sup>á ŋây<sup>n</sup>→ bè-y
thing thus remain.Stat-3SgSbj
'The problem has remained like that.'
    b. ŋây<sup>n</sup>→ bè-rí-Ø
thus remain-PfvNeg-3SgSbj
```

'It didn't remain like that.'

The bare stem is  $b\check{e}$ . 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 1Sg forms.

```
(359) category form

\begin{array}{ccc}
1Sg & b\grave{e}-\grave{y} \\
2Sg & b\grave{e}-\grave{w}
\end{array}

\begin{array}{ccc}
1Pl & b\grave{e}-\grave{y} \\
2Pl & b\grave{e}-\grave{w} \\
\end{array}

\begin{array}{ccc}
3Sg/Inan & b\grave{e}-\grave{y} \\
3Pl & b\grave{e}-\grave{y}
\end{array}
```

In contrast to its usual sense 'remain, stay', bĕ- is **inchoative** ('become') when it follows an expressive adverbial (eg. 'become straight'). See §8.6.7 for examples and for more on the syntax of expressive adverbials.

## 11.2.6.2 'Become, happen' (tángí-)

In addition to  $k\acute{a}y^{n}$  'be done' (hence 'happen, take place'), on which see §11.1.6 above, there is a verb  $t\acute{a}ng\acute{a}$  'become', with NP complement (360).

```
(360) 3:-m tángí:-rè-\(\mathcal{O}\)
chief-AnSg become-Pfv1a-3SgSbj
'He became chief.'
```

See also 'he has become a man' (árnà-m tángí:-rè-Ø) 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' (guy<sup>n</sup>-)
```

The inflectable 'say' verb, following a quotation, is  $g\check{u}y^n$ - (variant  $g\check{t}y^n$ -). It is one of three monosyllabic  $Cvy^n$  stems. These are the only CvC or otherwise C-final verbs in the language (§10.1.3.6). The imperfective 3Sg is  $g\grave{u}-g\acute{u}-\grave{m}$ . The same-subject chaining form is  $g\grave{u}=n\acute{t}\sim g\grave{t}=n\acute{t}$ , and this is the probable etymological source of purposive postposition  $g\check{t}n\sim g\grave{u}n\acute{t}\sim g\grave{u}n\acute{t}(\S8.5.1)$ .

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  $\{L\}$ -toned inanimate form of the adjective ( $\S11.4.3$ ).

In the absence of focalization, there are two adjectival predicate constructions. One has the relevant inflected form of the **locational-existential quasi-verb**  $b\hat{u}$ - 'be (in a place), exist' following the adjective (which has **invariant "inanimate" form**).  $b\hat{u}$ - 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  $b\hat{u}$ -, 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  $\{w\ u\ m\}$  (361b-d). These are the modifying forms, not the predicative forms, on which see the following section.

#### (361) Adjectives with $b\hat{u}$ :- predicative form

```
gloss
                              modifying form (inanimate)
a. vowel-final, with inanimate suffix -w
      'big, adult'
                              diy^n \hat{a} - w^n
      'spacious'
                              káwà-w
      'good'
                              \hat{\varepsilon}s\hat{u}-w
      'fat'
                              dùgû-w
      'long'
                              gùrô-w
      'heavy'
                              dùsû-w
      'nearby'
                              sòsû-w
      'small'
                              dâ:-w
      'thin'
                              mènjê-w
      'soft'
                              yàrû-w
      'lightweight'
                             n \hat{\epsilon} r^n \hat{u} - w^n
b. with final w
      'tight; brave'
                              \tilde{\varepsilon}w
      'hot'
                              э̂W
      'distant'
                              wã:w
c. with final u
      'crooked'
                              gàlú
      'bad, ugly'
                              mòsú
d. with final m
      'plump'
                              ãm
      '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  $\S11.4.2$  below).

## (362) Adjectives with 'it is' clitic in predicative form

```
modifying form (inanimate)
      gloss
a. vowel-final, with inanimate suffix -w
      'unripe'
                                kèsû-w
      'deep'
                                 w\acute{5}r^n\grave{5}-w
      'other'
                                lă-w
      'red'
                                bár<sup>n</sup>à-w<sup>n</sup>
                                iéw<sup>n</sup>è-w<sup>n</sup>
      'black'
b. vowel-final, with zero inanimate suffix
      'white'
                                pílέ
      'skinny'
                                kómbó
      'living'
                                úw<sup>n</sup>5
      'old'
                                pě:
      'weak, diluted'
                                sèré
      'new'
                                kálà
      'flat'
                                pàtà-pátà
      'easy, cheap'
                                nà:r<sup>n</sup>á
      'runty'
                                cété-m (animate singular)
c. final y
      'half-ripe'
                                 bòlòrŏy
      'empty'
                                kòrŏy
```

## 11.4.1 Positive adjectival predicates with 'be' quasi-verb ( $b\hat{u}$ -)

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  $b\hat{u}$ -, a special **HL>-toned** version  $b\hat{u}$ - of the locational-existential 'be' quasi-verb  $b\hat{u}$ -  $b\hat{u}$ - (§11.2.2.2-3). The 3Sg (and inanimate) form is  $b\hat{u}$ :- $\mathcal{O}$ , and the 3Pl form is b- $\hat{\epsilon}$ : $^n$ . While the predicative adjective itself is invariant in form, a Sg/Pl distinction is made in this way by the quasi-verb.

The predicative adjective before  $b\hat{u}$ - is either {LH}- or {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 /H/. The form of the predicative adjective is identical to that of the abstractive nominal, specifically the form, {H}-toned for some adjectives, used in comparative constructions to specify the domain of comparison (§12.1.1).

```
(363)
                                     Inan modifying
                                                            predicative with bû-
         gloss
         a. /LH/ in both functions, no nonzero suffix
           final u
              'crooked'
                                     gàlú-Ø
                                                            gàlú
              'nearby'
                                     sàsú-Ø
                                                            sòsú
              'bad, ugly'
                                     màsú-Ø
                                                            mòsú
              'good'
                                     \grave{\varepsilon}sú-\varnothing (\sim \grave{\varepsilon}sû-w)
                                                            ὲsú
         b. /LHL/ modifying with -w, {LH} predicative without -w
           final u
              'heavy'
                                     dùsû-w
                                                            dùsú
             'fat'
                                     dùgû-w
                                                            dùgú
              'soft'
                                     yòrû-w
                                                            yòrú
             'lightweight'
                                    n \hat{\epsilon} r^n \hat{u} - w^n
                                                           nèr<sup>n</sup>ú
           final 3
              'long'
                                     gùrô-w
                                                            gùrɔ-w
         c. /LHL/ modifying, {LH} predicative, both with final w
           with -w
              'thin'
                                     mènjê-w
                                                            mènjě-w
           lexical final w
              'short'
                                     g̃3:w-Ø
                                                            gš:w
              'tall'
                                     gãw-Ø
                                                            găw
              'distant'
                                     wã:w-Ø
                                                            wă:w
           final consonant, no suffix
              'plump'
                                                            ăm
                                     ãm-Ø
         d. /HL/ modifying, {H} predicative
           final a, with -w
              'small'
                                                            dá:-w
                                     dâ:-w
                                     div^n \hat{a} - w^n
                                                            dív<sup>n</sup>á-w<sup>n</sup>
              'big, adult'
              'spacious'
                                     káwà-w
                                                            káwá-w
           final u, with -m
              'sweet; sharp'
                                     έrù-m
                                                            έrú-m
              'coarse'
                                     kúnjù-m
                                                            kúnjú-m
           final consonant, no suffix
              'hot'
                                     ŝw-Ø
                                                            э́w
              'cold, slow'
                                     tâm-Ø
                                                            tám
         e. irregular output {H} with nasal extension
              'tight; brave'
                                     \tilde{\varepsilon}w-\mathcal{O}
                                                            έn
```

'full'

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 (363a-d) is attributed to the stem (with suffixes inanimate -w and animate

bání

bâ-w

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 {LH} and /HL/ to {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 3Sg/Inan  $b\hat{u}$ :- $\emptyset$  are in (364).  $b\hat{u}$ :- $\emptyset$  is homophonous with 3Pl pronoun  $b\hat{u}$ : and with inanimate participial  $b\hat{u}$ - $\hat{w}$  (§14.1.6.3).

```
(364) a. mòsú
                               bû:-Ø
           bad
                               be-3SgSbj
            'He/She/It is nasty' (mòsú)
       b. ăm
                               bû:-Ø
           plump
                               be-3SgSbj
            'He/She/It is plump.' (am)
       c. mènjě-w
                               bû:-Ø
           thin-Inan
                               be-3SgSbi
            'He/She/It is thin.' (mènjê-w)
       d. gš:w
                               bû:-Ø
           short
                               be-3SgSbj
           'He/She/It is short.' (gɔ̃:w)
       e. káwá-w
                               bû:-Ø
           spacious-Inan
                               be-3SgSbj
           'It is spacious.' (káwà-w)
       f. div^n \acute{a} - w^n
                               bû:-Ø
           big-Inan
                               be-3SgSbj
            'He/She/It is big.' (díynà-wn)
       g. érú-m
                               bû:-Ø
           sweet-Inan
                               be-3SgSbj
           'He/She/It is sweet.' (érù-m)
```

See also  $n\check{u}m \ b\mathring{u}:-\emptyset$  '(it) is difficult' in line 4 of (673) in the sample text. For 3Pl subject,  $b-\hat{\varepsilon}:^n$  'they are' follows the adjective (365).

```
(365) a. m \hat{o} s \hat{u} be-\hat{\epsilon} : n bad be-3PlSbj 'They are bad.' (m \hat{o} s \hat{u})

b. \tilde{a} m be-\hat{\epsilon} : n plump be-3PlSbj 'They are plump.' (\tilde{a} m)
```

For first and second person subject, the appropriate inflected form of  $b\hat{u}$ - 'be' is used (366).

```
(366)
       a. mòsú
                              b\hat{u}-y (or: b\hat{i}-y)
            bad
                              be-1SgSbi
            'I am bad' (mòsú)
        b. <u>ăm</u>
                              bû-y
            plump
                              be-1SgSbj
            'I am plump.' (am)
        a. ăm
                              bû-w∴
                              be-2PlSbj
            plump
            '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.

```
(367)
       a. mènjé-w
                            bû:-Ø
           short-Inan
                            be-3SgSbj
           'He/She/It is thin.'
       b. mènjé-w
                            bû-y
           short-Inan
                            be-1SgSbj
           'I am thin.' (gɔ̃:-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  $-\hat{m}$  for animate singular reference, and  $-\hat{w}$  or zero (depending on the adjective, §4.5.1) for animate plural as well as for inanimate reference. An exception is that the 1Pl and 2Pl forms add  $-\hat{m}$  instead of zero.

The adjective is then followed by the conjugated 'it is' clitic forms in (368).

```
(368) category form

1Sg = m-iy

2Sg = m-iw

1P1 = m-iy.:

2P1 = m-iw.:
```

```
3Sg/Inan
after consonant: = Ø (with final L-tone)
after vowel: = ?-Ø (vowel lengthened, with final L-tone)
3Pl = b5
```

Examples with  $pil\acute{e}$  'white' and  $j\acute{e}w^n\grave{e}$ - 'black' (the latter taking inanimate singular -w suffix) are in (369). Both 'black' and 'white' have their regular "inanimate singular" forms ( $pil\acute{e}$ ,  $j\acute{e}w^n\grave{e}-w^n$ ) for inanimate or plural reference (369a-b). The lengthening and <HL>-tone in  $pil\acute{e}:-\emptyset=\emptyset$  are due to the clitic; a rendition  $pil\acute{e}-\emptyset=$ ' would capture this better but is typographically ungainly. For animate singular reference, the adjective ends in (animate) singular  $-\grave{m}$  for both 'white' and 'black' (369c-d), producing a geminated mm at the boundary For animate plural reference, 'white' is  $pil\acute{e}-\grave{m}$  ("animate singular") while 'black' is  $j\acute{e}w^n\grave{e}-\grave{w}^n$  (morphologically "inanimate") in (369e-f).

```
(369) a. [\acute{u} \qquad \stackrel{\text{HL}}{\text{b\'er\'e}}] [2SgPoss \stackrel{\text{HL}}{\text{stick}}] pil\hat{\varepsilon}:-\emptyset=\emptyset (j\acute{e}w^n\grave{e}-w^n=\emptyset) white-Inan=it.is.3SgSbj (black-Inan=it.is.3SgSbj) 'Your-Sg stick is white (black).'
```

- b.  $[\acute{u} \qquad \stackrel{\text{HL}}{\text{b\'er\`e}} \qquad k\grave{u} \qquad b\grave{e}]$   $[2\text{SgPoss} \qquad \stackrel{\text{HL}}{\text{stick}} \qquad \text{Def} \qquad \text{Pl}]$   $p\acute{\imath}l\hat{e}:-\varnothing=\varnothing \qquad (j\acute{e}w^n\grave{e}-w^n=\varnothing)$ white-Inan=it.is.3SgSbj (black-Inan=it.is.3SgSbj)
  'Your-Sg sticks are white (black).'
- c.  $pil\acute{e}-m=m-iy$   $(j\acute{e}w^n\grave{e}-m=m-iy)$  white-AnSg=it.is-1SgSbj (black-AnSg=it.is-1SgSbj) 'I am white (black)'.
- d.  $pil\acute{e}-\dot{m}=\emptyset$   $(j\acute{e}w^n\acute{e}-\dot{m}=\emptyset)$  white-AnSg=it.is.3SgSbj (black-AnSg=it.is.3SgSbj) 'He/She/It (person, animal) is white (black).'
- e.  $pil\hat{e}:-\emptyset = b\hat{o}$  ( $j\acute{e}w^n\acute{e}-\grave{w}^n = b\acute{o}$ ) white.Inan=it.is.3PlSbj (black.Inan=it.is.3PlSbj) 'They (e.g. people, sheep) are white (black).'
- f.  $pil\acute{e}-m = m-iy$ .:  $(j\acute{e}w^n\acute{e}-\grave{w}^n = m-iy$ .:) white-AnSg=it.is-1PlSbj (black-Inan=it.is-1PlSbj) 'We are white (black)'.
- g.  $pil\acute{e}-\acute{m}=m-\grave{u}w$ .:  $(j\acute{e}w^n\acute{e}-\grave{w}^n=m-\grave{u}w$ .:) 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  $\{L\}$ -toned clause-final form, occurs after a focalized constituent. For example, the regular predicative form  $\grave{e}s\acute{u}$   $b\^{u}$ -'be good' is replaced by  $\grave{e}s\grave{u}$  in (370a). The other examples in (370) show that the adjective is inanimate in form even with a human singular or plural subject.

```
(370) a. k \vec{u} = \vec{m}
                                èsù
             Inan=Focus
                                good
             'That [focus] is what is good.' (2005.1a.05)
                                     gà:-w / èrù-m
         Prox.Inan=Focus
                                     short/sweet-Inan
             'This [focus] is what is short/sweet.'
         c. k\acute{u} = \grave{m}
                                dùgù / wà:w
                                big/distant.Inan
             [Inan=Foc
              'That [focus] is what is big/far away.'
                                diy^n \hat{a} - \hat{w}^n
         d. i = m
                                big-Inan
             1Sg=Focus
             'It's I [focus] who am big (adult).'
                                div^n \hat{a} - \hat{w}^n
         e. b\hat{u} = \hat{m}
             3Pl=Focus
                                big-Inan
             'It's they [focus] who are big (adult).'
```

#### 11.4.4 Negative adjectival and stative predicates ( $=r\acute{a}$ -)

The stative negative clitic  $= r\acute{a}$ - is added to the form of the adjective used as **modifier of an inanimate noun**. After a nasal, the clitic takes the form  $= d\acute{a}$ -, which in careful pronunciation comes out as  $= n d\acute{a}$ -. The negative suffix induces **tone-dropping** on the stem. The regular pronominal-subject suffixes follow  $-r\acute{a}$ -. The paradigm is (371). The 2Sg suffix is H-toned (as in other negative-suffix paradigms). The 3Pl is also H-toned.

```
(371) category form

1Sg = r\acute{a}-\grave{y}

2Sg = r\acute{a}-\acute{w} \text{ (H-toned)}

1Pl = r\acute{a}-\grave{y} : = r\acute{a}-\grave{w} : :

3Sg/Inan = r\acute{a}-\varnothing

3Pl = r\acute{a}-b\acute{b} \text{ (H-toned)}
```

Examples with 3Sg (animate), inanimate, and 3Pl referents are in (372).

```
'he/she is not ...'
                                                                                     'it is not ...'
                                                                                                                                   'they are not ...'
(372) gloss
                  'bad'
                                       m \hat{\sigma} \hat{s} \hat{u} - \emptyset = r \hat{a} - \emptyset
                                                                                     m \hat{\sigma} \hat{s} \hat{u} - \emptyset = r \hat{a} - \emptyset
                                                                                                                                   m \hat{\sigma} \hat{s} \hat{u} - \emptyset = r \hat{a} - b \hat{\sigma}
                  'red'
                                       b a r^n a - w^n = r a - \emptyset
                                                                                     bar^n - w^n = ra - \emptyset
                                                                                                                                   bar^n - w^n = ra - b3
                  'short'
                                       g \hat{\jmath} : w = r \hat{a}
                                                                                     g \hat{\beta} : w = r \hat{a}
                                                                                                                                   g \grave{\partial} : w = r \acute{a} - b \acute{\sigma}
                  'cold'
                                       t am - \emptyset = d a -
                                                                                     t am - \emptyset = d a -
                                                                                                                                   t am - \emptyset = da - b
```

Examples with *mòsú* 'bad, ugly' showing a fuller range of pronominal subjects are in (373).

- (373) a.  $m \ge v \emptyset = r \le \emptyset$ bad-Inan<sup>L</sup>=StatNeg-3SgSbj 'He/She/It is not bad.'
  - b. *mòsù-∅ = rá-bó* bad-Inan<sup>L</sup>=StatNeg-3PlSbj 'They are not bad.'
  - c. mòsù-Ø=rá-ỳ bad-Inan<sup>L</sup>=StatNeg-1SgSbj 'I am not bad.'
  - d. *mòsù-∅ = rá-ẃ* bad-Inan<sup>L</sup>=StatNeg-2SgSbj 'You-Sg are not bad.'
  - e. *mòsù-∅ = rá-ỳ∴* bad-Inan<sup>L</sup>=StatNeg-1PlSbj 'We are not bad.'
  - f. mòsù-Ø=rá-ẁ∴ bad-Inan<sup>L</sup>=StatNeg-2PlSbj 'You-Pl are not bad.'

## 11.4.5 Past forms of adjectival predicates ( $=b\hat{\varepsilon}:-,=b\hat{\varepsilon}-$ )

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  $=b\hat{\varepsilon}$ -.

Examples with **third person** subjects are in (374). In the 3Pl, two constructions are possible. One has  $=b\delta=b-\hat{a}$ ; beginning with the 3Pl subject suffix used in perfective positive forms (374b). The other has 3Pl past  $=b-\hat{a}$ : added to the plural form of the adjective with suffix  $-y\hat{\epsilon}$  (374d). Further examples (not reproduced here) confirm that either construction may be used with any adjective. For example, (374d) can also be expressed as  $j\hat{\epsilon}w^n\hat{\epsilon}=b\delta=b-\hat{a}$ :.

```
(374) a. púl5-m
                                    m \hat{\sigma} s \hat{u} = \emptyset = b \hat{\varepsilon} : -\emptyset
                Fulbe-AnSg bad=be.3SgSbj=Past-3SgSbj
                 'The Pullo (=Fulbe man) used to be bad.'
           b. púlš:
                                    m \hat{\sigma} s \hat{u} = b \hat{\sigma} = b - \hat{a}:
                Fulbe.Pl
                                    bad=be.3PlSbj=Past-3PlSbj
                 'The Fulbe-Pl used to be bad.'
           b. j\acute{e}w^n\grave{e}-m=b\grave{e}-\varnothing
                black-AnSg=Past-3SgSbj
                 'He/She was black.'
           c. j \in w^n = b \in \mathcal{O}
                black-Inan=Past-3SgSbj
                 'It (inanimate) was black.'
           d. j \notin w^n \hat{e} - y \hat{e} = b - \hat{a}:
                black-Pl=Past-3PlSbj
                 'They (animate) were black.'
           e. nî:
                                  t\acute{a}m-\varnothing=b\hat{\varepsilon}:-\varnothing
                                 cold-Inan=Past-3SgSbj
                 water
                 'The water was cold.'
Examples with first/second person subjects are in (375).
(375) a. j \in w^n \hat{e} - m = b \hat{e} - y.:
                black-AnSg=Past-1PlSbj
                 'We were black.'
           b. g u r \check{\delta} - w = b \acute{\varepsilon} - \mathring{v}.:
                long-Inan=Past-1PlSbj
                 'We used to be tall.'
           c. k \acute{o} mb\acute{o} = b\acute{\varepsilon} - \grave{w}
```

skinny=Past-2SgSbj

fat=Past-1SgSbj 'I was fat.'

d.  $d\dot{u}g\dot{u} = b\dot{\varepsilon} - \dot{v}$ 

e.  $d\hat{u}g\hat{u} = b\hat{\varepsilon} - \hat{y}$ .: fat=Past-1PlSbj 'We were fat.'

'You-Sg used to be skinny.'

**Past negative** examples are in (376). The structure is the same as above, except for the addition of stative negative clitic  $= r\acute{a}$ , which forces tone-dropping on the adjective.

```
(376) a. jèwnè-wn=rá=bé-ŷ∴
black-Inan<sup>L</sup>=StatNeg=Past-1PlSbj
'We were not black.' (jéwnè-)
b. nî: òw-Ø=rá=bê:-Ø
water hot-Inan<sup>L</sup>=StatNeg=Past-3SgSbj
'The water was not hot.' (ôw)
c. sàlà=rá=bê:-Ø
small=StatNeg=Past-3SgSbj
'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  $s\acute{o}$ - 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  $y\acute{a}$  (§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 2Sg and 3Sg forms with H-toned suffix  $-\vec{w}$  are homophonous. The 3Pl is idiosyncratic but is also H-toned.

```
(378) category form

1 \operatorname{Sg} \qquad s \circ -\hat{y}
2 \operatorname{Sg} \qquad s \circ -\hat{w} \qquad (\text{H-toned, homophonous to 3Sg})
1 \operatorname{Pl} \qquad s \circ -\hat{y} \therefore
2 \operatorname{Pl} \qquad s \circ -\hat{w} \therefore
3 \operatorname{Sg/Inan} \qquad s \circ -\hat{w} \qquad (\text{H-toned, homophonous to 2Sg})
3 \operatorname{Pl} \qquad s -\hat{\varepsilon} : ^{n} \sim s -\hat{\varepsilon} : ^{n} - b \circ \qquad (\text{H-toned})
```

In the **negative**, the form is sò-ló-, used without existential yá.

```
(379) nă:-m sò-ló-ẃ cow-AnSg have-Neg-2SgSbj 'You-Sg don't have a cow.'
```

The **negative paradigm** is (380). The 2Sg suffix is again H-toned, but the 2Sg and 3Sg forms are segmentally distinct. The 3Pl form is again idiosyncratic and difficult to segment (the front vowels may constitute two plural morphemes).

```
(380) category form

1Sg \qquad s\grave{o}-l\acute{o}-\grave{y}
2Sg \qquad s\grave{o}-l\acute{o}-\acute{w} \text{ (H-toned)}
1Pl \qquad s\grave{o}-l\acute{o}-\grave{y}...
2Pl \qquad s\grave{o}-l\acute{o}-\grave{w}...
3Sg/Inan \qquad s\grave{o}-l\acute{o}-\varnothing
3Pl \qquad s\grave{\varepsilon}-n\acute{\varepsilon}
(alernative segmentation s-\grave{\varepsilon}-n-\acute{\varepsilon})
```

## 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'.

```
(381) a. nă:-m yá só-ŷ
cow-AnSg Exist have-1SgSbj
'I have (= own) a cow.'

b. nă:-m sò-ŷ
cow-AnSg have-1SgSbj
'I have a cow (with me).'
```

In (382), the locative adverbials appear to be (contrastively) focalized, so existential  $y\acute{a}$  is absent.

```
(382)
        ú
                                   sò-ẁ
                                                     dè,
                   ŋgú-rù
        2Sg
                   here
                                  have-2SgSbj
                                                     if,
        [m̀bá
                           yà]
                                                       s\grave{o}-\grave{w}
                                       ngá-rù
        [FarDist.An
                           alsol
                                       there.Dist
                                                       have-3SgSbj
        'If you-Sg have (one) here, that (other person) too has (one) there.' [2005.1a.06]
```

This construction without  $y\acute{a}$  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.

```
(383) pèrí-yěy yá só-ẃ
ten-two Exist have-2SgSbj
'Do you have twenty riyals (= 100 CFA francs) on you?'
```

# 11.5.3 'Belong to' predicates (HLk3:n, HLy3-m)

The noun  $k\delta$ : "thing' is used in predicate genitives ('X belongs to Y'). It takes possessed form  ${}^{HL}k\delta$ :" or  ${}^{L}k\delta$ :" (1Sg possessor  ${}^{L+HL}k\delta$ :" is mine'). The subject X is typically a discourse-definite, or deictically anchored, inanimate entity. The 'it is' clitic is presumably present, but it has no audible manifestation since  ${}^{HL}k\delta$ :" and variants already end in a long vowel and final L- tone.

- (384) a.  $[\hat{u}r\hat{o}^L \quad \hat{n}g\hat{u}]$  L+HL  $k\check{\sigma}$ :  $n = \emptyset$  [house Prox.Inan] L+HL 1SgPoss.thing=it.is 'This house belongs to me (=is mine).'
  - b.  $b\acute{u}:d\grave{u}$  [F  $HL k\^{o}:n=\varnothing$ ] money [F HL thing=it.is] 'The money belongs to F (personal name).'

For animate (but nonhuman) subject, the noun  $y \delta - m$  '(unspecified) animal, critter' or its plural  $y \delta$ : replaces  $k \delta$ : 'thing'. The possessed forms are singular  $^{HL}y \delta - m$  or  $^{L}y \delta - m$  (1Sg  $^{L+HL}y \delta - m$ ), and plural  $^{HL}y \delta$ : or  $^{L}y \delta$ : (1Sg  $^{L+HL}y \delta$ :). Again, the 'it is' clitic is presumably present but has no audible manifestation, as the possessed-noun tone overlay is already falling.

(385) 
$$p \stackrel{\text{ere}}{=} m$$
 [ú  $\stackrel{\text{HL}}{y} \stackrel{\text{$0-m$}}{=} \emptyset$ ] sheep-AnSg [2SgSbj  $\stackrel{\text{HL}}{=}$  animal-AnSg=it.is] 'The sheep-Sg is yours-Sg.'

# 12 Comparatives

## 12.1 Asymmetrical comparatives

#### 12.1.1 'More, most' ( $m \not\in g \not\in$ )

The noun  $m \ell g \ell$  'more, most' is common in comparatives. This stem is pronounced with H-tones 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  $loople m \ell g \ell$  in this position, behaving tonally like nouns following a possessor ending in an L-tone. Other speakers clearly pronounce H-toned  $loople m \ell g \ell$  in post-dative position, and this form is shown in the examples below (though some were originally transcribed with  $loople m \ell g \ell$ ).

```
(386) a. L+m\ddot{a}: m\acute{e}g\acute{e} Hd\acute{i}y^n\acute{a}-w^n Dat.1Sg more Hbig(ness) 'He/She is older than I (am).'
```

- b. [ú mâ:] mégé gǎw bí-ỳ
  [2Sg Dat] more tall(ness) be-1SgSbj
  'I am taller than you-Sg (are).'
  (bí-ỳ occasional variant of bú-ỳ)
- c. [û: Lmà:] mégé júwó-ỳ
  [2Pl LDat] more know.Ipfv-1SgSbj
  'I know more than you-Pl (do).'
- d. / L+mã: nî-w kù] [1Sg.Dat 3SgSbj give.Pfv-Ppl.Inan Def]  $^{\text{HL}}k\hat{\mathfrak{z}}:^{n}$ Lmà:1 mégé Πú HLPoss] <sup>L</sup>Dat1 [[2SgPoss more 'She gave me more than (she gave) you.' (lit: "What she gave me [is/was] more than yours.")
- e.  $\frac{\dot{\epsilon}r^n\dot{\epsilon} = \dot{m}}{3\text{Sg} = \text{Foc}}$  mégé  $n\dot{\epsilon} = \emptyset$ 3Sg=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  $m\acute{e}g\acute{e}$ . Abstractives, in other contexts, have an {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  $m\acute{e}g\acute{e}$ , several of these abstractive nominals shift to {H}-tone.  $d\acute{t}y^n\acute{a}$ -w bigness, size' in (386a) exemplifies this shift, compare the usual {LH}-toned abstractive

dìy<sup>n</sup>ǎ-w<sup>n</sup>. By contrast, gǎw 'tallness, height' in (386b) keeps its /LH/ melody in comparatives. For more details and examples, see §4.2.6.

 $m\acute{e}g\acute{e}$  can also occur with an {HL}-toned form of the adjective distinct from both the regular {LH}-toned abstractive and the {H}-toned form with  $m\acute{e}g\acute{e}$ . That the {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 tone-dropped 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).

```
(387) a. màngòrò <sup>L</sup> mégé HL bár <sup>n</sup>à-w <sup>n</sup> mango <sup>L</sup> more <sup>HL</sup> red-Inan 'the reddest mango' or 'a redder mango'
```

- b.  $n\dot{u}^L$   $m\acute{e}g\acute{e}$   $^{HL}b\acute{a}r^n\grave{a}$ -m person $^L$  more  $^{HL}$ red-AnSg 'the reddest (=brownest) person' or 'a redder (=browner) person'
- c. màngòrò L mégé HL dúsù-Ø mango L more HL heavy-Inan 'the heaviest mango' or 'a heavier mango'
- d. yà L mégé HL dúgù-yè woman L more HL fat-AnPl 'the fattest women' or 'some fatter women'

Further examples showing the form of the {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 {HL} overlay is realized as H.L.L on trisyllabics, the only attested example being that in (388e).

{HL} after mégé

(388) Inanimate modifying and {HL} comparative adjectives

modifying

gloss

```
a. -w (not homorganic to preceding vowel) retained after mégé adjective has /LHL/melody
'long' gùrô-w HL gúrô-w adjective has /HL/melody
'red' bárna-w HL bárna-wn'
'spacious' káwa-w HL káwa-w HL dívna-wn
```

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
                                                       ^{\mathrm{HL}} \acute{\varepsilon} r \grave{u}-m
      'sweet'
                           έrù-m
d. final u without -w
  adjective has /LH/ melody
                                                       HL 5mbù
     'rotten'
                           òmbú
                                                       HL mɔ́sù
     'bad'
                           mòsú
                                                       <sup>HL</sup> jímdù
     'blind'
                           jìmdú
e. trisyllabic
  adjective has /LH/ melody
                                                       <sup>HL</sup> bólòròy</sup>
     'half-ripe'
                           bòlòrŏy
f. other
  adjective has /H/ melody
                                                       ^{\mathrm{HL}}píl\grave{arepsilon}
      'white'
                           pílέ
  adjective has /HL/ melody
                                                       <sup>HL</sup>kálà
     'new'
                           kálà
                                                       ^{\mathrm{HL}}\hat{\mathfrak{z}}w
     'hot'
                           э̂W
                                                       <sup>HL</sup>tâm
     'cold'
                           tâm
                                                       HL gôm
     'foul'
                           gôm
  adjective has /LH/ melody
                                                       HL mâ:
     'dry'
                           mă:
                                                       <sup>HL</sup>nûm
     'difficult'
                           nŭm
                                                       <sup>HL</sup>írèy
     'ripe'
                           ìrěy
  adjective has /LHL/ melody
                                                       <sup>HL</sup>gâw
     'tall'
                           gãw
```

## 12.1.2 'Surpass' (*láwá*)

láwá 'pass by' can be used in the sense 'surpass' (389).

```
(389)
                                                         j\acute{u}w\acute{5}-\grave{m}=b\grave{\varepsilon}-\grave{y},
          kùyó:
                       [έr<sup>n</sup>έ
                                 mâ:]
                                            mέgέ
                                                         know-Ipfv=Past-1SgSbj,
          first
                                 Dat]
                                            more
                       [3Sg
          gà:
                  n\acute{u}w^n\grave{j}v^n
                                                láwá-jê:-∅
          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' (*irěw*)

The form  $ir\check{e}w$  'better' is used with 'be' quasi-verb to constitute the predicate. The comparandum is dative. Negation is with the stative negative  $=r\acute{a}$ - (§10.2.3.4), which induces tone-dropping (390b).

- (390) a. [ú mâ:] ìrěw bú-ỳ
  [2Sg Dat] better be-1SgSbj
  'I am better than you-Sg (are).'
  - b. L+mä: irèw=rá-b5
    Dat.1Sg better=Neg-3PlSbj
    '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.

(391) [[[ú 
$$m\hat{a}$$
:]  $d\hat{a}y^n$  í  $n\hat{i}$ - $w^n$ ]  $g\hat{a}y^n \rightarrow$ ] [[[2Sg Dat] manner<sup>L</sup> 1SgSbj give.Pfv-Ppl.Inan] **like**] [ér^n \( \xi \) \mathbb{m}\( \alpha:]  $n\hat{i}$ - $y$  [3Sg Dat] give.Pfv-1SgSbj 'I gave him like the way (=as much as) I gave you-Sg.'

#### 12.2.2 'Equal; be as good as' ( $b\check{a}$ -)

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 HL bɔ̂:] bá-ẁ [wrestling in] [3ReflSgSgPoss HL father] equal.Stat-3SgSbj 'He<sub>x</sub> is as good as his<sub>x</sub> father in wrestling.'
  - b. [à-jèrú wó] [á HL bɔ̂:] bà-rí-Ø [wrestling in] [3ReflSgSgPoss HL father] equal-PfvNeg-3SgSbj 'Hex is not as good as hisx 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.

(393)	category	form
	1Sg 2Sg	bá-ỳ bá-ẁ
	1Pl 2Pl	bá-ỳ∴ bá-ẁ∴
	3Sg 3Pl	bá-ẁ 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).

```
(394) a. cí-céw b-è:<sup>n</sup>-bó
equal be<sup>L</sup>-3PlSbj-3PlSbj
'They are equal.'
```

b. [sĕydù yà→¹] [á:mádù yà→¹] [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).

```
(395) [sĕydù yà→¹] [á:mádù yà→¹] céw-céw wàrà-b5

[Seydou and] [Amadou and] equally farm.Pfv-3PlSbj

'Seydou and Amadou did farming (=weeding) to the same extent.'
```

For simple  $c\hat{\epsilon}w$  in 'willy-nilly' conditional antecedents see §16.3. Jamsay  $c\hat{\epsilon}w$  'all' and its derivatives may be the sources of these forms.

```
12.2.4 'Equal(ly)' and 'since' (b\check{a} \rightarrow)
```

An adverbial (with final intonational prolongation)  $b\check{a} \rightarrow$ , possibly related to the verb  $b\check{a}$ - 'equal (be equal to)' (§12.2.2), can be glossed 'as much (as sb/sth else)'. It may be used predicatively, with following  $b\hat{u}$ - 'be'. The usual context is size (dimensions).

In the combination with following  $b\dot{u}$ - (396), one can clearly hear the rising tone.

```
(396) [nà: L mǔ:] gŏ:-m bǎ→ bù-Ø [cow ProxSg] elephant equally be-3SgSbj 'This cow is as big as an elephant.'
```

 $b\check{a} \rightarrow$  is also used in the negated '... not so much as X' construction. Here  $b\check{a} \rightarrow$  is phrase-final, and it is often heard as L-toned.

```
(397) támbú-m [[mbá HL támb-ì:] bà→]
kick.Ipfv-3SgSbj [[FarDist.An HL kick-VblN] equally]
ùrùyó-m-dó
hurt-Ipfv-Neg-3SgSbj
'It (=centipede) stings, (but) it doesn't hurt as much as the other one's stinging.'
[2005.1b.09]
```

 $b\check{a} \rightarrow$  is also used in the temporal sense 'since' after a noun denoting a time, as in  $j\hat{\epsilon}y^n b\check{a} \rightarrow$  'since last year'. A better gloss is '(going) back to last year' or '(since) as early as last year'. In the fixed phrase  $k\grave{u}y\acute{o}$ :  $b\check{a} \rightarrow$  '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' (*dŏ*-)

In the sense 'X come to equal Y' (e.g. as the culmination of a gradual improvement), the verb  $d\tilde{\sigma}$ - 'arrive, reach (destination)' may be used.

```
(398) a. [àjèrú wó] àbádá [á HL b3:]
[wrestling in] never [3ReflSgPoss HL father]
dó-m-dó-Ø
arrive-Ipfv-Neg-3SgSbj
'He<sub>x</sub> will never (come to) be as good in wrestling as his<sub>x</sub> father.'
```

```
b. gàwá í dŏ-jê:-Ø
height 1SgObj arrive-RecPf-3SgSbj
'He/She has (now) reached the same height as (= is now as tall as) me.'
```

# 12.3 'A fortiori' (*wê:y*)

The particle  $w\hat{e}:y$ , sometimes  $w\hat{e}:y \rightarrow$  with intonational prolongation, means 'a fortiori, much less'. It could also be transcribed as  $w\acute{e}y$ : with dying-quail intonation. For this form in the sense 'as well as', see §7.1.3.

```
(399) a. injírí béré-mdó-ỳ [wê:y jìyé] get.up can-IpfvNeg-1SgSbj [much.less dance] 'I can't (even) get up, much less (can I) dance.'
```

```
[n\grave{a}: ^{L} g\acute{u}n\acute{u}m k\grave{u}] y\grave{\imath} = n\acute{a}y^{n}]
b. //dɔ̃:-m
                         yà]
    [[Dogon-AnSg
                         too
                                 [cow entire Def] see=and.SS]
    júwó-m-dó-Ø
    know-Ipfv-Neg-3SgSbj
                                  ^{L}này^{n}]
    wê:y
                  [nà:-dúrò
                                                mà:lù-Ø
    a.fortiori [cow<sup>L</sup>-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  $= \dot{m}$ . It is identical in form to an allomorph of the 'it is' clitic (§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  $\frac{\hat{a}r^n\hat{a}}{n}$  'men', this would produce  $\frac{\hat{a}r^n\hat{a}}{n} = \hat{m}$ , which would be homophonous to singular ár<sup>n</sup>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 1st/2nd person categories, by the use of a 3Sg 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  $y\acute{a}$  is used chiefly with a following quasi-verb  $b\grave{u}$ - 'be' or  $s\acute{o}$ - '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

stone

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, -\mathcal{O} for 3Sg/Inan, and -b5 for 3Pl.

```
(400) a. s \not\in v d \hat{u} = \hat{m}
                                        10-0
              Seydou=Foc
                                        go.Pfv-3SgSbj
              'It's Seydou [focus] who went.'
         b. kúr<sup>n</sup>ù
                                yàyà-Ø
```

```
fall.Pfv-3SgSbj
     'It was a stone [focus] that fell.'
c. ár<sup>n</sup>à
                          vè-bɔ́
```

```
man.Pl
                come.Pfv-3PlSbi
'It was the men [focus] who came.'
```

For 1st/2nd person subject, the unsuffixed perfective is again used, but the verb has zero (pseudo-)3Sg inflection.

```
(401) a. i=m lô-Ø
1Sg=Foc go.Pfv-3SgSbj
'It's I [focus] who went.'
b. û:=m lô-Ø
2Pl=Foc go.Pfv-3SgSbj
'It's you-Pl [focus] who went.'
```

In the **imperfective**, the (positive) form in common use is the **unsuffixed imperfective**, without reduplication. Again, the 1st/2nd person subject forms require the (pseudo-)3Sg form of the verb, which in this case is  $-\dot{m}$ . True third person subject forms have the usual 3Sg or 3Pl suffix on the verb.

```
(402) a. \underline{i = m} \underline{l6-m}
1Sg=Foc go-Ipfv.3SgSbj
'It's \underline{I} [focus] who will go.'
```

c. 
$$s \not e y d \mathring{u} = \mathring{m}$$
  $l \not o - \mathring{m}$   
Seydou=Foc go-Ipfv.3SgSbj  
'It's Seydou [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. 
$$s \not e y d \hat{u} = \hat{m}$$
  $l \partial^{L} - r \hat{i} - \mathcal{O}$   
Seydou=Foc  $go^{L}$ -PfvNeg-3SgSbj  
'It was Seydou [focus] who did not go.'

b. 
$$\hat{\imath} := \dot{m}$$
  $l\hat{o}^{L} - r\hat{\imath} - \varnothing$   
 $1Pl = Foc$   $go^{L} - PfvNeg - 3SgSbj$   
'It was we [focus] who did not go.'

When focus  $= \dot{m}$  is absent, only the tone on the AN suffix identifies the clause as focalized. Thus (403c) differs only subtly from unfocalized  $\dot{a}r^n\dot{a}$   $\dot{l}\dot{o}$ -r- $\dot{a}$  'men did not go'.

In the **imperfective negative**, the verb stem retains its lexical tone. The AN suffix complex is -m-dó-. 1st/2nd person subject requires (pseudo-)3Sg suffix on the verb.

```
(404) a. sĕydù = m ló-m̀-dó-∅
Seydou=Foc go-Ipfv-Neg-3SgSbj
'It's Seydou [focus] who will not go.'
```

b. <u>ú=m</u> <u>ló-m-dó-Ø</u> 2Sg=Foc go-Ipfv-Neg-3SgSbj 'It's you-Sg [focus] who will not go.'

c.  $b\hat{u}$ := $\hat{m}$   $l\acute{o}$ - $\hat{m}$ -n- $\acute{\epsilon}$ 3Pl=Foc go-IpfvNeg-3PlSbj 'It's they [focus] who will not go.'

The subject (or topic) of an 'it is X' construction can also be focalized. See e.g.  $\ell r^n \ell = m$   $\ell j \partial n g \ell \ell m = 0$  'it's  $\ell h e$  [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  $= \dot{m}$  for subject focus may take accusative clitic  $= n\dot{i}$  (§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.

- (405) a.  $s \not e y d \mathring{u} = n \mathring{i}$   $y \mathring{i} \mathring{y}$ Seydou=Acc see.Pfv-1SgSbj 'It was Seydou [focus] that I saw.'
  - b. yă: yì-w`
    woman.Pl see.Pfv-2SgSbj
    'It was the women [focus] that you-Sg saw.'
  - c.  $k\acute{u}r^n\grave{u}$   $jis\grave{e}-y$ stone throw.Pfv-1SgSbj 'It was the stone [focus] that I threw.'

```
d. i = ni yi - wi

1Sg=Acc 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 =ni 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 (-r)-, -mdo-) under focalization.

- (406) a.  $s \not e y d \hat{u} = n \hat{i}$   $y \hat{i}^L r \hat{u} \hat{w}$ Seydou=Acc see<sup>L</sup>-PfvNeg-2SgSbj 'It was <u>Seydou</u> [focus] that you-Sg did not see.'
  - b. yă: jò-ló-m woman.Pl convey-Caus-Ipfv.3SgSbj 'It's the women [focus] that he/she will take (there).'
  - c. yă: jò-ló-mdò-Ø 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.

```
(407) [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.

```
(408)
         a.
             ìnìr<sup>n</sup>î:
                             kù,
                             Def.
              name
                                      ìnìr<sup>n</sup>ì:-gǎỳ<sup>n</sup>
                         Lpày<sup>n</sup>]
                                                               bèré:-rà-w ...
              [àŋây<sup>n</sup>
                         with]
                                                              get-Prog-2PlSbi
                                      name<sup>L</sup>-put.VblN
              [how?
                               HL
                                              [àŋây<sup>n L</sup>ɲày<sup>n</sup>]
              [yí-m
                                                                  bèré:-rà-w:
                               HLname]
              [child-AnSg
                                             [how? with]
                                                                  get-Prog-2PlSbj
              '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.  $[k\acute{u} y\grave{a}]$   $[k\acute{u}$   $^{HL}k\acute{o}r\grave{o}]$   $\grave{n}j\hat{e}:=\varnothing$  [DiscDef also] [InanPoss  $^{HL}$ meaning] **what?=it.is** 'as for that, its meaning is what? [2005.1a.02]
- c. /kɔ̀:<sup>nL</sup> Lmà:1  $\hat{n}j\hat{e}:=\varnothing$ [[tàŋàsô: LDat] [thing<sup>L</sup> what?=Foc] [T] $k\acute{a}y^n = ni$ [nî: kù] 15γ3 [water dirtiness make=and.SS1 Def Lmà:1 ká:n-rà-wì ſà:ršv ſû: <sup>L</sup>Dat] make-Prog-Ppl.Inan] [2P1 [disease

'What thing is it that makes the water at Tangaso dirty, and makes (=causes) the sickness for you-Pl?' [2005.1a.04]

```
gì:n-bò.
d. [nŭ:
                  [kú
                          mâ:]
                                   ànâv<sup>n</sup>
    [person.Pl
                 [Inan
                          Dat]
                                  how?
                                            say.Pfv-3PlSbj,
    àŋây<sup>n</sup>
                 [kú
                          mâ:]
                                    mà:nù-ŵ:.
                [Inan
    how?
                          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→] [sè:njê: yà→],
[first.weeding Def and] [second.weeding and]
àngú=m mégé HL nûm
which=Foc more HL 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  $m\hat{a}\rightarrow$  '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.  $y \in -r \hat{a}$ :  $m \hat{a}$  come-Pfv1a-1a3PISbj Q 'Did they come?' (or: 'Have they come?')
  - b. yĕ:-r-à: mà→ yè-r-á
    come-Pfv1a-3PlSbj or come-PfvNeg-3PlSbj
    'Did they come, or did they not come?'
  - c. hónò hálkérè gây<sup>n</sup>→ mà:nù·ẁ:. mà→, for.example destruction like think.Pfv-2PlSbj **Q**, mà→ [kò:<sup>nL</sup> àdùnà:r<sup>n</sup>ù-náw<sup>n</sup>à] gây<sup>n</sup>→ mà:nù·ẁ:. má→ or [thing<sup>L</sup> world<sup>L</sup>-ruination] like think.Pfv-2PlSbj **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?' (*ăm*)

'Who?' is usually  $\underline{\check{a}m}$ , but this form can also be treated as a 'which?'-type adjectival interrogative and therefore extended as  $n\grave{u}^L\check{a}m$  'which person?' = 'who?'.

In subject function,  $\underline{\check{a}m}$  'who?' takes the focus clitic  $=\underline{\check{m}}$  (410).

- (410) a.  $\check{a}m = \check{m}$   $t\hat{e}$ :  $s\acute{i}r\acute{i}-\check{m}$  who?=Foc tea cook-Ipfv.3SgSbj 'Who will make (=boil) the tea?'
  - b.  $\check{a}m = \mathring{m}$   $l\hat{o}-\varnothing$ who?=Foc go.Pfv-3SgSbj 'Who went?'

In direct object function, the accusative clitic = ni is optional.

- (411) a.  $\check{a}m(=ni)$   $\check{y}i-\grave{w}$  who?(=Acc) see.Pfv-2SgSbj 'Who(m) did you-Sg see?'
  - b.  $[n\dot{u}^{L} \quad \check{a}m \ (=n\dot{i})] \quad [\hat{u}r\dot{o}^{L} \quad p\dot{i}r\acute{e}:] \quad y\dot{i}-\dot{w}$ .:

    [person who?(=Acc)] [house<sup>L</sup> inside] see.Pfv-2PlSbj

    'Who(m) did you-Pl see inside the house?'
  - c.  $s\acute{e}:d\grave{u}$   $[n\grave{u}^L$   $\check{a}m]$   $j\grave{i}y\grave{e}-\varnothing$ S [person<sup>L</sup> who?] kill.Pfv-3SgSbj 'Who(m) did Seydou kill?

```
13.2.3 'What?' (ṅjé), 'with what?', 'why?'
```

 $nj\acute{e}$  'what?' may be used by itself, or it may be combined with the noun 'thing' to form  $k\grave{\partial}.^{nL}$   $nj\acute{e}$  'what (thing)?'. In this combination it functions adjectivally, and so induces tone-dropping on the noun (412c-d).

- (412) a. *njé* lúgúró:-rà-ŵ what? look.for-Prog-2SgSbj 'What are you-Sg looking for?'
  - b. njé nέ-ỳ.:
     what? eat.Ipfv-1PlSbj
     'What will we eat?'
  - c. [kɔ̂:<sup>nL</sup> n̄jé] ú bèrè-Ø [thing<sup>L</sup> what?] 2SgObj get.Pfv-3SgSbj 'What has gotten (= is ailing) you-Sg?'
  - d. [kɔ̄:<sup>nL</sup> n̄jé] sé:dù bèrè-Ø [thing<sup>L</sup> what?] S get.Pfv-3SgSbj 'What has gotten (=is ailing) Seydou?'

'With what?' is expressed as the instrumental of kò: nL njé.

```
(413) [[k \hat{\sigma}:^{nL} \quad \hat{n}j\acute{e}] \quad n\hat{a}y^n] \quad b\acute{t}r\acute{e}-\grave{w} [[thing<sup>L</sup> what?] Inst] work.Ipfv-2SgSbj 'With what do you-Sg work?'
```

```
(414) [njé gì-náyn] [kú HL nî: kù]
[what? for] [DiscDef HL water Def]

kówó-m-n-é
get.water-Ipfv-Neg-3PlSbj
'Why do they not take the water of that (place)?' [2005.1a.05]
```

### 13.2.4 'Where?' (*án-dá*:, *án*, *áŋgòy*)

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 ǎm 'who?' or 'which?'.

(415) a. án-dá: ló-w where? go.Ipfv-2SgSbj 'Where are you-Sg going?'

- b. án-dá: gó-m where? exit-Ipfv.3SgSbj 'Where does he/she come from?'
- c. án-dá: sí-yé-ỳ where? go.down-MP.Ipfv-1SgSbj 'Where will I go down (=lodge)?'
- d. [[arsě: bû:=ni] án-dá: jò-ló-yè]
  [[animal Def.Pl=Acc] where? convey-Caus-Ipfv.3PlSbj
  'Where do they take the livestock animals?' [2005.1a.15]
- e. sé:dù án-dá: nàw<sup>n</sup>â: èwè-Ø S where? meat buy.Pfv-3SgSbj 'Where did Seydou buy the meat?'

Predicative 'X be where?' can be expressed by locational-existential quasi-verb  $b\hat{u}$ - plus  $an-d\hat{a}$ : 'where?'. For fixed entities such as mountains, houses, and villages), the 'where?' adverb may be  $ang\hat{o}y$  or  $an-d\hat{a}$ :.

- (416) a. isê: áŋgòy bù-Ø
  " án-dá: "
  village where? be.Pfv-3SgSbj
  'Where is the village?'
  - b.  $[t\acute{s}r\acute{s} & b\grave{e}] & \acute{a}ng\grave{o}y & b-\grave{\epsilon}.^n \\ [" & "] & \acute{a}n-d\acute{a}: & " \\ [mountain Pl] & where? & be.Pfv-3PlSbj$ 'Where are the mountains?'
  - c. án-dá: bù-w where? be.Pfv-2SgSbj 'Where are you-Sg?'

A simple form  $\check{a}n$  is also attested. The focalized form is  $\check{a}n = \emptyset$ , where the focus (='it is') clitic accounts for the final L-tone element. 'Where are you-Sg going?', cf.  $\acute{a}n$ - $\acute{a}n$ : in (415a) above, can therefore also be expressed as  $\check{a}n = \emptyset$  16- $\dot{w}$ .

(417) 
$$\tilde{a}n = \emptyset$$
  $g\check{o}-j\hat{\varepsilon}:-\emptyset$  where?=Foc go.out-RecPf-3SgSbj 'Where did it (=motorcycle) come from?' [2005.1b.06]

This form may also be expanded as  $\partial r^n \partial \tilde{a} n = \emptyset$  '(in) what place?', where  $\tilde{a} n$  functions like an adjective, cf.  $\partial r^n \partial \tilde{b}$  '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'.

- (418) a. [àŋgú HL úsù] Lwò [which? HLday] Lin 'when?' (= 'on which day?')
  - b. [[dògùrù<sup>L</sup> njé] nây<sup>n</sup>] yé-m [[time<sup>L</sup> what?] Inst] come-Ipfv.3SgSbj 'When (= with what time?) will he/she come?'
  - c.  $s\acute{e}:d\grave{u}$  [[dòg $\grave{u}$ r $\grave{u}^L$   $\grave{n}$ j\acute{e}]  $p\^{a}y^n$ ]  $y\grave{e}-\varnothing$ S [[time<sup>L</sup> what?] Inst] come.Pfv-3SgSbj 'When did Seydou come?'

# 13.2.6 'How?' (àŋây<sup>n</sup>)

'How?' is  $\frac{\partial g}{\partial x}$  (419a) or its extension  $\frac{\partial g}{\partial x}$ . It may be used predicately with  $\frac{\partial u}{\partial x}$  'be' (419b). The iterated form  $\frac{\partial g}{\partial x}$  is used adverbially (419c).  $\frac{\partial g}{\partial x}$  is used with  $\frac{\partial g}{\partial x}$  in the sense 'do what?' (419d).

- (419) a. *túní*: àŋây<sup>n</sup> cé:lé-ẁ mortar how make.well.Ipfv-2SgSbj 'How do you-Sg make a (wooden) mortar?'
  - b. àŋây<sup>n</sup> bù-Ø how? be-3SgSbj 'How is it?' (= 'What's the situation?')
  - c.  $\frac{\partial n}{\partial y} \frac{\partial n}{\partial y}$   $\frac{\partial n}{\partial y}$
  - d. àŋây<sup>n</sup> ká:<sup>n</sup>-rà-ẁ how? do-Prog-2SgSbj 'What are you-Sg doing?'

# 13.2.7 'How much?', 'how many?' (à:ŋgá)

'How much?' or 'how many?' is \(\frac{\partial}{a:\eta g\alpha}\). It is adverbial, and when "modifying" a preceding noun, the latter is not tone-dropped. From this are derived distributive \(\frac{\partial}{a:\eta g\alpha}-\frac{\partial}{a:\eta g\alpha}\) 'how much/how many (per unit)?', which is usually predicative with 'it is' clitic, and ordinal \(\frac{\partial}{a:\eta g\alpha y-n\eta}\) 'how many-th?' (answer would be 'first', 'third', etc.).

- (420) a. pèré à:ngá èwè-w sheep.Pl how.many? buy.Pfv-2SgSbj 'How many sheep did you-Sg buy?'
  - b. màngórò à:ngá-à:ngâ: = Ø mango how.much-how.much=it.is 'How much (apiece) are the mangoes?'

# 13.2.8 'Which?' (ăm, àngú)

- (421) a. [pèrè<sup>L</sup> ăm] jɔ́rɔ́-ẁ [sheep<sup>L</sup> which.Sg?] want.Ipfv-2SgSbj 'Which sheep-Sg do you-Sg want?'
  - b.  $[tiw^n \dot{e}y^{nL} \quad \dot{a}ngu] \quad j \circ r \circ -\dot{w}$   $[tree^L \quad which.Inan?] \quad want.Ipfv-2SgSbj$ 'Which tree do you-Sg want?'
  - c. [yû: yà→] [èmĕy yá→]
    [millet and] [sorghum and]
    àŋgú=m mégé HL ésù
    which?=Foc more HL good
    '(Between) millet and sorghum, which is better?'
  - d. [pèrè<sup>L</sup> ăm bè] jɔ́rɔ́-ẁ [sheep<sup>L</sup> 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  $k \delta : {}^{n}k u = \hat{n}$  '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 ( $n\check{u}$ -m 'person',  $k\acute{o}$ :" 'thing',  $d\acute{o}g\acute{u}r\acute{u}$  'time',  $\acute{o}r$ " 'place',  $d\check{a}y$ " 'manner') (422b).

- (422) a.  $[[k\dot{\delta}:^{nL} \quad \grave{n}j\acute{e}] \quad \jmath \acute{e}-\grave{y}^n$ .:  $m\hat{a}\rightarrow ]$   $[[thing^L \quad what] \quad eat.Ipfv-1PlSbj \quad Q]$   $j\acute{u}w\acute{\sigma}-\grave{m}-d\acute{o}-\grave{y}$  know-Ipfv-Neg-1SgSbj'I don't know what we are going to eat.'
  - b. [ŋgú-rù dày<sup>n</sup> gó-yè] júwó-m-dó-ŷ
    [here manner<sup>L</sup> 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<sub>x</sub> (kà:")] [market to] bring-Pfv.Ppl.AnSg Deff<sub>x</sub>*, 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**  $k\grave{a}.^n$  (§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  $k\grave{a}$ : 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.  $[goat (Adj) (Num)_x (k\grave{a}:^n)]_{RC...} (goat)_x ... Verb-Ppl] Def]$ . 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.  $[\__x [_{RC...} goat (Adj) (Num)_x (k\grave{a}:^n)]_{...} Verb-Ppl] Def]_x$ .

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.

The maximal form of the internal head is therefore (424), while the late-NP elements appear after the verbal participle.

In the absence of a possessor, (424) appears as N, [N<sup>L</sup> Adj], [N Num], or [N<sup>L</sup> 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 tone-dropping, becoming respectively N<sup>L</sup>, [N Adj]<sup>L</sup>, [N Num]<sup>L</sup>, and [N Adj Num]<sup>L</sup>, 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).

(425) a. 
$$[nai^L] bár^na] kúroy bû:$$
 $[cow^L] red.Pl] six$  Def.Pl
'the six brown cows'

b. 
$$[[n\hat{a}:^L] b\hat{a}r^n\hat{a} k\hat{u}r\hat{o}y]^L$$
 $[[cow.Pl^L] red.Pl six]^L$ 
 $i \epsilon w\epsilon - m\hat{a} b\hat{u}:$ 
 $1 SgSbj buy.Pfv-Ppl.AnPl Def.Pl$ 
'the six brown cows that I bought'

If an NP with the structure in (424), above, contains an alienable possessor, the possessor controls an overlay such as {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 {HL} overlay remains audible, specifically on the possessed noun 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 {HL} trumps relative-clause control of {L}. If relative-clause control were dominant, we would have gotten the incorrect (426c); note the tones on 'cows'.

However, with inalienable possession 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 {L}. In the other, the relative-controlled {L} has a wide domain and tone-drops 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 {L} has a wide domain.

```
b. u HL [n\hat{a}: b\hat{a}r^n\hat{a} k\hat{u}r\hat{o}y]
2SgPoss HL [cow.AnPl red.Pl six]
u \dot{\epsilon}w\dot{\epsilon}-m\hat{a} b\hat{u}:
1SgSbj buy.Pfv-Ppl.AnPl Def.AnPl
'your-Sg six brown cows that I bought'
```

not:

c. #ú [nà: bàr<sup>n</sup>à kùròy]<sup>L</sup>  
#2SgPoss [cow.AnPl red.Pl six]<sup>L</sup>  
i 
$$\varepsilon w \varepsilon$$
-mà bû:  
1SgSbj buy.Pfv-Ppl.AnPl Def.AnPl  
[intended sense = (b)]

e. [[û lèsù pèrù mòsì-yè]<sup>L</sup>
[[2SgPoss uncle ten bad-AnPl]<sup>L</sup>

i súyó-mà kù
1SgObj hit.Pfv-Ppl.AnPl Def

'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  $n\dot{u}^L$  'person'.

```
(427) <u>ú [nù<sup>L</sup> yàyá-só-m kù]</u>
2SgSbj [person<sup>L</sup> 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 u v:-ra-w rbyura-w rbyura-wrbyura-wra-

## 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  $be \rightarrow$  as conjunctive particle (§7.1.2).

```
(428)
                          bè→1
                                                            bé→1
        [[ár<sup>n</sup>à
                                       [yǎ:
        [[man.AnPl
                          and]
                                       [woman.AnPl
                                                            and]
                          jàyá-mà
        jáy
                                                  kù]
                          fight.Pfv-Ppl.AnPl
        fight(n)
                                                  Def
                     b-\grave{\varepsilon}:^n
        án-dá:
        where?
                    be-3PlSbi
         'Where are [the men and women] who quarreled?'
```

A similar example with  $ya \rightarrow$  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  $n\dot{u}^L$  'a person (who ...)' or  $k\dot{\partial}$ ." '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 verb-participle, and are required when the subject of a nonsubject relative is pronominal. The interlinear word glosses are to the right.

```
(429) inj\hat{\epsilon}^{L} dog^{L} \{i \ \hat{\imath}: \ \acute{u} \ \hat{u} : \ \acute{\epsilon}r^{n}\acute{\epsilon} \ b\hat{u}: \ \acute{a} \ \hat{a}:\} (pronominal subject) lar\acute{u}-\dot{m} chase.Pfv-Ppl.AnSg k\dot{u} Def 'the dog that I/we/you-Sg/you-Pl/3Sg/they/LogoSg/LogoPl chased'
```

Examples occur throughout this chapter, for example in the object relatives in §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, -ma, -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-1a/1b, 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 §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  $y \hat{a} y \hat{a}$ - 'fall' and  $t \hat{t} w \hat{\epsilon}$ - 'die' have their regular lexical forms in such perfective participles as (animate) singular  $y \hat{a} y \hat{a} - \hat{m}$  and  $t \hat{t} w \hat{\epsilon} - \hat{m}$ .

The perfective participal suffixes are in (430). (Animate) singular  $-\dot{m}$  and inanimate  $-\dot{w}$  also occur with modifying adjectives, while (animate) plural  $-m\dot{a}$  is idiosyncratic.

### (430) Perfective (positive) participial suffixes (after bare stem)

```
(animate) singular -\dot{m} (animate) plural -m\dot{a} inanimate -\dot{w}
```

For Cv- verbs with rising tone melody, the rising tone appears in the participles with  $-\dot{m}$  and  $-\dot{w}$ , whose heavy syllables allow expression of <LHL> tone. Thus, for 'come',  $y\check{e}-\dot{m}$  and  $y\check{e}-\dot{w}$ . In plural  $y\check{e}-m\grave{a}$ , the H-tone element may spill into the first part of the second syllable, in which case a phonetic transcription [ $\check{j}\check{e}m\hat{a}$ ] approximates its pronunciation.

Some perfective participle examples are in (431).

```
(431) a. \frac{\dot{u}r\dot{o}^L}{\text{house}^L} \frac{y\dot{a}y\dot{a}-\dot{w}}{\text{fall.}Pfv-Ppl.Inan} 'the house that fell'
```

- b.  $\dot{u}r\dot{o}^L$   $b\hat{u}$ :  $d\check{\sigma}-\dot{w}$   $k\dot{u}$  house 1 3PlSbj burn.**Pfv-Ppl.Inan** Def 'the house that they burned'
- c.  $\frac{\partial r^n \partial^L}{\partial r^n}$  ló-m man<sup>L</sup> go.**Pfv-Ppl.AnSg** 'the man who went'
- d. *yì-tè:* Líwé-mà child.Pl<sup>L</sup> die.**Pfv-Ppl.AnPl** 'the children who died'

The participles ending in  $-\dot{w}$  (animate singular) and  $-m\dot{a}$  (animate plural) are indistinguishable from the 3Sg and 3Pl forms (respectively) of an alternative unsuffixed perfective form that is common in narrative ( $\S10.2.1.2$ ).

#### 14.1.6.2 Participles of unsuffixed imperfective $(-m, -\emptyset, -\dot{m}, -y\dot{\epsilon})$

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 3Sg form of the inflected paradigm, with suffix  $-\dot{m}$  (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 - $m\dot{u}$  is attested, see  $dimbi-yi-m\dot{u}$  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  $\{LH\}$  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, {LH} overlay)

```
(animate) aingular -m
(animate) plural -∅ (archaic -mù)
```

b. based directly on unsuffixed imperfective stem inanimate -m

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 §14.2.1 below. This matches the (incorporated-object) {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 participal paradigms are in (433).

(433)			$I_{ m J}$	Ipfv participles		
	gloss	stem	Sg (animate)	Pl (animate)	Inanimate	
	'fall' 'go down' 'go up' 'hurt' 'shout'	yàyá- sí-yé- ùró- bármé- píyé-	(yì-)yàgú-m (sì-)sì-yí-m (ù-)?ùrú-m (bì-)bàrmú-m (pì-)pìyí-m	(yì-)yàgú (sì-)sì-yú (ù-)?ùrú (bì-)bàrmú (pì-)pìyú	yáyá-m sí-yé-m úró-m bármé-m píyé-m	
	'go' 'come' 'bring'	lό- yἔ- jἒ:-	(lì-)lŏ-m (yì-)yĕ-m (jì-)jĕ-m	(lì-)lŏ: (yì-)yĕ: (jì-)yĕ:	ló-ṁ yé-ṁ jé-ṁ	

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.

- (434) a.  $\dot{u}r\dot{o}^L$  (yì-)yáyá-m house<sup>L</sup> (Rdp-)fall.**Ipfv-Ppl.Inan** 'the house that will fall'
  - b.  $\frac{\partial r^n \partial^L}{\partial r^n}$   $\frac{(li-)l\check{o}-m}{(Rdp-)go.Ipfv-Ppl.AnSg}$  'the man who will go'
  - c.  $yi^L$  tiwú-m kù child die. **Ipfv-Ppl.AnSg** Def 'the child who will die'
  - d.  $yi^L$  yàgú-m kù child fall. **Ipfv-Ppl.AnSg** Def 'the child who will fall'
  - e. yì-tè: L (tì-)tìwú child.Pl<sup>L</sup> (Rdp-)die.**Ipfv.Ppl.AnPl** 'the children who will die'

f. [nù<sup>L</sup> ú bì-bàrú] yá b-è:<sup>n</sup>-bó dé [person<sup>L</sup> 2SgObj Rdp-help.**Ipfv.Ppl.AnPl**] Exist be-3PlSbj-3PlSbj if 'if there are people who will help you-Sg' [2005.1a.10]

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.

- (435) a.  $n\grave{a}w^n\grave{a}$ : î:  $k\acute{u}w\acute{o}-\grave{m}$  meat LPlSbj eat.meat.Ipfv-Ppl.Inan 'the meat that we will eat'
  - b.  $p\grave{e}r\grave{e}^L$   $\hat{i}$ :  $s\grave{e}w^n\acute{u}$ -msheep $^L$  1PlSbj slaughter.**Ipfv-Ppl.AnSg** 'the sheep-Sg that we will slaughter'
  - c.  $p \hat{e} \hat{r} \hat{e}^L$   $\hat{i}$ :  $s \hat{e} w^n \hat{u}$ sheep<sup>L</sup> 1PlSbj slaughter.**Ipfv.Ppl.AnPl** 'the sheep-Pl that we will slaughter'
  - d. [[tòy<sup>L</sup> mă:] ɔr<sup>n</sup>ɔ̄<sup>L</sup> ú tɔ́-m̀] <sup>L</sup>dày<sup>n</sup>
    [[sowing<sup>L</sup> dry] place<sup>L</sup> 2SgSbj sow.**Ipfv-Ppl.Inan**] <sup>L</sup>boundary
    'at the boundary of the place (=part of the field) where you are doing the dry-sowing' [2005.1a.10]

However, the texts also include examples like (436), where the participle (agreeing with animate plural head NP, not with the 2Sg subject) has a suffix  $-y\hat{e}$  that could be (mis-)parsed as a 3Pl-subject main-clause imperfective form. In other words, in another context  $j\delta r\delta -y\hat{e}$  can also mean 'they like/want'.

The option of using  $-y\hat{e}$  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  $-y\hat{e}$  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**  $b\dot{u}$ - 'be' and  $s\acute{o}$ - 'have' have similar participles (437). They are based on H-toned variants  $b\acute{u}$ - and  $s\acute{o}$ -, which also occur after existential  $y\acute{a}$  (§11.2.2.3, §11.5.1).

Including suffixes, the participles are <HL>-toned. The plural participles are identical segmentally to the corresponding 3Pl inflected forms, which are irregular. Inanimate  $b\hat{u}-\hat{w}$  is homophonous with  $b\hat{u}-\hat{w}$  'he/she/it is' (with predicative adjective) and with 3Pl pronoun  $b\hat{u}$ : 'them', but I transcribe them differently to bring out their morphological structure.

(437)	category	'be'	'have'
	singular	bû-m	sô-m
	plural	$b$ - $\hat{arepsilon}$ : $^n$	$s$ - $\hat{arepsilon}$ : $^n$
	inanimate	bú-ẁ	só-ẁ

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 {HL} tones, as in the 1Sg 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.

- (438) a.  $tiw^n \hat{\epsilon} y^{nL}$   $an \hat{a} = \hat{a} + \hat{a} + \hat{a} + \hat{a} = \hat{a} + \hat{a} + \hat{a} + \hat{a} = \hat{a} + \hat{a} + \hat{a} + \hat{a} + \hat{a} = \hat{a} + \hat{a} + \hat{a} + \hat{a} + \hat{a} + \hat{a} + \hat{a} = \hat{a} + \hat{a$ 
  - b.  $n\dot{u}^L$   $\dot{a}\eta\dot{a}$ - $d\dot{a}$ :  $\dot{i}y\dot{a}$ -m  $k\dot{u}$ person over.there stand.Stat-**Ppl.AnSg** Def
    'the person who is standing over there.'
  - c.  $n\hat{u}^L$   $\hat{a}n\hat{a}-d\hat{a}$ :  $\hat{i}y\hat{a}-m\hat{a}$   $\hat{b}\hat{u}$ :

    person<sup>L</sup> over.there stand.Stat-**Ppl.AnPl**'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 :-rè- does not occur in participles in my data. Perfective-1b -tî- is attested in a participle (439), but the combination is infrequent.

It was possible to elicit participles including **recent perfect**  $-j\hat{\varepsilon}$ - (440a-c), **experiential perfect**  $-t\hat{a}$ - (440d-f), and **resultative**  $-s\hat{o}$ - (440g-i). The endings for the recent perfect and experiential perfect are those found in perfective participles (for animates, singular -m and plural  $-m\hat{a}$ ; for inanimates,  $-\hat{w}$ ). The resultative likewise has (animate) singular -m (hence  $-s\hat{o}$ -m) and inanimate  $-\hat{w}$  (in  $-s\hat{o}$ - $\hat{w}$ ), but the (animate) plural is -s- $\hat{\varepsilon}$ .n, like the 3Pl inflected form.

# (440) Participles of recent perfect, experiential perfect, resultative

#### Recent perfect

- a.  $n\grave{u}^L$   $n\check{\epsilon}y^n$   $n\acute{\epsilon}-j\hat{\epsilon}-m$  person meal eat-RecPf-Ppl.AnSg 'a person who has (already) eaten'
- b.  $n\dot{u}^L$   $n\check{\epsilon}y^n$   $n\acute{\epsilon}-j\acute{\epsilon}-m\grave{a}$  person<sup>L</sup> meal eat-RecPf-Ppl.AnPl 'people who have (already) eaten'
- c.  $k \dot{u} r^n \dot{u}^L$   $y \dot{a} y \acute{a} j \acute{e} \dot{w}$ stone fall-RecPf-Ppl.Inan 'a stone that has already fallen'

## Experiential perfect

- d.  $n\dot{u}^L$   $\dot{\eta}g\dot{u}$ - $r\dot{u}$   $y\check{e}$ - $t\hat{a}$ -m person here come-ExpPf-Ppl.AnSg 'a person who has (ever) come here'
- e.  $n\dot{u}^L$   $\dot{\eta}g\dot{u}$ - $r\dot{u}$   $y\dot{\varepsilon}$ - $t\acute{a}$ - $m\grave{a}$ person<sup>L</sup> here come-ExpPf-Ppl.AnPl
  'people who have (ever) come here'
- f.  $k \dot{u} r^n \dot{u}^L$   $y \dot{a} y \acute{a} t \acute{a} \dot{w}$ stone<sup>L</sup> fall-ExpPf-Ppl.Inan 'a stone that has (ever) fallen'

## Resultative

- g.  $n\dot{u}^L$  sŏ-m  $\dot{u}$ ró-só-m̀ person<sup>L</sup> horse-AnSg go.up-Reslt-Ppl.AnSg 'a person who has mounted (= is mounted on) a horse'
- h.  $n\grave{u}^L$  sǒ:  $\grave{u}r\acute{3}$ -s- $\hat{\varepsilon}$ : nperson horse-Pl go.up-Reslt-Ppl.AnPl
  'people who have mounted (= are mounted on) horses'
- i.  $k \delta$ :  $^{n L}$   $s \delta$ -m  $ù r \delta$ - $s \delta$ - $\dot{w}$  thing  $^{L}$  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  $s\hat{o}$ - (441a), Experiential perfect  $t\hat{a}$ - (441b), recent perfect  $t\hat{e}$ - (441c), and perfective-1b  $t\hat{i}$ - (441d). An assistant rejected a similar separation of verb and inflectional suffix/auxiliary in the case of perfective-1a -: $r\hat{e}$ -.

- (441) a.  $m \delta$ :- $n \epsilon y^n$   $y^n$   $y^n$ 
  - $k \hat{\sigma}^{nL}$ b. *yǐ-tá-yè* tû-m] [[kú see-ExpPf-3PlSbj [[InanPoss companion-AnSg] thing<sup>L</sup> tá-w] VĬ bû: 3PlSbj ExpPf-Ppl.InanSg] see vá bê:-Ø 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.  $n\grave{a}w^n\grave{a}$ :  $k\acute{u}w\acute{o}$   $\acute{u}$   $j\acute{\varepsilon}$ - $\grave{w}$   $k\grave{u}$  meat eat.meat 2SgSbj RecPf-Ppl.Inan Def 'the meat that you-Sg have (just) finished eating'
  - d. ùsù L [sèŋgû: ăγ kù] day<sup>L</sup> [waterjar Def] take sí-lé ú tí-ŵ go.down-Caus 2SgSbj 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 :- $r\dot{a}$ - is attested in participial form, with ordinary nominal suffixes for animates (singular -m, plural zero), and with (adjective-like) - $\dot{w}$  for inanimates.

- (442) a.  $\frac{\partial r^n \partial^L}{\partial r^n}$   $\frac{\partial r}{\partial r}$   $\frac{\partial r}{\partial r}$   $\frac{\partial r}{\partial r}$  DefPl 'the men who run'
  - b.  $\frac{\partial r^n \partial}{\partial r}^L$   $y \partial y \partial : -r \partial m$   $k \hat{u}$  man run-Prog-AnSg Def 'the man who runs'

```
c. [léré-léré nù L kówó:-rà]
[occasionally person draw.water-Prog]

yá b-è:^n-bò
Exist be-3PlSbj-3PlSbj

'There are some people who draw it (water) from time to time.' [2005.1a.05]
```

d. jáy û: jàyá:-rà-w 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 {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 3Pl and 3Sg/Inan inflected forms would account for the plural and inanimate participles. However, the singular ends in -m, which could be taken as the regular nominal and adjectival (animate) singular suffix.

## (443) Perfective negative participles

```
(animate) singular -rú-m
(animate) plural -r-â:
inanimate -rî:
```

Examples are in (444).

- (444) a.  $yi^L$   $y \partial y \partial -r u m$  ku child run-PfvNeg-Ppl.AnSg Def 'the child who did not run' (yi-m)
  - b.  $y\hat{\imath}$ - $t\hat{\epsilon}$ : L  $y\hat{\jmath}\hat{\jmath}\hat{\jmath}$ -r- $\hat{a}$ :  $b\hat{u}$ : children run-PfvNeg-Ppl.AnPl DefPl 'the children who did not run'  $(y\hat{\imath}$ - $t\hat{\epsilon}$ :)
  - c.  $k u r^n u^L$  y a v a r i: k ustone fall-PfvNeg-Ppl.Inan Def
    'the stone that didn't fall'  $(k u r^n u)$

**imperfective negative**  $-\dot{m}$ - $d\acute{o}$ - 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 -\dot{m}-d\acute{o}-\dot{m} (< -\dot{m}-d\acute{o}-L-m)
(animate) plural -\dot{m}-n-\hat{\varepsilon}: (< -\dot{m}-n-\dot{\varepsilon}-L)
inanimate -\dot{m}-d-\hat{o}: (< -\dot{m}-d\acute{o}-L)
```

Examples of imperfective negative participles are in (446).

- (446) a.  $yi^L$   $y5y5-\dot{m}-d6-\dot{m}$   $k\dot{u}$  child run-Ipfv-Neg-Ppl.AnSg Def 'the child who does not run' (yi-m)
  - b.  $y\hat{\imath}-t\hat{\epsilon}$ :  $y\delta y\delta -\hat{m}-n-\hat{\epsilon}$ :  $b\hat{u}$ : children L run-Ipfv-Neg-Ppl.AnPl DefPl 'the children who do not run'  $(y\hat{\imath}-t\hat{\epsilon})$ :
  - c.  $k \dot{u} r^n \dot{u}^L$   $y \dot{a} y \dot{a} \dot{m} d \hat{o}$ :  $k \dot{u}$  stone Late of all-Ipfv-Neg-Ppl.Inan (the stone that didn't fall' ( $k \dot{u} r^n \dot{u}$ )

**Stative negative** clitic  $= r\hat{a}$ , 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  $/= r\hat{a}$ - $\dot{a}$ / versus  $/= r\hat{a}$ -L/ or the like).

### (447) Stative negative participles

```
(animate) singular = r\hat{a} \cdot \hat{m}

(animate) plural = r \cdot \hat{a}:

inanimate = r \cdot \hat{a}:
```

Examples are in (448), cf. inflected stative  $\frac{\partial w}{\partial w} = r\hat{a} - \emptyset$  'he/she is not sitting'.

- (448) a.  $n\dot{u}^L$   $\dot{e}w-y\dot{e}-w=r\acute{a}-\dot{m}$  person<sup>L</sup> sit-MP-Stat=StatNeg-Ppl.AnSg 'a person who is not sitting'
  - b.  $n\dot{u}^L$   $\dot{e}w-y\dot{e}-w=r-\hat{a}$ : person<sup>L</sup> sit-MP-Stat=StatNeg-Ppl.AnPl 'people who are not sitting'
  - c.  $k\partial : {}^{n}{}^{L}$   $\partial w y\partial w = r \hat{a}:$ thing sit-MP-Stat=StatNeg-Ppl.Inan 'a thing that is not sitting'

# 14.1.6.8 Relative-clause participle including past clitic $=b\hat{\epsilon}$ -

For regular inflected forms including the past clitic, see §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 3Pl, the suffixes  $(-\dot{m}, -\dot{w})$  are those of perfective participles.

(449) Participles of past  $=b\hat{\varepsilon}$ -

```
(animate) singular = b \check{\varepsilon} - \dot{m}

(animate) plural = b - \ddot{a}:

inanimate = b \check{\varepsilon} - \dot{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  $bir\dot{e}bir\dot{e}-\dot{m}=b\dot{e}-\mathcal{O}$  'he/she was working', are in (450). As usual for this category, the verb form preceding the clitic has imperfective  $-\dot{m}$ -.

- (450) a.  $n\dot{u}^L$   $b\acute{i}r\acute{e}$   $b\acute{i}r\acute{e}-\dot{m}=b\check{e}-\dot{m}$  person<sup>L</sup> work(n) work-Ipfv=Past-Ppl.AnSg 'a person who was working'
  - b.  $n\dot{u}^L$   $b\acute{i}r\acute{e}$   $b\acute{i}r\acute{e}-\dot{m}=b-\ddot{a}$ : person<sup>L</sup> work(n) work-Ipfv=Past-Ppl.AnPl 'people who were working'
  - c.  $k\dot{\partial}$ :  ${}^{n}$  L  $b\acute{i}r\acute{e}$   $b\acute{i}r\acute{e}$ - $\grave{m}$  =  $b\check{e}$ - $\grave{w}$  thing L work(n) work-Ipfv=Past-Ppl.Inan 'a thing that was working'
  - d.  $k\dot{u}y\delta$ :  $b\hat{u}$ :  $k\acute{a}^n$ - $\dot{m} = b\check{e}$ - $\dot{w}$   $k\dot{u}$  first 3PlSbj do-Ipfv=Past-Ppl.Inan Def 'What they used to do formerly (was ...)' [2005.1b.01] (headless)

**Negative** counterparts have  $-\dot{m}$ - $d\acute{o}$ - before the clitic:  $n\grave{u}^L$   $b\acute{t}r\acute{\epsilon}$   $b\acute{t}r\acute{\epsilon}$ - $m\acute{m}$ - $d\acute{o}$  =  $b\check{\epsilon}$ - $m\acute{m}$  'a person who was not working'.

See also  $w\acute{a}r\acute{a}-\grave{m}=b\check{\varepsilon}-\grave{w}$  in (507) in §15.2.1.3.

Participles corresponding to the **past stative**, e.g.  $(i-?)\acute{e}w-y\acute{e}-\acute{w}=b\hat{e}:-\varnothing$  'he/she was sitting' (§10.4.1.2), are in (451).

- (451) a.  $n\dot{u}^{L}$   $\not ew-y\dot{e}-\dot{w}=b\ddot{e}-\dot{m}$  person<sup>L</sup> sit-MP-Ipfv=Past-Ppl.AnSg 'a person who was sitting'
  - b.  $n\grave{u}^L$   $\not ew-y\acute{e}-\acute{w}=b-\ddot{a}$ : person<sup>L</sup> sit-MP-Ipfv=Past-Ppl.AnPl 'people who were sitting'

```
c. k\dot{\partial}: {}^{n} \acute{e}w-y\acute{e}-\acute{w} = b\check{e}-\grave{w} thing {}^{L} sit-MP-Ipfv=Past-Ppl.Inan 'a thing that was sitting'
```

**Negative** counterparts are of the type  $n\dot{u}^{\rm L}$   $\dot{e}w-y\dot{e}=r\acute{a}-b\breve{e}-m$  'a person who was not sitting', with stative negative  $=r\acute{a}$ .

Participles corresponding to the **past perfect** (i.e. the past form of the morphological perfective), cf.  $y\not\in -\dot{w} = b\dot{\varepsilon}-\varnothing$  '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  $-m\dot{a}$ - before the clitic. This can be identified as the (animate) plural suffix in simple perfective participles (e.g.  $n\dot{u}$   $y\dot{\varepsilon}-m\dot{a}$  'people who came').

- (452) a.  $n\grave{u}^L$   $y\acute{e} = b\check{e}-\grave{m}$  person<sup>L</sup> come=Past-Ppl.AnSg 'a person who had come'
  - b.  $n\dot{u}^L$   $y\acute{\epsilon}-m\grave{a}=b-\breve{a}:$  person<sup>L</sup> come-Pl=Past-Ppl.AnPl 'people who had come'
  - c.  $k\dot{\partial}$ :  $n^L$   $y\acute{e} = b\check{e} \cdot \grave{w}$  (or:  $y\acute{e} \cdot \acute{w} = b\check{e} \cdot \grave{w}$ ) thing  $n^L$  come=Past-Ppl.Inan 'a thing that had come'

In other examples, the same assistant again used  $-m\grave{a}=b-\tilde{a}$ : in plural participles, but used  $-m=b\check{\epsilon}-\hat{m}$  (in form, identical to the past unsuffixed imperfective participle) for the (animate) singular. See plural  $b\acute{a}rm\acute{\epsilon}-m\grave{a}=b-\tilde{a}$ : 'who-Pl had been hurt' and singular  $b\acute{a}rm\acute{\epsilon}-m\grave{a}=b\check{\epsilon}-m$ ' 'who-Sg had been hurt' in (469a-b) in §14.4. This suggests that the pattern with  $=b\epsilon$ - added directly to the unsuffixed bare stem, as in (452a) and (452c), above, is unstable. In the inflected past perfect, the 3Sg form has suffix  $-\grave{w}$ - before L-toned  $=b\grave{\epsilon}$ -, and is therefore distinguished only by tones from the past stative, on which see §10.4.1.2.

**Negative** counterparts:  $n\dot{u}^L$   $y\dot{\varepsilon}$ - $r\acute{i} = b\breve{\varepsilon}$ - $m\acute{i}$  'a person who had not come', plural  $n\dot{u}^L$   $y\dot{\varepsilon}$ - $r\acute{a} = b$ -a: 'people who had not come', inanimate  $k\dot{\delta}$ :  $n^L$   $y\dot{\varepsilon}$ - $r\acute{i} = b\breve{\varepsilon}$ - $m\acute{i}$  'a thing that had not come'

A participle of the past form of 'have' is in (453).

```
(453) [[nù<sup>L</sup> kà:<sup>n</sup>] ŋgá-dá: [ú HL kɔ̂:<sup>n</sup>]
[[person<sup>L</sup> Rel] around.there [2SgPoss HLthing]
[kàrwá só-m̂ = bĕ-m̂ kù]
[trust have-Stat=Past-Ppl.AnSg 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  $\underline{\check{a}y}$  (from  $|\check{a}y\acute{a}y\acute{a}y\acute{a}y\acute{a}y\acute{a}y\acute{a}y$ ) 'pick up' and  $|\check{j}o-l\acute{o}-$  '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.

- (454) a. sèŋgû: 

  waterjar pick.up convey-Caus-Pfv1b-1SgSbj

  'I picked up and took (conveyed) the waterjar.'
  - b.  $s \grave{e} \eta g \grave{u}^L$   $\check{a} y$   $\acute{l}$   $\acute{l} j \grave{o} l \acute{o} \grave{w}$   $k \grave{u}$  waterjar pick.up 1SgSbj convey-Caus.Pfv-Ppl.Inan Def 'the waterjar that I picked up and brought'

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'.

- (455) a. *péré* sì-yè-Ø jump go.down-MP.Pfv-3SgSbj 'He/She jumped down.'
  - b.  $n\dot{u}^{L}$  péré sí-yé-m  $k\dot{u}$  person<sup>L</sup> jump go.down-MP.Pfv-Ppl.AnSg Def 'the person who jumped down'

In textual example (456), the L-toned head  $k \partial :^n$  'thing' is logically the object of 'get water' in the initial clause, which is chained (by  $= n \acute{a} y^n$ ) to the following negated main clause. Here, however, the speaker changed the syntax in mid-stream, beginning with a relative construction (note the {L}-toned  $k \partial :^n$  'thing') but ending with a regular inflected verb.

(456)  $[k \dot{\partial}:^n]^L$   $k \dot{\partial} w \dot{\partial} = n \dot{a} y^n]$  [thing  $^L$  get.water=then.SS]  $[k \dot{u} - t \dot{o} g \dot{o} \dot{o} \qquad ^L p \dot{a} y^n] \qquad d \dot{u} - r \dot{u} - \dot{w}$  [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  $b\dot{e}$ , and the 'each/all' quantifier  $w\hat{o}y$ , 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.

- (457) a.  $n\grave{a}$ . L  $y\grave{a}y\acute{a}-\grave{m}$   $k\grave{u}$  cow fall.Pfv-Ppl.AnSg Def 'the cow that fell'
  - b.  $n\hat{a}$ : L  $y\hat{a}y\hat{a}$ - $m\hat{a}$   $b\hat{u}$ :  $cow^L$  fall.Pfv-Ppl.AnPl Def.Pl 'the cows that fell'
  - c.  $n\grave{a}$ : L  $y\grave{a}y\acute{a}$ - $m\grave{a}$   $w\^{o}y$   $cow^L$  fall.Pfv-Ppl.AnPl all 'all the cows that fell'
  - d.  $k \dot{u} r^n \dot{u}^L$   $y \dot{a} y \acute{a} \dot{w}$   $b \dot{e}$  stone fall.Pfv-Ppl.Inan Pl '(some) stones that fell'
  - e.  $k u r^n u^L$  y a y a m b e stone fall. Ipfv-Ppl. Inan f(some) stones that fall fall

The examples in (458) involve participles that end in an H-tone.

- (458) a.  $n\grave{a}$ : L  $y\grave{a}g\acute{u}$ -m  $k\grave{u}$   $cow^L$  fall.Ipfv-Ppl.AnSg Def 'the cow who falls'
  - b.  $n\grave{a}$ : L  $y\grave{a}g\acute{u}$   $b\^{u}$ :  $cow^L$  fall.Ipfv.Ppl.AnPl Def.Pl 'the cows who fall'
  - c.  $n\grave{a}$ : L  $y\grave{a}g\acute{u}$   $w\^{o}y$   $cow^L$  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,  $m\check{u}$ : '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  $y\grave{a}y\acute{a}-m$  appears

as {L}-toned, suffixless  $y \grave{a} y \grave{a}^L$  before  $m \check{u}$ :. In (459b), the plural counterpart  $y \grave{a} y \acute{a} - m \grave{a}$  drops its tones to  $y \grave{a} y \grave{a} - m \grave{a}^L$  before the demonstrative.

```
(459) a. n\grave{a}:^L y\grave{a}y\grave{a}^L m\check{u}: cow^L fall.Pfv ^L Prox.An 'this cow that fell' (y\grave{a}g\acute{a}-\grave{m})
```

#### 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  $k\hat{a}$ :", 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.

```
[bèr-hòggò<sup>L</sup>
              \int t\acute{e}r\grave{e}w = \emptyset
                                                                          kà:n,
(460)
                                    wà]
                                                  [goat-herd<sup>L</sup>
                                                                          Rel.
               [truth=it.is
                                   Ouot]
                                       HL<sup>-</sup>nâ:]
                                                         Lwò1
               [[á
                                       HL hand]
               [[LogoSgPoss
                                                         Linl
                \varepsilon r^n \varepsilon
                                                             kù
                                                                         nànàná:]
                3SgSbj
                               leave.Pfv-Ppl.Inan
                                                            Def
                                                                         all
                'She said: it was true; the whole herd of goats that, he (=Lion) had left in her
               hand(s), ...' [2005.2a.06]
```

```
b. ∫ɔ̀r¹ɔ̇¹¹
                     kà:n]
                                  g \acute{o} = n \acute{i},
                                                             ŋ̀gú-rù
                                                                         v \check{\varepsilon} = \acute{n},
     [place<sup>L</sup>
                     Rel]
                                  go.out=and.SS,
                                                                         come=and.SS,
                                                             here
     \int \partial r^n \partial^{\mathrm{L}}
                     kà:"]
                                  î:
                                               éw-yé-ŵ
                                                                                 kù,
     [place<sup>L</sup>
                     Rell
                                  1PlSbj
                                              sit-MP.Pfv-Ppl.Inan
                                                                                 Def
                      <sup>HL</sup>kábà:r]
     [[kú
                                       ſú
                                                 mâ:]
                                                             bèré-ỳ∴
                                                                                     dè]
                     HL news]
     [[InanPoss
                                       [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  $k\grave{a}$ :<sup>n</sup> are in (461).

```
[[dògùrù<sup>L</sup>
                                                                        gǎy<sup>n</sup>-tú-ẁ
(461) a.
                                    kà:"] yĕy
                                                                                                        wôy]
                                                           bû:
                 [[time<sup>L</sup>
                                                           3PlSbj put-Pfv1b-Ppl.Inan
                                   Rel] honey
                                                                                                       all]
                                ^{\rm HL}k\hat{u}:] ^{\rm L}m\hat{a}:] [n\acute{a}r^{n}\grave{u}\ ^{\rm L}w\grave{o}]\ l\acute{o}-\grave{w}
                 [[[ú
                                                                                                   dé1
                 [[[2SgPoss HLhead] LDat] [night
                                                                 <sup>L</sup>Loc] go.Pfv-2SgSbj if]
                 òmdò:-tòŋgŏy
                                            páyá-w
```

```
'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. //nù<sup>L</sup>
                     kà:"]
    [[person.Pl<sup>L</sup>
                     Rel]
                     Lnà:1
                                     hàybú]
    [3ReflPlPoss Lcow.Pl]
                                    watch.over.Ppl.Ipfv.AnPl]
                  HL nî:]
                                 Lwò]
                                            [nǎ:
    [[kú
                                                        kù]
                                                                  dìmbà-w-bà
                                 Lin]
    [[DiscDef HL cause]
                                                                  follow-Stative-3PlSbj
                                            [cow.Pl
                                                         Def]
     '(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. \lceil k \hat{\sigma} : r^n \hat{\sigma}^L \rceil
                                            nù:-rà-w<sup>L</sup>
                 kà:n]
                           â:
                                                                       ŋ̀gú,
    [roar(n)<sup>L</sup>
                           3LogoPlSbj hear-Progr-Ppl.Inan<sup>L</sup>
                 Rel]
    jàw<sup>n</sup>â: [kɔ̂:<sup>nL</sup>
                         [ \xi r^n \xi \quad n \hat{a} y^n ] \quad j \hat{a} y \hat{a} - \hat{m} ] = d \hat{a}
    crowd [thing<sup>L</sup> [3Sg with] fight(v).Ipfv-Ppl.AnSg]=not.be
              dé
     wá
    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]
                      kà:<sup>n</sup>] [[kɔ̂:
                                     yà→] [nì-nòr<sup>n</sup>ú
                                                              vá→11
    2Sg [[person<sup>L</sup> Rel] [hunger and] [thirst
                                                              and]
    [nù<sup>L</sup>
                    kà:<sup>n</sup>]
                                dá-m]
    [person<sup>L</sup>
                                endure.Ipfv-Ppl.AnSg
                    Rel]
     'you-Sg (as) a person who (can) endure hunger and thirst' [2005-1b.10]
d. [găm
                   kù]
                             vâ:
                                         dùwò-bò.
                                         leave.Pfv-3PlSbjbj,
    some
                   Def]
                             there
    [[gàm<sup>L</sup>
                             ínjírí-mà]
                   kà:<sup>n</sup>]
    [[some<sup>L</sup>
                   Rel]
                             get.up- Ppl.Pfv.AnPl]
                 y \neq a \rightarrow l [dèrě-m y \neq a \rightarrow l ínjírí-mà
    [ònjŏ-m
                                                                         kù.
                                       and] get.up-Ppl.Pfv.AnPl Def,
    [y.sib-Sg and] [e.sib
                              [yúlì Lwò] y \tilde{\varepsilon} = \tilde{n}
              Lmà:]
    [[bû:
              <sup>L</sup>QuotSbj]
                              [Yuli Loc] come=and.SameSubj
    [[3P1
    èw-yè-bó
                                      wá
    sit-MP.Pfv-3PlSbjbj
                                      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<sup>n</sup>â: [dògùrù<sup>L</sup>
                             kà:"] gŏ:-rè-w
                                                                     wôy
               [time<sup>L</sup>
                             Rel] go.out-Pfv1a-Ppl.Inan
    meat
                                                                     all
     'any time (=whenever) meat (=a game animal) comes out' (< dógúrú)
```

torch

tie.Pfv-2SgSbj

if,

f. [[pèrè tà:nù]<sup>L</sup> kà:<sup>n</sup>] î: sèw<sup>n</sup>ǔ-m kù
[[sheep three]<sup>L</sup> **Rel**] 1PlSbj slaughter.Ipfv-Ppl.AnPl Def
'the three sheep-Pl that we will slaughter'

A synchronic connection between relative  $k\hat{a}$ :<sup>n</sup> and the compound-final-like quantifier  $k\hat{a}$ :<sup>n</sup> '(not) any' is initially suggestive. The tonal difference could be attributed to tone-dropping on  $k\hat{a}$ :<sup>n</sup> as part of a relative head.  $k\hat{a}$ :<sup>n</sup> '(not) any' has an animate singular form  $k\hat{a}$ :<sup>n</sup>-m that has no counterpart with relative  $k\hat{a}$ :<sup>n</sup>, 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  $k\hat{a}$ : noccurs freely in positive as well as negative contexts and with any noun, N-Adj, or N-Num combination. By contrast,  $k\hat{a}$ : 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  $k\hat{a}$ : do not require a maximalized reading (any X that...). A maximalized reading can be forced by adding  $w\hat{o}y$  all as in (461a,e), but some other examples clearly have specific readings.

A diachronic connection between relative  $k\grave{a}:^n$  and the quantifier  $k\^{a}:^n$  '(not) any' is possible but uncertain. The only known cognate relative marker is Toro Tegu  $k\grave{a}:^n$  '(not) any' has cognates like Yanda Dom  $k\acute{a}m\grave{a}$  and Nanga  $k\acute{a}m\^{a}$  that point to an etymon \*kámã.

## 14.2 Subject relative clause

We have already seen the component features of relative clauses that are relevant: tone-dropping 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.

- (462) a.  $y\acute{e}ng\grave{u}$   $y\grave{a}^L$   $y\check{e}-\grave{m}$   $k\grave{u}$  yesterday woman come. Pfv-Ppl.AnSg Def 'the woman who came yesterday' [linear order also:  $y\acute{e}ng\grave{u}$   $y\grave{a}^L$   $y\check{e}-\grave{m}$   $k\grave{u}$ ]
  - b.  $y\hat{a}^L$   $y\check{e}$ -m $\hat{a}$   $b\hat{u}$ :
    woman<sup>L</sup> come.**Pfv-Ppl.AnPl** DefPl
    'the women who came'
  - c.  $yi^L$  yaya-m ku child fall. **Pfv-Ppl.AnSg** Def 'the child who fell'
  - d. *yì-tè:* L yàyá-mà bû:
    child.Pl<sup>L</sup> fall.**Pfv-Ppl.AnPl** DefPl
    'the children who fell'

e.  $k \dot{u} r^n \dot{u}^L$   $y \dot{a} y \acute{a} - \dot{w}$   $k \dot{u}$  stone 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).

- (463) a.  $y \hat{a}^L$  éléy tíyé- $\hat{m}$  kù woman<sup>L</sup> peanuts sell.Pfv-Ppl.AnSg Def 'the woman who sold (the) peanuts'
  - b.  $yi^L$   $inj\check{e}$ -m  $s\acute{u}y\acute{o}$ -m  $k\grave{u}$  child dog-AnSg hit.Pfv-Ppl.AnSg Def 'the child who hit the dog'
  - c.  $yi^L$  [á  $^{HL}b\hat{s}$ :](=in)  $súy\acute{s}$ -in  $k\grave{u}$  child [3ReflSgPoss  $^{HL}$ father](=Acc) hit.Pfv-Ppl.AnSg Def '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.  $yi^L$  i=ni súy5-mi ki child 1Sg=Acc hit.Pfv-Ppl.AnSg Def 'the child who struck me'
  - b.  $yi^L$  i=ni sùyú-m kù  $child^L$  1Sg=Acc hit.Ipfv-Ppl.AnSg Def 'the child who hits me'
  - c.  $y\hat{\imath}$ - $t\hat{\epsilon}$ : Let  $i=n\hat{\imath}$  sùyú- $\varnothing$  kù child.Pl<sup>L</sup> 1Sg=Acc hit.Ipfv-Ppl.AnPl Def 'the children who hit-Present me'
  - d.  $k u r^n u^L$  i = n u  $d u n j u e^L$  k u stone u 1Sg=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. [àr<sup>n</sup>à <sup>L</sup> ỳgứ-rừ b-ê:<sup>n</sup> bû:] jứwó-ỳ
  [man<sup>L</sup> here be-Ppl.AnPl DefPl] know.Ipfv-1SgSbj
  'I know the men who live here.'
  - b. [yà L nă:-m só-m kù] júwó-ỳ [woman L cow-AnSg have-Ppl.AnSg Def] know.Ipfv-1SgSbj 'I know the woman who has a cow.'

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 ngu '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 tone-dropping or other evidence of compounding.

- (466) a.  $y\hat{a}^L$   $\hat{e}l\hat{e}y^L$ - $t\hat{i}y\hat{u}$   $b\hat{u}$ :

  woman peanuts -sell. Ipfv. Ppl. AnPl

  'the women who sell peanuts'
  - b.  $y\hat{a}^L$   $\hat{\epsilon}l\hat{\epsilon}y^L$ -[ $t\hat{\imath}y\hat{\imath}-m$ ]  $k\hat{\imath}u$ woman peanuts -[sell.**Ipfv-Ppl.AnSg**] Def 'the woman who sells peanuts'
  - c.  $y\hat{a}^L$   $[\hat{e}l\hat{e}y-\hat{e}s\hat{u}]^L$ - $t\hat{i}y\hat{u}$   $b\hat{u}$ :

    woman  $[\text{peanuts}^L\text{-good}]^L$ -sell.Ipfv.Ppl.AnPl DefPl

    'the women who sell good peanuts'
  - d.  $y\hat{a}^L$   $[\hat{e}l\hat{e}y^L$   $\hat{\eta}g\hat{u}]$   $t\hat{v}u$   $b\hat{u}$ :

    woman<sup>L</sup> [peanuts<sup>L</sup> Prox.Inan] sell.**Ipfv.Ppl.AnPl** DefPl

    'the women who sell these peanuts'
  - e.  $y\dot{a}^{L}$  [màngórò pérú] tìyí-m kù woman<sup>L</sup> [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  $=n\hat{\imath} \sim =\hat{n}$ , which is optional for direct objects in main clauses, is not allowed in object relatives. For example, in (467b),  $y\hat{\imath}-t\hat{\epsilon}$ . 'children (who...)' cannot be followed by  $=n\hat{\imath}\sim =\hat{n}$ , although in the corresponding main clause  $y\hat{\imath}-t\hat{\epsilon}$ :  $b\hat{u}:(=\hat{n})$ ]' 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).

- (467) a.  $n\grave{a}w^n\grave{a}$ . î:  $k\acute{u}w\acute{o}-\grave{w}$   $k\grave{u}$  meat l 1PlSbj eat.Pfv-Ppl.Inan Def 'the meat that we ate'
  - b.  $y\hat{\imath}-t\hat{\epsilon}$ :  $\hat{\iota}$   $\hat{\iota}$   $y\tilde{\imath}-m\hat{a}$   $\hat{b}\hat{u}$ : **child.Pl**<sup>L</sup> 2SgSbj see.Pfv-Ppl.AnPl Def.AnPl

    'the children who(m) you-Sg saw'

    [cf. main clause  $[y\hat{\imath}-t\hat{\epsilon}: \hat{b}\hat{u}:(=\hat{n})]$   $y\hat{\imath}-\hat{w}=\hat{b}\hat{\epsilon}-\hat{w}$  'you had seen the children']
  - c.  $n\grave{a}$ : L f páyá-m kù cow L 1SgSbj tie.Pfv-Ppl.AnSg Def 'the cow that I tied up'

  - e. *yéŋgù yì-tè:* <sup>L</sup> *ú yǐ-mà bû:* yesterday **child.Pl** <sup>L</sup> 2SgSbj see.Pfv-Ppl.AnPl DefPl 'the children who(m) you-Sg saw yesterday' (< *yì-tè:*)
  - f. yéŋgù sĕydù yì-tè: Yǐ-mà kù bè yesterday Seydou child.Pl<sup>L</sup> see.Pfv-Ppl.AnPl Def Pl 'the children who(m) Seydou saw yesterday' (< yì-të:)

Imperfective examples are in (468).

- (468) a.  $n\grave{a}w^n\grave{a}$ : î:  $k\acute{u}w\acute{o}-\grave{m}$   $k\grave{u}$  meat Lapfv-Ppl.Inan Def 'the meat that we will eat'
  - b.  $y\hat{\imath}$ - $t\hat{\epsilon}$ : u  $y\hat{\imath}$ :  $b\hat{u}$ : child.Pl<sup>L</sup> 2SgSbj see.Ipfv.Ppl.AnPl DefPl 'the children who(m) you-Sg will see'

In all nonsubject relative clauses, including object relatives, if the relative-clause subject is coindexed with a third-person main-clause subject ('Seydou<sub>x</sub> has found [the shoulderbag that he<sub>x</sub> left]'), the relative-clause subject is expressed by a reflexive pronoun. See §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  $k\hat{u}$  where plural  $b\hat{u}$ : 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.

```
(469) a. [àr^nà^L [ér^né HL yí-m] bármé-m = bě-m kù]
[man^L [3SgPoss HL child-AnSg] be.hurt-Ipfv=Past-Ppl.AnSg Def]
tèmbì-rí-ŷ
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. [\hat{a}r^n\hat{a}^L [\xi r^n\xi \delta \delta \delta y'\int t\hat{e}:] b\hat{a}rm\xi -m\hat{a} = b-\hat{a}: k\hat{u}] [man^L [3SgPoss HL child-Pl] be.hurt.Pfv-Ppl.AnPl=Past-3PlSbj Def] \text{t\hat{e}mb\hat{i}-r\inf y} \text{find-PfvNeg-1SgSbj} \text{'I didn't (= couldn't) find the man whose children had been hurt.'} [given by another informant with \(\hat{b}\hat{a}rm\hat{e}-\hat{m} = b\hat{e}-\hat{m}\) as in (469a)]
- c. [àr<sup>n</sup>à<sup>L</sup> [bû: <sup>L</sup>yì-tè:] bármé-mà bû:]
  [man<sup>L</sup> [3PlPoss <sup>L</sup>child-Pl] be.hurt.Pfv-Ppl.AnPl Def.Pl]
  tèmbì-rí-ỳ
  find-PfvNeg-1SgSbj
  'I didn't (=couldn't) find the men whose children were hurt.'
- d. [yì-tè: L [bû: Lkù: bármé-mà kù] [child [3PlPoss Lhead be.hurt.Pfv-Ppl.AnPl Def] súsó:-r-à: heal-Pfv1a-3PlSbj

'The children whose heads were hurt have healed.'

- f. [nù L [bû: Lùrò] gŏ: tángú-mà kù]
  [personL [3PlPoss Lhouse] fire be.lit.Pfv-Ppl.AnPl Def]

  bărà
  help.Imprt
  'Help-2Sg the people whose house burned (down)!'
- g. [àrnà Larman [grant fortune] [frant fortune] [grant fortune] [frant fortune] [grant fortune

In line 4 of (674) in the sample text, translated 'a young woman whose breasts are fully going out (=developed)', relative marker  $k\hat{a}$ : appears instead of a resumptive pronoun. The possessed noun  $\hat{i}r\hat{u}$  '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 {HL} or {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...*).

- (470) a.  $\frac{\partial a^n \partial^L}{\partial m}$  bú:dù í ní-m kù man<sup>L</sup> money 1SgSbj give.Pfv-Ppl.AnSg Def 'the man to whom I gave the money'
  - b.  $tiw^n \hat{\epsilon} y^n L$  konjoy  $b\hat{u}$ :  $g\check{t}^n m$   $k\dot{u}$  tree balanzan 3PlSbj say-Ipfv.Ppl.Inan Def 'the tree that they call "balanzan".'
  - c.  $b\dot{e}r\dot{e}^{L}$   $\epsilon r^{n}\epsilon = ni$  í  $s\dot{u}y\dot{5}-\dot{w}$   $k\dot{u}$  stick 3Sg=Acc 1SgSbj hit.Pfv-Ppl.Inan Def 'the stick with which I hit-Past it'

- d.  $[j\grave{e}mb\grave{e}^L \quad s\acute{u}k\acute{o}r\grave{o} \quad \acute{l} \quad g\check{a}^n-\grave{w}^n \quad k\grave{u}]$   $[sack^L \quad sugar \quad 1SgSbj \quad put.Pfv-Ppl.Inan \quad Def]$   $\acute{a}n-d\acute{a}: \quad b\grave{u}$ where? be-3SgSbj'Where is the sack in which I put-Past the sugar?'
- e.  $\frac{\partial r^n \partial^L}{\partial r^n}$  [éré mâ:] bú:dù í ní-m kù man<sup>L</sup> [3Sg Dat] money 1SgSbj 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.

```
(471) a. éw-yé [nĕy<sup>n</sup> nÉ-ŷ<sup>n</sup>...]
sit-MP [meal eat.Ipfv-1PlSbj]
'We will sit down and eat.'
b. péré sí-yé:-rè-Ø
jump go.down-MP-Pfv1a-3SgSbj
'He/She jumped down.'
```

There is also a type with {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  $-\hat{\imath}: \sim -\hat{y}$  (§4.2.2). The nonfinal verbs (usually just one) appear as L-toned compound initials.

```
(472) a. péré sí-yé-
jump go.down-MP-
'jump down'

b. pèrè <sup>L</sup> -[sì-y-î:]
jump <sup>L</sup> -[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 {HL} overlay overrides the compound tone pattern. This happens to  $l\hat{o}^L$ - $[d\hat{o}-\hat{y}]$  'going and coming' ( $l\hat{o}$ -,  $d\hat{o}$ -) in (473).

```
(473) [ùwó tǎ:n] HL ló-[dò-y] [month three] 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, {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.

### 15.1.2.2 Nonfinal chained verb with {HL} tone overlay

HL jó-lò

(475) a. *jémbé* 

In this construction, the uninflected **nonfinal verb has {HL} 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.

děy-tí-ỳ

```
bag HL convey-Caus put.down-Pfv1b-1SgSbj 'I took (there) and put down the bag.' (jò-ló)

b. sŏ-m HL jó-lò cè:rì-Ø horse-AnSg HL convey-Caus show.Pfv-3SgSbj 'He took (there) and showed the horse.' (jò-ló)
```

```
c. n\grave{a}w^n\hat{a}: H^Lj\hat{\epsilon}: k\grave{u}w\grave{o}-\varnothing
meat H^Lbring eat.meat.Pfv-3SgSbj
'He/She brought and ate the meat.' (j\check{\epsilon}:)
```

```
d. n\grave{a}w^n\hat{a}: H^Lj\hat{\epsilon}: k\acute{u}w\acute{o}-\grave{m}
meat H^Lbring eat.meat-Ipfv.3SgSbj
'He/She will bring and eat the meat.' (j\check{\epsilon}:)
```

A possible connection is with the {HL}-toned alternative perfective verb form (§10.2.1.3).

# 15.1.3 Direct chains including a time-of-day verb

Verbs like  $n\acute{a}$ - 'spend the night' and  $d\grave{e}r^n\acute{e}$ - 'spend the (mid-)day' may be chained to a preceding VP denoting a prolonged activity.

```
(476) a. jìyé jìyé nà-bó dance(n) dance(v) spend.night.Pfv-3PlSbj 'They danced all night.'
```

b.  $t\hat{e}$ : siri  $d\acute{e}r^n\acute{e}-y\grave{e}$ 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.

```
(477) a. [jémbé kù] děy dùwò-Ø
[bag Def] put.down leave.Pfv-3SgSbj
'He/She put the bag down and left it.'
```

```
b. nă:-m páyá dúwó-ỳ cow-AnSg tie leave.Ipfv-1SgSbj '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).

```
(478) a. ló yé-ỳ
go come.Ipfv-1SgSbj
'I will go and come (back).'
b. yè = n ló:-rè-Ø
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  $-r\acute{a}$ :  $\sim -r\acute{e}$ : 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  $m \partial : l \dot{u}$  '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  $m \partial : l \dot{u}$  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 §15.1.9 below.

```
(479) a. mò:lú bìré:-rà-ỳ∴
come.together
'We work together.' work-Prog-1PlSbj
```

```
b. [d\tilde{o}: b\hat{e} \rightarrow] [p\tilde{u}l\tilde{o}: b\hat{e} \rightarrow]
[Dogon.Pl and] [Fulbe.Pl and]
m\hat{o}:l\hat{u}
b-\hat{e}:^n=b-\hat{a}:
come.together
be-3PISbj=Past-3PISbj
'Dogon and Fulbe (ethnicities) used to be (=live) together.'
```

c.  $[y\check{a}: b\acute{e} \rightarrow] [\acute{a}r^n\grave{a} b\grave{e} \rightarrow]$ [woman.Pl and] [man.Pl and]  $j\grave{i}y\acute{e} m\grave{o}:l\acute{u} j\acute{t}y\acute{e}-y\grave{e}$ dance(n) **come.together** dance.Ipfv-3PlSbj 'Women and men will dance together.'

```
d. [í yá→] [sĕydù yà→]
[1Sg and] [Seydou and]

L+HL řr<sup>n</sup>à mò:lú wárá-ỳ::
1SgPoss. 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).

```
(480) a. [sá:kù yèy kú] mò:lú dèyì-ỳ

[sack two Def] put.together put.Pfv-1SgSbj

'I put down the two sacks together.' (yĕy)
```

```
b. [àwă-m yá→] [ô-m yà→]
[snake-AnSg and] [mouse-AnSg and]
mɔ̂:lú dùwɔ̂-ŷ
put.together leave.Pfv-1SgSbj
'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.

# 15.1.8 VP-chaining with same-subject past sequential $= ni \sim = ni$

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 =ni, often reduced to =ni, 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  $=ni \sim =ni$ , on which see §15.1.10.

 $=ni \sim = ni$  is added to the bare stem of the verb. For Cv verb stems, such tonal distinctions as that between nui- 'go in' and nui- 'hear' were audible (482c), though not consistently. The one <LHL> monosyllabic, 'bring', is heard with <LH>-tone plus downstep of the H-tone of the clitic (482d). Representative data are in (482).

(482)	gloss	bare stem	with $=ni$	
	a. $C\acute{v} = n\acute{i}$			
	ʻgoʻ	ló	ló=ní	
	'spend night	ná	ná = ní	
	'shoot'	tá	tá = ní	
	b. $C\check{\mathbf{v}} = n\hat{\mathbf{i}}$			
	'come'	yĚ	$y\check{\varepsilon} = ni$	
	'arrive'	dš	$d\check{\sigma} = ni$	
	c. 'hear' and 'go in	and 'go in' distinguished (though not easily)		
	'hear'	nŭ	$n\check{u} = ni$	
	'go in'	nú	nú = ní	
	d. 'bring' ( <lhl> tone preserved)</lhl>			
	'bring'	j̃E:	$j\check{\varepsilon}$ : = ${}^{4}ni$	
	e. <i>Cvy</i> <sup>n</sup>			
	'put'	gǎy <sup>n</sup>	$g\check{a}y^n = ni$	
	'do'	gǎy <sup>n</sup> káy <sup>n</sup>	găy <sup>n</sup> =ní káy <sup>n</sup> =ní	
	irregular	-	•	
	'say'	gŭy <sup>n</sup>	$g\hat{u} = n\hat{i}$	

```
f. bisyllabic

'tie' p\acute{a}y\acute{a} p\acute{a}y\acute{a} = n\acute{i}

'take out' g\grave{o}-ló g\grave{o}-ló = n\acute{i}

'leave' d\grave{u}w\acute{o} d\grave{u}w\acute{o} = n\acute{i}

g. trisyllabic

'poke' d\grave{u}s\grave{u}r\acute{o} = n\acute{i}
```

Some examples are in (483).

- (483) a. [yǎ-m isê:  $gŏ=\acute{n}$ ] yĚ:-rĚ-𝒪 [woman-AnSg village go.out=and.SS] come-Pfv1a-3SgSbj 'A woman left the village and came (here).'
  - b. [wárà  $\check{a}y = ni$ ]  $\grave{\partial}r^n \acute{\partial}$ :  $l\acute{o}: -r\grave{e} \varnothing$  [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  $= n \acute{a} y^n$  (see the following section) for similar same-subject sequential events.

There is also a phrase  $k\acute{u} = \grave{m} n\acute{i}$  in the texts, consisting of  $k\acute{u} = \grave{m}$  'it is that' (i.e. 'that's it') plus a  $n\acute{i}$  that might be equated morphemically with same-subject  $= n\acute{i}$ , but that merely resumes the situation established by preceding discourse.  $k\acute{u} = \grave{m} n\acute{i}$  is set off prosodically from preceding and following material. An example is at the beginning of (657) in the sample text.  $k\acute{u} = \grave{m}$  without  $n\acute{i}$  is even more common.

## 15.1.9 VP-chaining with same-subject future sequential $= n \acute{a} v^n$

This clitic is attached to an uninflected verb stem that **drops its tones** to  $\{L\}$ . This tone-dropping does not occur with other clause-final particles. The exception to tone-dropping is that the only  $\langle LHL \rangle$ -toned monosyllabic stem, 'bring', retains its tones; the final L is expressed as downstep (4), i.e. as partial pitch-lowering of an H-tone, on  $= n \acute{a} y^n (484d)$ .

(484) gloss bare stem with 
$$= n \acute{a} y^n$$

a.  $C \grave{v} = n \acute{a} y^n$ 

'go'  $l\acute{o}$ 

'spend night  $n \acute{a}$ 

'shoot'  $t \acute{a}$ 

b.  $C \grave{v} = n \acute{a} y^{\acute{n}}$ 

'come'  $y \check{e}$ 

'arrive'  $d \check{o}$ 

'arrive'  $d \check{o}$ 

with  $= n \acute{a} y^n$ 
 $\grave{l} \grave{o} = n \acute{a} y^n$ 
 $\grave{n} \grave{a} = n \acute{a} y^n$ 
 $\grave{v} \grave{e} = n \acute{a} y^n$ 

```
c. 'hear' and 'go in' merged
                                                                        n\dot{\mathbf{u}} = n\acute{a}\mathbf{v}^n
       'hear'
                                    пŭ
                                   пú
                                                                       n\hat{\mathbf{u}} = n\hat{\mathbf{a}}\mathbf{y}^n
       'go in'
d. 'bring' (<LHL> tone preserved but final L expressed as downstep)
       'bring'
                                                                       j\check{\varepsilon}:={}^{\downarrow}n\acute{a}y^n
                                   jἒ:
e. bisyllabic
       'tie'
                                                                       p \dot{a} y \dot{a} = n \dot{a} y^n
                                   páyá
                                                                       g \partial - l \partial = n \acute{a} v^n
       'take out'
                                   gò-ló
                                                                       d\hat{u}w\hat{\sigma} = n\acute{a}y^n
       'leave'
                                    dùwś
f. trisyllabic
                                                                       d\hat{u}s\hat{u}r\hat{o} = n\acute{a}y^n
       'poke'
                                    dùsùró
```

My assistant regularly used  $=n\acute{a}y^n$  to link two same-subject clauses denoting future (including imperative) and generalized-time (gnomic) event sequences. He rejected  $=n\acute{a}y^n$  in reports of similar same-subject event sequences in the past, using  $=n\acute{a}$  (preceding section) instead. For example,  $=n\acute{a}y^n$  was regular in future-time  $l\grave{o}=n\acute{a}y^n$  yé- $\grave{y}$  'I will go and come [back]' and in imperative  $l\grave{o}=n\acute{a}y^n$  yá 'go and come[back]!'), but it was replaced with  $=n\acute{a}$  in past-time  $l\acute{o}=n\acute{a}y^n$  yê-y' I went and came [back]'.

Textual examples like those in (485) generally bear out the future or generalized-time context. The interlinear gloss is "then.SS."

```
(485) a. [\hat{u}r\hat{J}^L = n\acute{a}y^n] [\hat{a}: Ldiy^n\hat{a}] [hat{line}] [hat{line}]
```

- b. [ŋgú-rù go L = náy<sup>n</sup>]

  [here go.out = then.SS]

  [à:m<sup>b</sup>á: HL tûm] ló béré-m-dó-Ø

  [Amba HL mate] go can-Ipfv-Neg-3SgSbj

  '... he could not walk (a distance) on the order of leaving here (= Beni) and going to Amba (village)' [2005.2b.02]
- c. [nù<sup>L</sup> díy<sup>n</sup>à] [áŋày<sup>n</sup> <sup>L</sup>wò] bě:-rè-Ø dè, [person<sup>L</sup> remain-Pfv1a-3SgSbj big.Pl] [like.that Lin] if.  $\int i \hat{i} y \hat{\varepsilon}^{L} = n \hat{a} y^{n}$ nì] pégé-m-n-é kŏv<sup>t</sup> wá [kill<sup>L</sup>=then.SS Emph] put.in-Ipfv-Neg-3PlSbj 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:<sup>L</sup>
                     k\grave{a}:^{n}I^{\mathrm{L}}
                                           g \grave{a}^{n L} = n \acute{a} y^n 
                                 bû:
                                                                   [location] = n\acute{a}v^n],
     [[shoe<sup>L</sup>
                     any<sup>L</sup>
                                 3PlSbj put<sup>L</sup>=then.SS],
                                                                   [go<sup>L</sup>=then.SS]
     [ìsê:
                                      bû:
                                                  láwá-m
                   gàngùrú]
     [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]
```

```
f. [[kì-kà:<sup>L</sup> kísíyé-m] ŋây<sup>n</sup>→ yè<sup>L</sup> = náy<sup>n</sup>]

[[grasshopper<sup>L</sup> flying-AnSg] thus come<sup>L</sup> = then.SS]

[yû: kù-kúwó-m mâ:-màr<sup>n</sup>á:]

[millet Rdp-eat.Ipfv-Ppl.Inan amazingly]

yì-tà<sup>L</sup>-lí-ŷ:]

see<sup>L</sup>-ExpPf<sup>L</sup>-PfvNeg-1PlSbj

'We had never seen flying grasshoppers come like that and amazingly eat up the millet.' [2005.1a.08]
```

```
g. [k\acute{u} \quad m\grave{a}y^n\acute{a}:-r\grave{\epsilon}-\varnothing \quad m\grave{a}:]
[Inan dry-Pfv1a-3SgSbj before]
[[p\grave{a}l=n\acute{a}y^n] \quad n\acute{\epsilon}-\grave{y}^n..]
[[pick<sup>L</sup>=then.SS] eat.Ipfv-1PlSbj
'Before they (=cow-peas) dry (=ripen fully), we pick (them) and eat (them).'
[2005.1a.12]
```

The combination of  $= n\acute{a}y^n$  with  $m\grave{o}: l\acute{u}$  '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  $m\grave{o}: l\acute{u}$  preceding the other verb (§15.1.6 above).

```
(486) a. [[\hat{u}s\acute{u} s\acute{u}y^n\grave{\partial}y^n] d\acute{z}:-r\grave{e}-\varnothing d\grave{e}]
[[day seven] arrive-Pfv1a-3SgSbj if]
[m\grave{o}:l\grave{u}=n\acute{a}y^n] \grave{n}n\grave{r}^n\^{c}: g\acute{a}^n-\grave{y}.
[assemble^L=\mathbf{then.SS}] name put.Ipfv-1PlSbj 'When seven days have arrived (=elapsed), having assembled, we give the name.' [2005.1a.02]
```

```
b. \lceil m \hat{\sigma} : l = n \acute{a} v^n \rceil
    [assemble ^{L} = then.SS]
    [îsê:
                 wôy]
                             [[póŋgú
                                                 yěy]
                                                         mà:lú
    [village
                             [[neighborhood
                                                         assemble
                 all]
                                                two
    bšy
              bàr<sup>n</sup>á-w∴
                                    dè] [ló
                                                 gànjí-yè]
    bell
              beat-Ipfv.2PlSbj
                                   if] [go
                                                 dig.Ipfv-3PlSbj]
    '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.

```
(487) y\check{e} [u b\grave{a}r = n\acute{a}y^n] d\grave{e}mb\acute{l}-y\grave{e} come [2SgObj help<sup>L</sup>=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  $= n \acute{a} y^n$  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,  $b \grave{a} \eta g \grave{i} y \acute{i}$  'hide' (here, by extension, 'do secretly') is conceptually linked to 'get and chew tobacco', so there is a kind of same-subject structure here.

```
(488) [bàngìyì = náy<sup>n</sup>] = dá-∅ dé,

[hide<sup>L</sup>=then.SS]=StatNeg-3SgSbj if,

táwà bèré hámpé-wú-m-dó-∅

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.

```
(489) [né: kày] [[[yă-m kù] HL têy kù] tègè = náy<sup>n</sup>]
[now Top] [[[woman-AnSg Def] HL word Def] talk<sup>L</sup>=then.SS]

á lò-m bá
LogoSg go<sup>L</sup>-Hort Quot

'He said; now they (he?) should talk about (=discuss) the matter of the woman so he might go.' [2005.2a.01]
```

The combination  $l\hat{o} = n\acute{a}y^n$  '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

```
(490) a. [lò=náy<sup>n</sup>] hâl ló [[ùsú pé-nì:y] dò-ý]
[go<sup>L</sup>=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<sup>L</sup>
                                     tó-jέ-ẁ
                                                             dé
                                                                    wò:-wôy,
                   mă:
                            kù]
    [sowing<sup>L</sup>
                   dry
                            Def]
                                     sow-RecPf-2SgSbj if
                                                                    all,
    [[nέ:
                  kày]
                            ăν
                                     l\grave{o} = n\acute{a}y^n
                                     go^{L} = then.SS
    [[now
                 Top]
                            take
    \int j i r^n \check{\varepsilon} y^n
                            dš:-rè-∅ —1
                            arrive-Pfv1a-3SgSbi---1
     [rainv.season
     'If you-Sg have done the dry sowing, from then until the rainy season has
    arrived—' [2005.1a.10]
```

The combination  $g\dot{u}^n = n\acute{a}y^n$  or  $g\dot{\imath}^n = n\acute{a}y^n$ , based on  $g\widecheck{u}y^n$  (variant  $g\widecheck{i}y^n$ ) 'say', has more or less literal sense in (491a). However, it can also function as a purposive postposition, as in interrogative  $[\grave{n}j\acute{e}\ g\grave{\imath} = n\acute{a}y^n]$  'why?' ('for what?', §13.2.3), and as in (491b).

```
(491) a. [n\check{u}-m \quad g\grave{u}^n = n\acute{a}y^n] \quad l\check{a}-w \quad [k\grave{\delta}:^{nL} \quad k\hat{a}:^n] [person-Pl say = then.SS] other-Inan [thing<sup>L</sup> any] 'There is no longer any (act) of (people saying)...' [2005.2a.08]
```

```
b. d\tilde{\partial}:-m k\tilde{a}y, [g\tilde{u}l\tilde{\partial}-\tilde{m}=\emptyset] g\tilde{u}^n=n\tilde{a}y^n]
Dogon-AnSg Top, [slave-AnSg=it.is say=then.SS]
[p\tilde{u}l\tilde{\partial}-m b\tilde{e}r\tilde{e}-j\tilde{e}:-\emptyset d\tilde{e}] m\tilde{a}r\tilde{e}-\tilde{m}-d\tilde{o}-\emptyset
[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]
```

# 15.1.10 VP-chaining with different-subject $= n\hat{i} \sim = \hat{n}$

A common construction for combining two clauses with **different subjects** is for the first clause to end in clitic  $=n\hat{i}$ , or its common reduced form  $=\hat{n}$ , 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  $=n\hat{i} \sim =\hat{n}$ , 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  $=n\hat{i} \sim =\hat{n}$  denotes an eventuality that **chronologically precedes** the eventuality denoted by the following clause.  $=n\hat{i} \sim =\hat{n}$  is therefore most directly in opposition to same-subject  $=n\hat{a}y^n$ .

```
(492) a. [ú HL írna] ú wará = nì,
[2SgPoss HL field] 2SgSbj farm=and.DS,
yâ: gŏ:-m gò-Ø
there elephant go.out.Pfv-3SgSbj
'When you-Sg had farmed in your field, an elephant appeared there.'
```

b. [i: lăr=nì] lò-r-á
[1PlSbj chase.away=and.DS] go-PfvNeg-3PlSbj

'We (tried to) chase them away, but they wouldn't go.' [2005.1a.08]

```
nέ:
                                               tini = ni
c. hà:
    well,
                   now
                               [1PlSbj
                                              look=and.DS]
                               [dàw<sup>n</sup>á
     [ŋgú
                   kày]
                                               kù]
    [Prox.Inan Top]
                               [thing
                                              Def]
    [dàw<sup>n</sup>à<sup>L</sup>
                   d\hat{a}:y\hat{i}-\hat{m}]=d\hat{a}
    [thing<sup>L</sup>
                   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. /isê:
                   kù]
                               bû:
                                          \epsilon gg\epsilon = n
     [village
                   Def]
                               3PlSbj abandon=and.DS],
                                  bě:-rè-ŵ
     [yâ:
                                                                    dè]
                  2SgSbj
                                  remain-Ipfv-2SgSbj
     [there
                                                                    if]
                      ^{\mathrm{HL}}k\hat{\mathfrak{z}}:^{n}]=\varnothing
     [[ǎm
                      HLthing]=it.is
     [who?
```

'If they have abandoned the village, and (if) you-Sg remain there, it (village) is whose?' [2005.1a.07]

```
e. [bû: yé=n cêm] [[kòsŏy wó] lò-ỳ.:]
[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  $= \hat{n}$ , followed by an SS clause with  $= \hat{n}$ , and a final clause (whose subject is identical to that of the SS clause). The DS clause happens to itself be complex (with  $k \acute{o} s \acute{u}$  'harvest' chained to  $n \acute{a}$  'spend night'), but this is not directly pertinent here.

```
(493)
                       Lwò1
         [nár<sup>n</sup>ù
                                  kósú
                                                           n\acute{a} = \grave{n}.
                       Lin]
                                  harvest
                                                           spend.night=and.DS]
         [night
                                               1PlSbi
         ſbû:
                   \hat{u}r\hat{j} = \hat{n}
                                       [[t]w^n \not \epsilon y^n
                                                     wó] bì-yè-bó]
         [3PlSbj go.up=and.SS] [[tree
                                                     in] lie.down-MP.Pfv-3PlSbj
         '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  $k\acute{a}y^n$  '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.

```
(494) a. [bòlô: sí-yé=ń] [ér<sup>n</sup>é káy<sup>n</sup>=nì]
[down go.down-MP=and.SS] [3SgSbj do=and.DS]
[injĕ-m [[ér<sup>n</sup>é HL túlù] Lwò] dìm-dì-bó] wá
[dog-AnSg [[3Sg HL behind] Lin] follow-Caus.Pfv-3PlSbj] Quot
'When she came down, when she did that, they made a dog follow after her, it is said.' [2005.2a.04]
```

```
b \partial r^n \delta: l\delta = \hat{n} \hat{u}: k\acute{a}y^n = n\hat{i}, outback go=and.SS 2PlSbj do=and.DS, y\hat{i}-t\ddot{e}: c\grave{e}mn\acute{e} c\acute{e}mn\acute{e}-y\grave{e} child.Pl fun have.fun.Ipfv-3PlSbj '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  $=ni \sim =n$  and the same phonological shape functioning (after a noun or pronoun) as optional **accusative** morpheme (§8.2). I first encountered a morphemic identity between different-subject 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  $n\hat{i}$  (and variants) that may or may not be directly equatable with the different-subject 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  $=n\hat{i}$ . An example is  $\hat{\epsilon}r^n\hat{\epsilon}=\hat{m}=n\hat{i}$  at the beginning of (679) in the sample text, with focalized  $\hat{\epsilon}r^n\hat{\epsilon}=\hat{m}$  'it was  $\underline{he}$  (who ...)'. More difficult cases involving clause-final  $n\hat{i}$  in the sample text are  $\hat{j}\hat{i}\hat{y}\hat{\epsilon}=n\hat{a}y^n$   $\hat{n}\hat{i}$  including same-subject  $=n\hat{a}y^n$  in line 3 of (675), and  $n\hat{u}m-d\hat{o}:-r\hat{\epsilon}$   $n\hat{i}$  with perfective-1a verb at the end of (683).

## 15.1.11 Chaining with perfective linker tí

A linking element ti related to perfective-1b suffix -ti- (§10.2.1.5) is exemplified in (495), where it is followed by  $=naiy^n$ , and therefore drops its tone to ti. 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.

```
(495)
        [núw<sup>n</sup>ɔ̂y<sup>n</sup>
                      kày]
                               Γá
                                        dùwś
                                                 t\hat{i} = n\hat{a}y^n
                              [3Refl leave
                                                 Perf=then.SS]
        now
                      Top]
         ló-rέ-ý
                                        wá
        go-ImprtNeg-QuotImprt
                                        Ouot
         '(younger brother said to elder brother:) he (=elder) should not go away, having left
        him (= younger brother) now.' [2005.2a.08]
```

ti 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: ti-ti:- $\emptyset$  '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 (16- 'go') is incompatible with perfective-1b suffix (it forms perfective-1a 16:- $r\hat{e}$ -), 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 t6: ti- 'spill' is a lexicalized chain (i.e. a kind of verb-verb compound), so ti- is found even in the imperfective (t6: ti- $\hat{y}$  'I will spill') and in other non-perfective contexts like the 'be able to' construction in (496b).

```
(496) a. [bă:-rè dè] ló tí dúwó-ŵ [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 *tf*-, 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.

```
(497) hàyà [sèŋgû: kù] ăy sí-lé á 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]
```

# 15.1.12 Chaining with $ji-j\hat{\epsilon} \rightarrow$ 'go with'

The word  $ji-j\hat{e} \rightarrow$  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  $ji-j\hat{e} \rightarrow$  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  $jij\hat{e}$  has similar properties.

```
(498) [yǎ-m kù] jí-jè→ 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  $-j\hat{\varepsilon} \rightarrow$ , which occurs in backgrounded durative clauses indicating the continuation of an activity; see (512) in §15.2.1.4.

In one text, the form  $ji-j\epsilon$  (looking like a regular verb) is followed by 3Pl subject  $-m\hat{a}$ . The 3Sg subject counterpart is  $ji-j\epsilon-\hat{w}$ , with a final  $-\hat{w}$ . These forms are suggestive of perfective participal suffixes (§14.1.6.1).

```
^{HL}máni:] ^{L}wò] náy^{n}-yà,
(499)
        [[[sŏ:
                            HL above]
        [[[horse
                     Def]
                                        Lin]
                                                put.up.on.Ipfv-3PlSbj,
        jí-jέ-mà
                                  dè.
        go.with-3PlSbj
                                  if.
        [[bùrúgù <sup>L</sup>tù-m]
                                       ló]
                                             tíyé-yè
                    <sup>L</sup>mate-AnSg]
                                       go
                                             sell.Ipfv-3PlSbj
        '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]
```

### 15.1.13 Chaining with jùw<sup>n</sup>5 'do first, proceed to'

The verb  $j \hat{u} w^n \delta$  (not to be confused with unnasalized  $j \hat{u} w \delta$  'know') occurs a number of times in the texts with a preceding chained VP. My assistant glosses  $j \hat{u} w^n \delta$  in isolation as 'do first', but the textual contexts suggest a free translation 'proceed to VP' or 'now/then VP', implying a brief temporal separation between two chronologically sequenced events.

An example (in hortative form  $j \hat{u} w^n \hat{\partial} - m$ ) is at the end of (685) in the sample text. Another is (500).

```
(500)
        [dòró
                               bú-Ø
                                             dé1
                     yá
        [thorn
                     Exist
                               be-3SgSbj
                                             if]
                                        yàwrú yàwrú yàwrú
        Πó
                yàwrú
                             yàwrú
        [go
                rake.up
                             [repetitions]
        mà:lú-w
                                        dè]
        assemble.Pfv-Ppl.Inan
                                        if
                 găyn
                             iúw<sup>n</sup>ó-ẁ<sup>n</sup>
        gŏ:
        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]
```

#### 15.2 Adverbial clauses

### 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  $w\acute{a}k\acute{a}t\grave{u} \sim w\acute{a}g\acute{a}t\grave{u} \sim w\acute{a}g\acute{a}t\grave{u}$  'time, moment' or other temporal noun ('day', 'year', etc) as head, hence in {L}-toned form.

In (501a-b), a definite imperfective relative headed by 'time', and therefore with inanimate participle, is followed by instrumental  $n\hat{a}y^n$  'with' to create a temporal adverbial clause describing simultaneous eventualities. (501c) is similar construction but with a perfective participle. Definite  $k\hat{u}$  is heard as H-toned  $k\hat{u}$  when followed by  $n\hat{a}y^n$ .

```
(501) a. [[3:-m wàgàtù<sup>L</sup> yé-m kú] nây<sup>n</sup>]

[[chief-AnSg time<sup>L</sup> come.Ipfv-Ppl.Inan Def] with]

\[ \frac{\darkar^n \delta:}{\darkar^n \delta:} \frac{\beta(r\elli) = b\elli-\delta'}{\delta:} \]

field work(n) work-Ipfv=Past-1SgSbj

'At the time when the chief was coming, I was working in the fields.'
```

- b. [wàgàtù <sup>L</sup> í yé-m kú] nây<sup>n</sup>
  [time <sup>L</sup> 1SgSbj come.Ipfv-Ppl.Inan Def] with
  'at the time when I was coming'

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  $n\hat{a}y^n$  is absent. (502b) is a variant showing **doubling** of the head noun following the verbal participle.

```
(502) a. [kì-k\ddot{a}: \dot{u}s\dot{u}^L \ (k\dot{a}:^n) \ y\check{e}-\dot{w} \ k\dot{u}]
[Rdp-grasshopper \ day^L \ (Rel) \ come.Pfv-Ppl.Inan \ Def]
\dot{\eta}g\dot{u}-r\dot{u} \ i \ t\grave{e}mbi-\varnothing
here 1SgObj \ find.Pfv-3SgSbj
'The day when the locusts came found me here.' (<\dot{u}s\dot{u})
```

```
b. [k\hat{\imath}-k\tilde{a}: \hat{\imath}s\hat{u}^L (k\hat{a}:^n) y\check{\epsilon}-\hat{w}] L \hat{\imath}s\hat{u} \hat{\imath}s\hat{u}
```

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 §14.1.4 and especially §15.2.4, below.

```
15.2.1.2 'While X was VP-ing' (-\dot{m}|\dot{w}=b\dot{a}y, -\dot{m}|-\dot{w}\ d\dot{e}, \dot{m}|-\dot{w}\ n\dot{e})
```

The clitic  $=b\grave{a}y$ , apparently related to past  $=b\grave{e}-\sim=b\hat{e}$ -, is used in a temporal clause meaning 'while X was VP-ing'. The clause has the syntactic structure of a relative clause; in particular,  $=b\grave{a}y$  does not conjugate for subjects, rather a pronominal subject is expressed as a preparticipial pronoun. Except for statives,  $=b\grave{a}y$  is preceded by an unconjugated imperfective verb with suffix  $-\grave{m}$  (503a-c) cf. the past unsuffixed imperfective complex  $-\grave{m}=b\grave{e}-$  (§10.4.1.1). Derived stative verbs have  $-\grave{w}$  instead of  $-\grave{m}$  (504c, below). With quasi-verb  $b\grave{u}-$  'be (somewhere)' we get just  $b\acute{u}=b\grave{a}y$ . The clitic  $=b\grave{a}y$  cannot be equated precisely with any normal participial form of  $=b\grave{e}-$  ( $=b\^{e}-$ ).

```
(503) a. [\acute{e}r^n\acute{e} t\acute{n}\acute{n}-\grave{m}=b\grave{a}y] [3SgSbj watch-Ipfv=Past.Ppl] [\acute{e}r^n\acute{e} t't\acute{y}\grave{a}-m] s\grave{u}y\grave{o}-b\acute{o} [3SgPoss HL friend-AnSg] hit.Pfv-3PlSbj 'While hex watched, they struck hisx friend.'
```

```
b. [bû: tíní-m = bày]
[3PlSbj watch-Ipfv=Past.Ppl]
[bû: Ltiyà-m] sùyò-Ø
[3PlPoss Lfriend-AnSg] hit.Pfv-3SgSbj
'While they<sub>x</sub> watched, he struck their<sub>x</sub> friend.'
```

```
c. \partial r^n \delta: bír\epsilon í bír\epsilon-\dot{m} = bày, outback work(n) 1SgSbj work-Ipfv=Past.Ppl, púl5-m yè-\varnothing Fulbe-AnSg come.Pfv-3Sgs 'While I was working in the field(s), a Fulbe person came.'
```

A clause with  $-\dot{m} = b\dot{a}y$  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.

```
(504) a. [\acute{e}r^n\acute{e} y\grave{a}y\acute{a}-\grave{m}=b\grave{a}y] y\grave{i}-r\acute{i}-\grave{y} [3Sg fall-Ipfv=Past.Ppl] see-PfvNeg-1SgSbj 'I didn't see him/her fall.'
```

```
b. [î: yàyá-m̀ = bày] yì-ẁ

[1Pl fall-Ipfv=Past.Ppl] see.Pfv-2SgSbj

'You-Sg saw us fall.'
```

```
c. [érné bíyé-w=bày] tèmbù-Ø 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  $-\dot{m}|-\dot{w}=b\dot{a}y$  construction, my assistant used  $-\dot{m}|-\dot{w}$  followed by conditional particle  $d\dot{e}$  (or variant, e.g.  $d\dot{e}y$ ) 'if' (505). This is not unusual since the 'if...' particle can often be glossed freely as 'when...'. The construction resembles that with  $-\dot{w}$   $d\dot{e}$  (§16.1.2), but in the present construction verbs other than statives have  $-\dot{m}$  rather than  $-\dot{w}$ . There are quite a few textual examples of  $-\dot{m}$   $d\dot{e}$ .

```
(505) [bíré í bíré-m dè] nú-ré
[work(n) 1SgSbj work-Ipfv if] go.in-ImprtNeg
'When I am working, don't come in!'
```

A similar construction, common in narratives, has  $-\dot{m}|-\dot{w}$   $n\dot{\epsilon}$ , ending with a reduced variant  $n\dot{\epsilon}$  of topicalizing particle  $n\dot{\epsilon}$ : 'now'. In (506) the phrase is repeated three times.

```
[bû: Lmà:]
(506)
                                                      wò-ý
        [iyé
                và]
                                         bérù-m
                                                                        wá,
                        [3Pl LQuotSbi] goat-AnSg catch-QuotImprt Quot,
        [today also]
        ſbû:
                wó-m
                             nè] [bû:
                                          wó-m nè] [bû:
                                                                wó-m nèl
        [3PlSbj catch-Ipfv now] ...
        [[bér
                kù
                        kày]
                                y \check{\varepsilon} = \acute{n}  ...
        [[goat Def
                                come=and.SS ...
                        Top]
        '(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]
```

 $n\hat{\epsilon}$  is also attested after defective stative quasi-verb  $b\hat{u}$ - 'be', as in  $b\hat{u}$ :  $b\hat{u}$   $n\hat{\epsilon}$  'they kept being (thus)' in line 6 of (668) in the sample text.

# 15.2.1.3 'While X was VP-ing' $(-\dot{m} = b\check{\epsilon} - \dot{w} k\acute{u} \, p\hat{a}y^n)$

A construction that appears to be interchangeable with the  $-\dot{m} = b \grave{a} y$  clause type described in the preceding section, but that is more transparent morphologically, has an inanimate past unsuffixed imperfective participle with suffix complex  $-\dot{m} = b \check{e} - \dot{w}$ , followed by definite  $k\acute{u}$  (H-toned here before a postposition) and instrumental postposition  $p \hat{a} y^n$  'with'.

```
(507) [\acute{u} \ ^{HL}\acute{tr}^n\grave{a}] \ \acute{u} \ w\acute{a}r\acute{a}-\grave{m}=b\check{\epsilon}-\grave{w} \ k\acute{u} \ n\^{a}y^n, [2SgPoss HLfield] 2SgSbj farm-Ipfv=Past-Ppl.Inan Def Inst, g\check{o}:-m \ g\grave{o}-\varnothing elephant-AnSg come.out.Pfv-3SgSbj 'While you-Sg were farming in your field, an elephant appeared.'
```

```
15.2.1.4 '(While) X continue(-s/-ed) to VP' (-\dot{m}, tíném, túnó, -\dot{j}\dot{\epsilon}\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  $-\dot{m}$  (cf. past unsuffixed imperfective  $-\dot{m} = b\dot{\epsilon}$ -) 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  $y\acute{a}r\acute{a}-\dot{m}y\acute{a}-\dot{m}y\acute{a}r\acute{a}-\dot{m}y\acute{a}-\dot{m$ 

```
(508)
           [vòg-î:
                                 tùmdì-Ø]
                                                                wà,
                                 begin.Pfv-3SgSbj]
           [run-VblN
                                                                Quot,
           [\'\'\epsilon r^n \'\epsilon \'
                          yόγό-m]
                                               [\'\'\epsilon r^n \'\epsilon \'
                                                           yόγό-m̀]
           [3Sg
                          run-Ipfv]
                                               [3Sg
                                                            run-Ipfv]
           [έr<sup>n</sup>έ
                                        \int \varepsilon r^n \varepsilon
                                                   yáyá-m]
                                                                   [\epsilon r^n \epsilon y \delta y \delta - m]
                       yóyó-m]
           [3Sg
                       run-Ipfv] [3Sg
                                                   run-Ipfv] [3Sg run-Ipfv]
            "... she began to run, it is said. She kept running and running."
           [2005.2a.02]
```

A more explicity durative clause is -m followed by an adverb tiném (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.

```
(509) tì-tã:-m [yàrìyí-m tíném]
Rdp-hyena-AnSg [stroll-Ipfv continuing]
mùmùr<sup>n</sup>ú-m yì-Ø
scorpion-AnSg see.Pfv-3SgSbj
'While Hyena was continuing to stroll around, (suddenly) he saw Scorpion.'
```

The verb plus tinem may be repeated three or so times for narrative effect. In (510), the light verb  $kay^n$  'do' substitutes for a more substantive VP given earlier in the discourse.

```
(510) béré-m̀-n-é wá,
be.able-Ipfv-Neg.3Pl Quot,
áŋàyⁿ káⁿ-m̀ tíném [káⁿ-m̀ tíném] [káⁿ-m̀ tíném]
[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, tiném often sounds L-toned, which I attribute to the influence of the preceding -m suffix. When tiném is followed by another element, such as bu- 'be' or be- 'remain', the H-tone is clearer.

A variant  $t\acute{u}n\acute{o}$  is attested in similar function (511). Most attestations of this variant are with  $b\grave{u}$ - 'be (somewhere)'. There is no subject pronoun, and no imperfective  $-\grave{m}$  on the verb. Since  $b\grave{u}$ - is a stative quasi-verb, it would not allow specifically imperfective suffixes in any event.

```
(511) [yâ: bú tún5] bú-tún5 bú-tún5 bú-tún5, [there be continuing] ...
[yà-gùr5 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  $-j\hat{e} \rightarrow$  added directly to the verb stem. The verb may be single, or repeated up to four times. A morphological parsing as perfective  $j\hat{e}$ :- $\mathcal{O}$  '(3Sg) brought', or a connection with recent perfect  $-j\hat{e}$ -, are excluded since neither has the requisite durative sense. A more likely historical connection is with  $j\hat{i}$ - $j\hat{e} \rightarrow$  '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  $-j\hat{e}$  may be related.

```
(512) a. sì-y-î: tùmdì-Ø wà íyà,
go.down-VblN begin.Pfv-3SgSbj Quot again,
íyà áŋày¹ sí-yé-jè→ sí-yé-jè→
again like.that go.down-MP-continue go.down-MP-continue
'He began to go down, it is said, again. He kept going down. (Then ...)'
[2005.2a.01]
```

```
b. k\acute{a}y^n-j\grave{\epsilon} \rightarrow y\grave{\epsilon} = \acute{n} h\^{a}l ... do-continue come=and.SS until ... 'Doing that (=singing the song just recited), he came until he ...' [2005.2a.01]
```

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  $d\check{e}$ - 'get tired' is used, in a conjugatable falling-toned perfective form  $d\hat{e}$ :- (e.g. 3Pl  $d\hat{e}$ :- $b\hat{o}$ ) or in a headless adverbial participial form  $d\acute{e}$ - $\mathring{w}$ , after an intonationally prolonged form of a chained verb. The <HL> tone is found in one version of the perfective for third person subject; see §10.2.1.3.

Often the activity in question is described in one clause, followed by a clause denoting its prolongation with  $k\acute{a}y^n$  '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).

```
(513) ... [káy<sup>n</sup>→ HL dê:-Ø wà]
... [do HL get.tired.Pfv-3SgSbj Quot]
[sì-y-î: àw<sup>L</sup>-rí-Ø wá], ...
[go.down-MP-VblN accept<sup>L</sup>-PfvNeg-3SgSbj Quot],...
'[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 §15.2.1.8 below.

Locative postposition  $w\acute{o}$  is attested in a similar durative background clause in (514), with an H-toned stative  $d\acute{m}b\acute{a}$ - 'follow' (i.e. continue as before) plus  $-\acute{w}$ . This is morphologically interpretable as a 3Sg subject form.

```
(514) ŋgú dímbá-w HL wó],
Prox.Inan follow.Stat-3SgSbj HL in,
ŋgú dímbá-w HL wó],
Prox.Inan follow.Stat-3SgSbj HL in,
'This (argument) keeps going on and on, then ...' [2005.1b.05]
```

# 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  $-\hat{m}$  before past clitic), with repeated {HL} tone overlay, expressed as <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)		gloss	verb	'while VERB-ing'
	a.	'sow (seeds)'	tŏy tś-	tŏy tôm-tôm
		'weep'	yŏ: yó-	yă: yôm-yôm
		'shoot'	tá-	tâm-tâm
	b.	'come'	yέ-	yêm-yêm
		'bring'	j̃̃̃:−	jêm-jêm
c		'do'	káy <sup>n</sup> -	kâm-kâm
		'put'	gǎy <sup>n</sup> -	gâm-gâm
	d.	'dance a dance'	jìyé jìyé-	jìyé jíyèm-jíyèm
		'chase'	làrí-	lárùm-lárùm
		'roll on turban'	dòmbó-	dómbòm-dómbòm
	e.	'cut up'	yègìsé-	yégìsèm-yégìsèm
		'roll over'	bìlìré-	bílìrèm-bílìrèm
		'cough'	kógúsó-	kógùsòm-kógùsòm
		'winnow in wind'	ກຂໍr <sup>n</sup> ìy <sup>n</sup> í-	ກຣ໌r <sup>n</sup> ìy <sup>n</sup> ìm-ກຣ໌r <sup>n</sup> ìy <sup>n</sup> ìm
		'hide'	bàŋgìrí-	báŋgìrìm-báŋgìrìm
		'go around'	gòŋgìrí-	gʻəngirim-gʻəngirim
	f.	'walk around'	yàrì-yí-	yáràm-yáràm

# 15.2.1.6 'Before ...' (*mà:*, -*rὲ*)

The usual 'before ...' clause has a **clause-final particle**  $m\grave{a}$ : 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  $m\grave{a}$ : 'before' and dative postposition  $m\grave{a}$ : or quotative subject particle  $m\acute{a}$ :  $m\grave{a}$  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).

- (516) a. *í ínjírí:-rè mà:, gŏ:-r-à:=b-à:*1SgSbj get.up-Pfv1a **before**, go.out-Pfv1a-3PlSbj=Past-3PlSbj
  'Before I got up, they had (already) gone out.'
  - b. [bòlú yě:-rè mà:] [úrò nú]
    [rain(n) come-Pfv1a before] [house enter.Imprt]
    'Go-Sg into the house, before the rain comes!'

- c. [bû: yĕ:-rè mà:] bàŋgíy-à [3PlSbj come-Pfv1a **before**] hide.Imprt 'Hide (yourself), before they come!.'
- d. [ér<sup>n</sup>é=nì í súyó:-rè mà:] lò-Ø 3Sg=Acc 1SgSbj hit-Pfv1a **before** go.Pfv-3SgSbj 'He went away before I (could) hit him.'
- e. [bòlú yĕ:-rè mà:] nù-Ø [rain come-Pfv1a before] enter.Pfv1-3SgSbj 'He/She went in before the rain came.'
- f. pèrě-m [í séw<sup>n</sup>é:-rè mà:] yòγò-Ø sheep-AnSg [1SgSbj slaughter-Pfv1a before] run.Pfv-3SgSbj 'Before I could slaughter the sheep, it ran away (= bolted).'

In the frequent combination with  $g\check{u}y^n$  (and variants) 'say', a morpheme  $l\grave{e}$  is added, hence  $g\check{u}y^n l\grave{e}$  mà: 'before saying'.

```
(517) [láwá:-r-à: bû: gǐ:<sup>n</sup>-lè mà: wôy]
[pass-Pfv1a-3PlSbj 3PlSbj say-? before all]
'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 {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 (HL gó-rè 'before going out', pínìw^i-rè 'before returning'), HL dúwò-rè 'before leaving'). These examples show that the 'before' form has {HL} tone overlay with just the first syllable H-toned.

```
[[ùsù<sup>L</sup>
                                                     ^{\rm HL}y\acute{\varepsilon}-r\grave{\varepsilon}]
(518)
                      lă-w]
                                                     HL come-before]
         [[dav<sup>L</sup>
                      other-Inan] LogoPlSbj
                             HL dúgù l
         [[tà-dùngú-m
                                                             d\hat{\partial}-rí-Øl.
                                              ŋgú
                             HL size]
         [[lion-AnSg
                                              Prox.Inan
                                                             reach-PfvNeg-3SgSbj],
         [jâm
                    wôy] [éré
                                     mâ:]
                                                  ŋ̀gó-Ø
                                                                     wá
         [peace
                    all]
                            [3Sg
                                     Dat]
                                                 not.be-3SgSbj Quot
         '(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  $-r\hat{e}$  '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  $-r\hat{e}$ , perfective negative  $-r\hat{i}$ , stative negative  $-r\hat{a}$ ).

```
(519) [wàkàtù<sup>L</sup> kà:<sup>n</sup>] íyé yέ-rὲ

[time<sup>L</sup> Rel] today come-before

'at the time before today (=the present era) came' [2005.2a.09]
```

# 15.2.1.7 Clause-final $= r\dot{a}$ : 'when'

There are occasional textual occurrences of a clitic  $=r\grave{a}$ : following an inflected verb form (perfective or stative). My transcription assistant suggested emending by deleting the clitic. However, the examples suggest that the  $=r\grave{a}$ : 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.

- (520)a. [tórú-m kù] gánjì-m gánjì-m gánjì-m [warthog-AnSg Def] dig-Ipfv  $\int \varepsilon r^n \varepsilon$ VĚ mâ:]  $s \acute{o} s \acute{i} - l \acute{i} : -r \grave{e} - \emptyset = r \grave{a} :$ [3Sg come Dat] near-Inch-Pfv1a-3SgSbj=when, Lwò] písé  $[[\epsilon r^n \epsilon]]$ iirè]  $g \hat{a}^n - \hat{v}$ [[3SgPoss<sup>HL</sup>eye] Lin] spray put-QuotImprt Ouot, '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-pĕ-m sù:-díyáy ngó-Ø=rà:,
    woman-old-AnSg francolin-thigh not.be-3Sg=when,
    [íyé yà] [bû: Lmà:] bérù-m wò-ý wá
    [today also] [3Pl LQuotSbj] 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]
  - nínáy<sup>n</sup> c. [nù bû:] úrò  $p \varepsilon = r a^{\dagger}$ reliable Def.Pl] house not.be.3Pl=when, [person [yì-tɛ̃: bèré-j-â: dè1 wó-yà get-RecPf-3PlSbj 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  $d\tilde{\epsilon}$  '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:  $bir-\epsilon$ : 'work',  $n-\epsilon$ : 'eat',  $n-\delta$ : 'drink', and t-i: 'send', showing that the first verb lengthens its final vowel.

- (521) a. [tǔ: mâ:] bàt-á: dě:-rè-ŵ:. 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-é: dě:-rè-Ø [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.

## 15.2.1.9 'While standing/sitting' (type *i-?íyà-m*)

A morphological construction involving initial H-toned reduplication, {HL} stem overlay, and invariant final imperfective  $-\dot{m}$  is attested with three stance verbs:  $i-7iy\dot{a}-m$  'while standing',  $\dot{e}-7\dot{e}w-y\dot{e}-m$  'while sitting',  $\dot{b}i-\dot{b}i-y\dot{e}-m$  'while lying down'. The association with stance verbs and the {HL} stem overlay suggest an affinity with the reduplicated stative (§10.2.1.11), as opposed to the reduplicated imperfective, but the invariant final  $-\dot{m}$  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).

## 15.2.2 Spatial adverbial clause ('where ...')

The noun  $\delta r^n \delta$  'place' (also 'situation') may be used, in L-toned form  $\delta r^n \delta^L$ , as head of a relative (which therefore takes an inanimate participle).  $\delta r^n \delta$  is distinct from  $\delta r^n \delta$ : '(the) bush, outback, (the) fields (away from the village)'.

- (523) a.  $\frac{\partial r^n \partial^L}{\text{place}^L}$   $\frac{b\text{i}r\acute{e}}{\text{work(n)}}$   $\frac{b\hat{u}:}{\text{3PlSbj}}$   $\frac{b\text{i}r\acute{e}-\grave{w}}{\text{work.Pfv-Ppl.Inan}}$  'there where they worked'
  - b.  $s \delta f \tilde{e} : r \tilde{u} m$   $\delta r^n \delta^L$   $e w y \tilde{e} \tilde{w}$  driver-AnSg **place** sit-MP.Pfv-Ppl.Inan '(the place) where the driver sat'

## 15.2.3 Manner adverbial clause ( $day^n$ ... 'how ...')

The head noun  $d\check{a}y^n$  'manner', in L-toned form  $d\grave{a}y^{nL}$ , is the head of a relative clause in examples like (524).

```
(524) day^{nL} bir\acute{e} \acute{e}r^n\acute{e} bir\acute{e}:-r\grave{a}-w manner<sup>L</sup> work(n) 3SgSbj work-Prog-Ppl.Inan 'the manner in which (= how) he worked'
```

For quasi-purposive functions of such  $day^n$  clauses, see §17.5.1.2.

### 15.2.4 Headless adverbial clause $(-\dot{w})$

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  $-\dot{w}$ ). 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).

In (526a-b), universal quantifier  $w\hat{o}y$  is added following the participle. This gives a (mildly) emphatic sense that can, in some contexts, be translated freely as 'ever since ...'.  $w\check{o}y$  is also common at the end of conditional antecedent clauses, §16.1.1.

```
(526) a. [â: yĕ-w wôy] gò-rá-∅

[3ReflPl come.Pfv-Ppl.Inan all] go.out-PfvNeg-3PlSbj

'Since they<sub>x</sub> came, they<sub>x</sub> haven't gone out.'
```

```
b. [[érné HL bô:] órúgú-w wôy]
[[3SgPoss HL father] get.sick.Pfv-Ppl.Inan all]
[[á HL ísè:] gò-rí-Ø]
[[3ReflSgPoss HL village] go.out-PfvNeg-3SgSbj

'Since his, father got sick, he, hasn't left his, village.'
```

Headless relative clauses with  $-\dot{w}$  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  $-\dot{w}$  (note the preparticipial subject pronominals) denoting sequential events are followed by a clause with a conjugated perfective verb.

```
(527)
        [\hat{u}sú t\hat{u}w^{n}\hat{\jmath}-m]
                           sû:-m
                                            â:
                                                         jìγέ-ŵ,
        [day one-AnSg] francolin-AnSg 3ReflPlSbj kill.Pfv-Ppl.Inan
        ſsù:-nàw<sup>n</sup>â:
                           kù] jí-jè→
                                                              vě-ẁ,
                                                â:
        [francolin<sup>L</sup>-meat Def] taking.along 3ReflPlSbj come.Pfv-Ppl.Inan,
        [yà-pě-m
                                 kù
                                         mâ:]
                                                   nì-bà
        [woman<sup>L</sup>-old-AnSg
                                Def
                                         Datl
                                                   give.Pfv-3PlSbi
        '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  $\dot{u}s\acute{u}$   $t\dot{u}w^n\hat{\jmath}-m$  '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  $\hat{a}$ :); see §18.2.3.

## 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 = ni, different-subject = ni), then an inflected clause beginning with  $h\hat{a}l$  'until, all the way to'. This results in a biclausal adverbial that usually constitutes background for another (foregrounded) event expressed in the main clause.

```
(528) [[bíré t umdu = ni] [hâl duw \partial - \emptyset]]
[[work(n) begin=and.SS] [until leave.Pfv-3SgSbj]]
[[mex] n eat-PfvNeg-3SgSbj]

'From the time he started working until he stopped (working), he didn't eat.'
```

The verb  $d\hat{u}w\hat{\partial} - \emptyset$  in (528) is a conjugated perfective; the 1Sg equivalent would have  $d\hat{u}w\hat{\partial} - y$ . (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  $= n\hat{i}$ .

```
HL<sub>b3:</sub>
(529)
             [έr<sup>n</sup>έ
                                                                l \acute{o} = n \grave{i}
                                     ^{\rm HL}father
             [3SgPoss
                                                               go=and.DS]
                                               HL dérè]
                           \int \varepsilon r^n \varepsilon
             [hâl
                                                                             yè-Ø]
             [until [3SgPoss HLelder.sibling come.Pfv-3SgSbj
                                     n \hat{\varepsilon}^{L} - r^{n} \hat{\imath} - \emptyset
             n \check{\varepsilon} v^n
                                     eat-PfvNeg-3SgSbj
             meal
```

'From the time that his father went (away) until his elder brother came, he didn't eat.'

### 15.2.6 'As though ...' clause $(g\hat{a}y^n \rightarrow)$

In (530), the 'like' adverbial  $g\check{a}y^n \rightarrow$  is added at the end of a relative clause denoting a (generic) animate referent.

```
(530) [[ùsú yĕy] nĕy<sup>n</sup> nè-r<sup>n</sup>ú-m gây<sup>n</sup>→]
[[day two] meal eat-PfvNeg-Ppl.Inan like]
[nĕy<sup>n</sup> né:-rà-w]
[meal eat-Prog-3SgSbj]
'He is eating like (someone) who hadn't eaten for two days.'
```

In (531),  $g\hat{a}y^n \rightarrow$  follows a regular main clause, and the free translation is 'as though ...'.

```
(531) [bòlú mìr<sup>n</sup>é:-rà = rá-Ø gây<sup>n</sup>→]
[rain(n) rain.fall-Prog=StatNeg-3SgSbj like]
wóŋgóró wàrá:-rà-ẁ
farming do.farm.work-Prog-3SgSbj
'He/She is working in the field as though the rain were not falling.'
```

# 15.2.7 'Be really true that ...' (-m wò bě)

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  $b\check{e}$  'remain', a clause ending in imperfective  $-\dot{m}$ , and locative  $^Lw\grave{o}$  (which often becomes  $b\grave{o}$  after the nasal). The phrasing 'remain on VP-ing' is not far from the etymological sense of English *insist on*.

```
(532) a.
                                   yà-sámà
                                                                 Lbò]
            [[[έr<sup>n</sup>έ
                                                jźrź-m]
                        má:]
                                                                 Lin]
                        QuotSbj] Y
                                                love-Ipfv]
            [[[3Sg
            bě:-rè-∅
                                       dé
                                             wôy
                                       if
            remain-Pfv1a-3SgSbj
                                             all
            '(they said): if he insisted on loving Yasama (girl's name), ...'
            [2005.2a.01; this required achieving a nearly impossible feat]
                                                                 Lwô1
        b. hàyà
                       [[[έr<sup>n</sup>έ
                                   má:]
                                              lì-ló-m
            well
                                   QuotSbj] Rdp-go-Ipfv
                                                                 Lin]
                       [[[3Sg
            bě:-rè-Ø
                                      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  $[X^L w \delta] b \check{e}: -r \grave{e}-\varnothing d \grave{e}$  can also be used with X a manner adverb such as  $\acute{a} \eta \grave{a} y^n$  'thus, like that'. See (485c) in §15.1.9, above.

A perfective version of the clausal complement with  $w\dot{o}$ , followed by  $b\dot{e}:-r\dot{e}-\varnothing$   $d\dot{e}$   $w\dot{o}y$ , is (533).

```
Lwò1
(533)
        [jàw<sup>n</sup>â:
                   injiri = ni
                                        ∏ér<sup>n</sup>€
                                                          póndé:-rè
                                                  mâ:]
                                                                              Lin]
        [crowd
                   get.up=and.SS]
                                       [[3Sg
                                                  Dat]
                                                          head.for-Pfv1a
         bě:-rὲ-Ø
                                      dé
                                                     wôy
        remain-Pfv1a-3SgSbj
                                     if
                                                     all
         'if it were the case that a crowd got up and headed for it (=lion)' [2005.2b.05]
```

# 16 Conditional constructions

## 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 §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 *de*, and the **consequent** is in the imperfective (534a-b).

```
(534) a. \varepsilon v^n
                          yě:-rè-ẁ
                                                      dè.
             tomorrow
                          come-Pfv1a-2SgSbj
                                                     if,
             nàw<sup>n</sup>â:
                          témbú-ŵ
             meat
                          find.Ipfv-2SgSbj
             'If you-Sg (have) come tomorrow, you'll find some meat.'
        b. \epsilon r^n \epsilon
                    yè-rí-∅
                                                dé,
                                                       né-m̀-dó-ỳ∴
                    come-PfvNeg-3SgSbj
                                                if,
                                                        eat-Ipfv-Neg-1PlSbj
             3Sg
             'If he/she doesn't come (=hasn't come), we won't eat.'
```

### 16.1.1 Extensions of de (dé wôy, dé wò wôy)

The most common extended variant of de' if' is de' wôy. wôy is elsewhere a universal quantifier 'all' (§6.8.1). In rapid speech, an optional vocalic assimilation to de' wôy is common, but intermediate pronunciations also occur and I have normalized transcriptions to de' wôy. An extended form de' woverbar woverbar woverbar word.

dé wôy (or variant) is associated with more emphatic contexts ('as soon as ...', 'unless ...', etc.); for 'unless ...' see §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  $d\acute{e}$   $w\^{o}y$  (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  $[[S_1 \ de, (S_2 \ de,) \ ... \ S_n \ d\acute{e} \ w\^{o}y]$ ,  $S_{n+1}]$ , where  $S_n$  is the last in a string of two or more antecedent clauses, and is itself directly followed by the consequent clause  $(S_{n+1})$ .

```
[[jìr<sup>n</sup>ěy<sup>n</sup>
(535)
                                     cé:lé:-rè-Ø
                                                                     dè],
                                    be.good-Pfv1a-3SgSbj
          [[rainy.season
                                                                    if],
                              \hat{\varepsilon}si^n \rightarrow
          [bíré
                                             bìré-tú-ŵ
                                                                          dé
                                                                                   wôy]],
          work(n)
                                             work-Pfv1b-2SgSbj
                                                                          if
                                                                                   all]],
                              very
                               bãy<sup>n</sup>→
                                               bέrέ-ẁ
          yû:
          millet
                                               get.Ipfv-2SgSbj
                              much
```

'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 -\hat{w} k\hat{u} d\hat{e} (perfective) and -\hat{w} d\hat{e} (pseudoconditional)

A construction with a verb form ending in  $-\dot{w}$ , followed by definite  $k\dot{u}$  and (apparent) 'if' particle de in L-toned form  $d\dot{e}$ , is used in narrative as an alternative to a regular perfective verb form. The  $-\dot{w}$  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  $-\dot{w}$  functions as the 3Sg subject marker (§10.2.1.2).

```
(536)
        [ònjŏ-m
                                   kù
                                             yà]
        [younger.brother-AnSg Def
                                             tool
        á
                        sá-ŵ
                                                  kù
                                                             dè,
        3Refl
                                                  Def
                                                             if.
                        reply.Pfv-Ppl.Inan
                      <sup>HL</sup>dérè]
        Γá
                                            mâ:
                      HLelder.brother]
                                            Dat
        [3Refl
        "... 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 §18.2.3.

An informant indicated that the consruction in  $-\dot{w} k\dot{u} d\dot{e}$  can also be expanded as  $-\dot{w} k\dot{u}$  mà  $d\dot{e}$ .

A similar construction with  $-\dot{w}$  and  $d\dot{e}$  but without the definite  $k\dot{u}$  is also attested. The clause in  $-\dot{w}$   $d\dot{e}$  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.

```
(537) a. \acute{\epsilon}r^n\acute{\epsilon}=n\grave{i} \acute{i} s\acute{u}y\acute{5}-\grave{w} d\grave{e}, 3Sg=Acc 1SgSbj hit.Pfv-Ppl.Inan if, [b\acute{s}r\acute{5}-\grave{m}-d\acute{o}-\varnothing] d\acute{e}] y\acute{i}-\grave{y}... [result-Ipfv-Neg-3SgSbj if] see.Ipfv-1PlSbj 'I will hit him and we'll see whether nothing happens (as a result).' [b\acute{s}r\acute{5}-\grave{m}-d\acute{o}-\varnothing] is used in such boasting utterances]
```

```
b. \epsilon r^n \epsilon
                 \varrho u^n - \dot{w}^n
                                          dè.
                                          if,
    3Sg
                 say.Pfv-Ppl.Inan
                    súyó-ŵ
    ſί
                                             dè,
                    hit.Pfv-Ppl.Inan
    [1SgObj
                                            if,
                                                             bà
    ŋ̀gú-rù
                            làrú-m]
    here
               1SgObj
                            chase.away-Ipfv.3SgSbj]
                                                             Ouot
    'He said he will hit me, and (that) he will run me out of here.'
```

- c. [í yě-w dè] [něy<sup>n</sup> bírá] [1SgSbj come.Pfv-**Ppl.Inan** if] [meal cook.Imprt] 'Cook-2Sg the meal (only) when I have come back!'
- d. [něy<sup>n</sup> î: bìré-w 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  $-\dot{m}$   $d\dot{e}$  (and stative  $-\dot{w}$   $d\dot{e}$ ), see §15.2.1.2.

Historical interpretation of the origin of  $-\dot{w} k\dot{u} d\dot{e}$  and  $-\dot{w} d\dot{e}$  should consider the probably related Nanga subordinators  $-s\dot{e} g\dot{u}-nd\dot{e}$  and related forms. One possibility is that Ben Tey  $k\dot{u}$  and Nanga  $g\dot{u}$ - derive from the 'say' verb (Ben Tey  $g\check{u}y^n$ -, Nanga  $kiy\dot{e}$ -, and many Dogon cognates), although the erratic g/k correspondences make exact equation difficult.

## 16.2 Alternative 'if' particles

#### 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-∅ [millet Exist have-3SgSbj even], give-Ipfv-Neg-3SgSbj 'Even if he/she has some millet, he/she won't give (it).'

# 16.2.2 *tán* 'as soon as ...'

The particle  $t\acute{an}$ , 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.

```
(539) n\acute{u}w^n\grave{\partial}y^n y\grave{\varepsilon}-\grave{w} t\acute{a}n, s\acute{u}:r^n\grave{a} now come.Pfv-2SgSbj 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.

# 16.3 Willy-nilly and disjunctive antecedents ('whether X or Y ...')

 $c\hat{\epsilon}w$  (likely borrowed from Jamsay  $c\hat{\epsilon}w$  'all') occurs in reduplicated or iterated form ( $c\hat{\iota}-c\hat{\epsilon}w$ ,  $c\hat{\epsilon}w-c\hat{\epsilon}w$ ) in the sense 'equally' (§12.2.3). As simple  $c\hat{\epsilon}w$  it occurs at the right edge of a biclausal conditional antecedent of the type '(whether) S<sub>1</sub> or not-S<sub>1</sub>', or any other combination of two component clauses that are (more or less) truth-conditionally antagonistic.

```
(540) [[ú mâ:] érì-m = Ø→ èrì-m = dá-Ø cêw],
[[2Sg Dat] sweet-Inan=it.is sweet-Inan=it.is.not-3SgSbj equally]
bíré 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 participal form, as in (541).

```
(541) a. [\acute{a}r^n\grave{a}-m & k\grave{a}y] & l\acute{o}=\acute{n}
[man-AnSg Top] go=and.SS
[\rlap/n\grave{a}w^n\acute{a}-\grave{w}^n \rlap/n\grave{a}w^n\grave{a}-r^n\acute{l}-\varnothing c\^{e}w]
[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. [yĭ-m jĕ-w→ jẽ-rí-Ø cêw]
[child-AnSg bring.Pfv-Ppl.Inan bring-PfvNeg-3SgSbj equally]
[yá góy²á-w²]
[Exist wait.Stat-3SgSbj]
whether the child (eventually) brings (something) or does not bring (anything), he (=father) waits for (something)' [2005.1b.06]
```

#### 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  $d\epsilon$  wôy (§16.1.1).

```
(542) [mòbílì ŋgú-rù làwà-rí-Ø dé wôy] tíwé-ỳ.:

[vehicle here pass-PfvNeg-3SgSbj if all] die.Ipfv-1PlSbj

'Unless a vehicle comes by here, we'll die.'
```

#### 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  $=b\dot{e}$ - (§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.

```
(543) a. \partial m\partial: y\check{\varepsilon}-\grave{w}=b\grave{\varepsilon}-\varnothing d\grave{e}, morning come-Stat=Past-3SgSbj if, b\acute{o}yr\grave{i} b\acute{e}r\acute{\varepsilon}-\grave{m}=b\grave{\varepsilon}-\varnothing porridge get-Ipfv=Past-3SgSbj 'If he/she had come in the morning, he/she would have gotten some porridge.'
```

```
    b. béré jề:-rí=bé-ỳ dè,
    stick bring-PfvNeg=Past-1SgSbj if,
    àwǎ-m í kúwó-m̀=bè-Ø
    snake-AnSg 1SgObj eat-Ipfv=Past-3SgSbj
    'If I hadn't brought my stick, the snake would have eaten me.'
```

c.  $[\acute{u} \qquad \stackrel{\text{HL}}{\acute{a}} \acute{a} \acute{y} \grave{a}:] \qquad m \grave{n} r^n \acute{e} - \grave{w} = b \grave{e} - \grave{w} \qquad d \grave{e},$  [2SgPoss  $\stackrel{\text{HL}}{\textrm{medication}}$ ] swallow-Stat=Past-2SgSbj if,  $s \grave{e} l l \grave{e} - r \acute{l} \qquad k \acute{a} - \grave{m} - d \acute{o} = b \check{e} - \grave{w}$  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).

# 17 Complement and purposive clauses

## 17.1 Quotative complement

```
17.1.1 'Say that ...' with 'say' verb (g\check{u}y^n)
```

The inflectable quotative verb is  $g\check{u}y^n$ , variant  $g\check{t}y^n$ . 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 quotative-subject phrase (NP or pronoun followed by QuotSbj  $m\acute{a}$ :  $\sim$   $^{L}m\grave{a}$ :), and b) the neutralization of pronominal-subject marking in the verb to 3Sg, except that the verb does agree with a 3Pl (regular or logophoric) subject.

The quotative clitic *wa* (§17.1.2, below) is omitted when the full 'say' verb follows the quotative complement.

# 17.1.1.1 Quotative subject (QuotSbj) *má:* ~ <sup>L</sup>*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  $m\acute{a}$ :  $\sim$   $m\grave{a}$ :. 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).

```
(545) [kú-dá: jìr<sup>n</sup>ěy<sup>n</sup> èsú bû:-Ø] gìy<sup>n</sup>-bó
[there.DiscDef rainy.season good be-3SgSbj] say.Pfv-3PlSbj
'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  $m\acute{a}: \sim m\grave{a}:$  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  $b\acute{o}l$  'rain', cf. §11.1.4.

```
(546) [[sùmóy Hwó] má:] bŏl sí-yé-m-ndò
[[ground Hin] QuotSbj] rain go.down-MP-Ipfv-IpfvNeg
gì:n-bò wà
say.Pfv-3PlSbj Quot
'they said that the rain wouldn't come down on the earth, it is said.' [2005.2a.04]
(sùmŏy)
```

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  $m\acute{a}$ : after an H-tone and as  $^Lm\grave{a}$ : 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  $m\acute{a}$ :. See (548b) in the following section. This suggests that the quotative subject particle is lexically H-toned ( $m\acute{a}$ :).

The L-toned form  $^{L}m\grave{a}$ : is homophonous to  $^{L}m\grave{a}$ : as L-toned form of dative postposition  $m\^{a}$ : (§8.3.1). Both instances of  $^{L}m\grave{a}$ : occur after NPs ending in an L-tone.

## 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 1Sg, 1Pl, 2Sg, and 2Pl suffixes are omitted, merging with 3Sg. There is, however, special marking of 3Pl subjects.

In (547), the verb inside the quoted clause ends in **imperfective**  $-\vec{m}$ , which is used when the subject of the quoted clause is other than 3Pl. This  $-\vec{m}$  is identical to the 3Sg suffix in the inflected paradigm of the unsuffixed imperfective, but in morphological contexts where pronominal-subject distinctions are neutralized  $-\vec{m}$  is generalized to other pronominal categories (except 3Pl). Generealization of  $-\vec{m}$  also occurs in the past unsuffixed imperfective, preceding the conjugated past clitic  $=b\hat{\epsilon}$ - (or variant). In these neutralizing contexts I gloss  $-\vec{m}$  simply as imperfective (Ipfv). A pronominal subject is expressed by a quotative-subject phrase (547b). Examples (547a,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 (547g-h).

```
(547) a. [[á má:] yì-yé-m] gìy^-\emptyset [[LogoSg QuotSbj] Rdp-come-Ipfv] say.Pfv-3SgSbj 'He<sub>x</sub> said that he<sub>x</sub> is coming.'
```

```
b. [[ú má:] yì-yé-m̀] gìyʰ-Ø

[[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-Ø
say.Pfv-3SgSbj
'Seydou<sub>x</sub> said that he<sub>x</sub> doesn't know.'
```

```
d. í [[ér<sup>n</sup>é má:] yì-yé-m̀]
1SgSbj [[LogoSg QuotSbj] Rdp-come-Ipfv]
gì-ní-ỳ
say-PfvNeg-1SgSbj
'I didn't say that he/she is coming.'
```

```
e. [[sěydù <sup>L</sup>mà:] yì-yé-m̀] gìy<sup>n</sup>-y<sup>n</sup>
[Seydou <sup>L</sup>QuotSbj] Rdp-come-Ipfv] say.Pfv-1SgSbj
'I said that Seydou is coming.'
```

```
f. [[û: Lmà:] yì-yé-mi] gìy<sup>n</sup>-Ø [[2Pl LQuotSbj] Rdp-come-Ipfv] say.Pfv-3SgSbj 'He/She said that you-Pl are coming.'
```

```
g. y\acute{e}\eta g\grave{u} [[\hat{a}: ^{L}m\grave{a}:] y\grave{i}-y\acute{e}-y\grave{e}]

yesterday [[LogoPl ^{L}QuotSbj] Rdp-come.Ipfv-3PlSbj]

g\acute{u}^{n}-y\grave{e} = b-\grave{a}:

say.Ipfv-3PlSbj=Past-3PlSbj

'Yesterday they<sub>x</sub> were saying that they<sub>x</sub> were coming (= would come).'
```

```
h. [[â: Lmà:] wóŋgóró wárá-yɛ]

[[LogoPl LQuotSbj] farming do.farm.work.Ipfv-3PlSbj]

gìy<sup>n</sup>-bó

say.Pfv-3PlSbj

'They<sub>x</sub> say they<sub>x</sub> will farm.'
```

The suffixally marked **progressive** may also be quoted (548). The 3Sg form :-rà-w generalizes (548a-b,d), except for 3Pl subject (548c).

```
(548) a. [[á má:] wóŋgóró wàrá:-rà-w]
[[LogoSg QuotSbj] farming do.farm.work-Prog-3SgSbj]
gìy^n-Ø
say.Pfv-3SgSbj
'He<sub>x</sub> says he<sub>x</sub> is farming.'
```

- b. [[[á  $^{HL}y\hat{\imath}$ -m]  $m\acute{a}$ :] wóngóró wàrá:-rà-w] gìy $^n$ - $\varnothing$  [[[LogoP  $^{HL}$ child] QuotSbj] ... 'He $_x$  says that his $_x$  child is farming.'
- c. [[â: Lmà:] wóngóró wàrá:-rà-ẁ-bó [[LogoPl LQuotSbj] farming do.farm.work-Prog-Stat-3PlSbj gìy<sup>n</sup>-bó say.Pfv-3PlSbj 'They<sub>x</sub> said they<sub>x</sub> are farming.'
- d. [î: Lmà:] wóŋgóró wàrá:-rà-w
  [1Pl LQuotSbj] farming do.farm.work-Prog-3SgSbj
  gìy^n-Ø
  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 3Pl), identical in form to the zero 3Sg 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 :- $r\hat{\epsilon}$ - is also possible (549b-c), as are perfective-1b suffix - $t\hat{i}$ - (549d) and other perfective-system markers such as recent perfect - $j\hat{\epsilon}$ - (549e). Agreement with 3Pl subject is observed in (549c-e).

- (549) a. [[î: <sup>L</sup>mà:] á sùyð] gìy<sup>n</sup>-Ø [1P1 <sup>L</sup>QuotSbj] LogoSgObj hit.Pfv] say.Pfv-3SgSbj 'He<sub>x</sub> said that we hit him<sub>x</sub>.'
  - b. [[û: \(^{\text{L}}\)m\(\hat{a}:\)] \(y\)ecirc\(\text{e}\)] \(g\)iy^n-\(\omega\)

    [[2Pl \(^{\text{L}}\)QuotSbj] \(come-\text{Pfv-3SgSbj}\)

    'He/She said that you-Pl had come.'
  - c. [[yì-tě: Lmà:] yě:-r-à:] gìy<sup>n</sup>-Ø [[child-Pl LQuotSbj] come-Pfv1a-3PlSbj] say.Pfv-3SgSbj 'He/She said that the children had come.'
  - d. [[â: Lmà:] pèrě-m séw<sup>n</sup>é-tí-yà]
    [[LogoPl LQuotSbj] sheep-AnSg slaughter-Pfv1b-3PlSbj]
    gìy<sup>n</sup>-bó
    say.Pfv-3PlSbj
    'They<sub>x</sub> said that they<sub>x</sub> have slaughtered a sheep.'
  - e. [[â: Lmà:] něy né-j-â:] gín-yè [[LogoPl LQuotSbj] meal eat-RecPf-3PlSbj] say.Ipfv-3PlSbj 'Theyx will say that theyx have already eaten.'

The alternative form of the unsuffixed perfective, with lexical tone on the verb stem and with  $3\text{Sg} - \dot{w}$  (generalized in quotatives to all first and second persons) and  $3\text{Pl} - m\dot{a}$  (§10.2.1.2), is illustrated in (550).

- (550) a. [[í má:] wóngóró wàrá-w]
  [[1SgSbj QuotSbj] farming farm.Pfv-Ppl.Inan]
  gìy^n-Ø
  say.Pfv-3SgSbj
  'He/She said that I did farming.'
  - b. [[î: mà:] wóŋgóró wàrá-w]
    [[1PlSbj QuotSbj] farming farm.Pfv-Ppl.Inan]
    gìy^n-Ø
    say.Pfv-3SgSbj
    'He/She said that we did farming.'
  - c. [[yì-tě: Lmà:] wóŋgóró wàrá-mà]
    [[child-Pl LQuotSbj] farming farm.Pfv-Ppl.AnPl]
    gìy^n-Ø
    say.Pfv-3SgSbj
    'He/She said that the children did farming.' (< yì-tɛ̃:, cf. §3.7.4.4)

(551a-b) are perfective negative.

```
(551) a. [ú má:] wóngóró wàrà-rí-∅
[2Sg QuotSbj] farming do.farm.work-PfvNeg-3SgSbj
gìy<sup>n</sup>-∅
say.Pfv-3SgSbj
'He/She said that you-Sg didn't do farm work.'
```

b. [â: Lmà:] wóŋgóró wàrà-r-á
[LogoPlSbj LQuotSbj] farming do.farm.work-PfvNeg-3PlSbj
gìy^n-Ø
say.Pfv-3SgSbj
'Hex said that theyxy didn't do farm work.'

(552a-b) are imperfective negative.

b. [â: Lmà:] yògó-m-n-é gìy<sup>n</sup>-bò [LogoPl LQuotSbj] run-Ipfv-Neg-3PlSbj say.Pfv-3PlSbj 'They<sub>x</sub> said that they<sub>x</sub> won't run.'

#### 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 1st/2nd person pronominals into the 3Sg suffix on the verb. (553a-b) illustrates this with the 'have' quasi-verb, using 1Pl and (logophoric) 3Pl subjects.

```
(553) a. [î: <sup>L</sup>mà:] wògòtórò yá só-ẃ gìy<sup>n</sup>-Ø
[1Pl QuotSbj] cart Exist have-3SgSbj say.Pfv-3SgSbj
'He/She said that we have a cart.'
```

```
b. [â: Lmà:] wògòtórò yá s-é: gìy^n-bò [LogoPl LQuotSbj] cart Exist have-3PlSbj say.Pfv-3PlSbj 'They said<sub>x</sub> that they<sub>x</sub> have a cart.'
```

# 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  $b\hat{u}$ - 'be' (§11.4.1), except that with 3Pl subject we get suffix  $-b\delta$  (not  $-y\hat{\epsilon}$ ) on the adjective (554c).

- (554) a. [[tớrờ kù <sup>L</sup>mà:] gắw] gìy<sup>n</sup>-y<sup>n</sup> [[mountain Def <sup>L</sup>QuotSbj] tall] say.Pfv-1SgSbj 'I said that the mountain is high.'
  - b. [úrò Lmà:] èsú gìy<sup>n</sup>-bò [house LQuotSbj] good say.Pfv-3PlSbj 'They said that the house is good.'
  - c. [nŭ: kù <sup>L</sup>mà:] mòsú-bó gìy<sup>n</sup>-bò [person.Pl Def <sup>L</sup>QuotSbj] bad-3PlSbj say.Pfv.3PlSbj 'They said that those people are bad.'
  - d. [yĕy má:] érúm gìyʰ-bò [honey QuotSbj] sweet say.Pfv-3PlSbj 'They said that the honey is sweet.'
  - e.  $[y \check{e}y \quad (m \acute{a}:)] \quad \grave{e}r \grave{u}m = d \acute{a} \quad g \grave{i}y^n b \grave{o}$ [honey (QuotSbj)] sweet=StatNeg say.Pfv-3PlSbj 'They said that the honey is not sweet.'

## 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  $g\tilde{u}^n$ - $\tilde{w}^n$ , 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. Clause-final quotative clitic wa is possible but uncommon. As usual, except for 3Pl as in (555b), the verb has 3Sg subject form for all subjects.

- (555) a.  $\epsilon r^n \epsilon$  $g\acute{u}^n$ - $\grave{w}^n$ dè, 3Sg say.Pfv-Ppl.Inan if. Lmà:] ká:<sup>n</sup>-rà-ŵ ſû: 'njé mà→ wà [2Sg <sup>L</sup>QuotSbj] what? do-Ipfv-3SgSbj Q Quot 'He/She said (= asked), "hey what are you-Pl doing?" '
  - b. î:  $g\acute{u}^n$ - $\grave{w}^n$  dè, 1PlSbj say.Pfv-Ppl.Inan if, [yì-tɛ̂: yɛ̃:-r-à:] [child-Pl come-Pfv1a-3PlSbj] 'We said, the children have come.'
  - c.  $b\hat{u}$ :  $g\hat{u}^n$ - $\hat{w}^n$   $d\hat{e}$ , ... 3PlSbj say.Pfv-Ppl.Inan if, 'They said, ...'

# 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  $gu^n - w^n de$ . However, wa is not used at the end of a quotation that is directly followed by an inflected form of  $guy^n$ - 'say' (i.e., wa and  $guy^n$ - 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 3Sg 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.

```
(556)
        a. [\hat{n}j\hat{e}] = \emptyset
                                     mà→1
                                                     wà
              [what?=it.is
                                     Q]
                                                     Quot
              "What is it?," he/she said (=asked)."
                                   HL<sub>b3:1</sub>
                                                     Lmà:]
         b. [[[á
                                  HL father]
                                                     LOuotSbi]
              [[[LogoSgPoss
              wóŋgóró
                              wárá-m]
                                                                  bà
                              do.farm.work-Ipfv.3SgSbj]
              farming
                                                                  Quot
              'He<sub>x</sub> says that his<sub>x</sub> 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 w is disallowed except in special cases.

```
(557) a. i g\acute{u}^n-\grave{w}^n d\grave{e}, [\acute{e}r^n\acute{e}(-n\grave{i}) s\acute{u}y\acute{o}-\grave{y} d\grave{e}, 1SgSbj say.Pfv-Ppl.Inan if, [3SgObj hit.Ipfv-1SgSbj if, \grave{\eta}g\acute{u}-r\grave{u} \acute{e}r^n\acute{e} [2\grave{a}r\acute{1}-\grave{y}] (\#?w\grave{a}) here [3SgObj chase.away.Ipfv-1SgSbj] (\#say) 'I said I will hit him, and (that) I will run him out of here.'
```

```
ú
                g\acute{u}^n-\grave{w}^n
b.
                                         d\hat{e}, \int \hat{\epsilon} r^n \hat{\epsilon}(-n\hat{\imath})
                                                               súyó-ŵ
                                                                                       dè,
     2SgSbj say.Pfv-Ppl.Inan if, [3SgObj
                                                               hit.Ipfv-2SgSbj if,
     ngú-rù
                      \varepsilon r^n \varepsilon
                                     làrú-wì
                                                                           (#?wa)
     here
                      1SgObj
                                     chase.away.Ipfv-2SgSbj]
                                                                           (#?say)
     'You-Sg said you will hit him, and (that) you will run him out of here.'
```

## 17.1.3 Jussive complement

Jussive complements are reported imperatives or hortatives.

# 17.1.3.1 Quoted imperative with suffix $-\dot{y} \sim -\dot{y}$

In this construction, the imperative verb in the original utterance is replaced by the quoted imperative (**QuotImprt**) form with suffix  $-\dot{y} \sim -\dot{y}$  (§10.5.7), invariant for original addressee number. Singular-addressee imperative (558a) and plural-addressee imperative (558c) both correspond to the invariant quoted imperative  $y\hat{e}-\dot{y}$  in jussives (558b,d-e). If the original addressee is referred to by a pronoun, it appears in a clause-initial quotative-subject phrase (558b,d-e).

```
(558) a. yá
            come.Imprt
            'Come-2Sg!'
        b. //1
                                                       giv^n-\emptyset
                    má:]
                                  yè-ý]
            [[1Sg QuotSbj]
                                  come-QuotImprt] say.Pfv-3SgSbj
            'He/She told me to come.'
        c. yá-nì
            come-Imprt.Pl
            'Come-2Pl!'
        d. [[î:
                     Lmà:]
                                                      gìy<sup>n</sup>-bɔ́
                                  yè-ý]
                    <sup>L</sup>QuotSbj] come-QuotImprt] say.Pfv-3PlSbj
            [[1P1
            'They told us to come.'
                    Lmà:]
        e. [[bû:
                                  yè-ý]
                                                       giv^n-\emptyset
                                  come-QuotImprt] say.Pfv-3PlSbj
            [[3P1
                     <sup>L</sup>QuotSbj]
            '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).

```
(559)
       a. pèrě-m
                               séw<sup>n</sup>á
            sheep-AnSg
                              slaughter.Imprt
            'Slaughter-2Sg the sheep-Sg!'
        b. //ú
                                                 s \in w^n \in -i
                     má:]
                                 pèrě-m
            [[2Sg
                    QuotSbj]
                                 sheep-AnSg slaughter-QuotImprt]
            giy^n-\dot{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  $-r \varepsilon - y$ . Again, the original distinction between singular and plural addressee in the imperative verb is not carried over into the verb of the jussive.

```
come-ImprtNeg
    'Don't-2Sg come!'
b. //1
                                                  giv^n-\emptyset
            má:]
                    vè-rè-ý]
           Emph] come-ImprtNeg-QuotImprt] say.Pfv-3SgSbj
    [1Sg
    'He/She told me not to come.'
c. vé-ré-nì
    come-ImprtNeg-2PlSbj
    'Don't-2Pl come!'
d. [[î: Lmà:]
                                                   gìy<sup>n</sup>-bɔ́
                     vè-ré-ýl
    [1Pl LQuotSbj] come-ImprtNeg-QuotImprt] say.Pfv-3PlSbj
    'They told us not to come.'
                    séw<sup>n</sup>é-ré
e. pèrě-m
   sheep-AnSg
                   slaughter-ImprtNeg
    'Saughter-2Sg the sheep-Sg!'
                                    s \in w^n \in -r \in -v
f. //ú
          má:]
                     pèrě-m
   [[2Sg QuotSbj] sheep-AnSg slaughter-ImprtNeg-QuotImprt]
    giv^n-v^n
    say.Pfv-1SgSbj
    'I told you-Sg not to slaughter the sheep-Sg.'
```

By adding purposive postposition *gin* 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).

## 17.1.3.2 Embedded hortative $(-m, -m\hat{a}y^n)$

(560) a. *yé-ré* 

The hortative in -m (for two referents) or  $-m\hat{a}y^n$  (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.

```
(561) a. lò-mây<sup>n</sup> gìy<sup>n</sup>-Ø go-Hort.Pl say.Pfv-3SgSbj 'He/She said, "let's-3+ go!." '
```

```
g\check{u}^n-\grave{w}^n
b. \xi r^n \xi
                                               dè,
                                               if.
                   say.Pfv-Ppl.Inan
    3SgSbj
             Lmà:]
                                                            giy^n-\emptyset
                           sèwá:rà
    [[î:
                                         lò-m]
              <sup>L</sup>QuotSbj] Sevare
                                         go-Hort.Du]
    [[1Pl
                                                            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.')
```

Lmà:] érné  $\varrho \hat{u}^n - w^n$ c. á:mádù [sěydù dè, [Seydou <sup>L</sup>Dat] 3SgSbj say.Pfv-Ppl.Inan Amadou Lmà:] [[â: sèwá:rà lò-m] [[LogoPl <sup>L</sup>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 1Sg subject hortatives (§10.5.6, above).

## 17.2 Factive (indicative) complements

# 17.2.1 'Know that ...' complement clause

The complement of juw5 'know' takes regular AN suffixes, but instead of a pronominal-subject 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.

```
(562) [[í má:] sèllè<sup>L</sup>-rí-Ø] 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.

```
(563) [[érné HL yá:jì:] páyá-tí-yà mâ:]
[3SgPoss HL marriage] tie-Pfv1b-3PlSbj Q]

júwó-m-dó = bé-ŷ
know-Ipfv-Neg=Past-1Sg
'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  $k\acute{u}$  or  $k\grave{u}$  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  $k\acute{u}$  (§4.4.1). The latter would be most appropriate for a proposition that was recently established in the discourse.

```
(564) [bolid] ye-m-do:-\emptyset kuj [nje:=\emptyset] kay^n] [rain come-Ipfv-Neg-Ppl.Inan Def/NearDist.Inan] [what?=it.is do.Pfv] 'The fact that rain isn't coming, what caused it?'
```

For an example with L-toned definite  $k\dot{u}$  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 {HL} possessed-noun overlay, the verb form would be  $\frac{\partial \hat{w}\hat{u} - \hat{m} - d\hat{o} - \emptyset}{\partial}$  'it does not accept'.

```
(565) [á HL áwù-m-dò-Ø kú]
[3ReflSgPoss HL accept-Ipfv-Neg-3SgSbj Def/NearDist.Inan]

iyé gò -rí-Ø

today go.out-PfvNeg-3SgSbj

'This (fact that) it (=Beni) doesn't accept (being pushed around), it didn't come out (=just begin) today' [2005.2b.04]
```

## 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 *yĭ*- 'see' is also used in this construction when the subject infers that an eventuality has taken place from circumstantial evidence (566b).

```
(566) a. [pèrĕ-m bèré-jé-ŵ] tèmbì-ŷ
[sheep get-RecPf-2SgSbj] find.Pfv-1SgSbj
'I found that you-Sg had gotten a sheep.'
```

```
b. [bòlú yè-rí-Ø] yǐ-jé-ỳ
[rain(n) come-PfvNeg-3SgSbj] see-RecPf-1SgSbj

'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 -m on the verb, followed by clitic =bay, 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:*).

```
(567) [[ú má:] kòsŏy kósú-jɛ̂:] nù-ỳ
[[2Sg QuotSbj] harvest(n) harvest-RecPf] hear.Pfv-1SgSbj
'I heard that you-Sg have already harvested.'
```

#### 17.3 Verbal noun (and other nominal) complements

For the morphology of the basic verbal noun in  $-\hat{i}$ :  $\sim -\hat{y}$ , see §4.2.2.

# 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.

```
(568) a. b\hat{u}:r\hat{u}^L-[n\check{e}-\hat{y}^n]
bread<sup>L</sup>-[eat-VblN]
'eating bread' (b\acute{u}:r\grave{u})

b. b\grave{e}:n\grave{i}^L-[l\check{o}-\hat{y}]
Beni-[go-VblN]
'going to Beni (village)' (b\acute{e}:n\grave{i})
```

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  $b\hat{u}:r\hat{u}^L$   $j\epsilon w^n\hat{e}-w^n$  'black bread', functions (in L-toned form) as the initial.

```
(569) [bù:rù-[jèw<sup>n</sup>è-w<sup>n</sup>]]<sup>L</sup>-[nĕ-ỳ<sup>n</sup>]
[bread-[black-Inan]]<sup>L</sup>-[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 {HL} overlay on the "possessed" verbal noun.

```
(570) a. [êlêy<sup>L</sup> ŋgú] HL kúw-ì:
[peanut<sup>L</sup> Prox.Inan] HL eat-VblN
'eating these peanuts' (kùw-î:)

b. [màŋgórò nùmǔy<sup>n</sup>] HL nê-y<sup>n</sup>
[mango five] HL eat.VblN
'eating five mangoes' (nĕ-ŷ)
```

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).

```
(571) u ent{ent{e}} int{e} int{e}
```

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  $= \hat{n} \sim = n\hat{i}$ . In either

case, it behaves as a possessor. The verbal noun therefore appears with possessed-noun tone overlay, either {HL} after an H-tone or tone-dropped after an L-tone.

```
(572) a. i

1SgPoss

HL

kill-VblN

'killing me' (lit. "my killing")

b. i=n

1SgObj

'kill-VblN

'killing me'

c. i:

1PlPoss

'kill-VblN

'killing us'
```

# 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 f as in this example, or with accusative clitic as f = ni.

```
túmdí-tí-yà
(573) a. n\dot{u}w^{n}5
                                       begin-Pfv1b-3PlSbj
               'They have begun to sing.'
          b. n \dot{u} w^n \dot{\sigma}^L - [n \dot{u} w^n - \hat{\imath}:]
                                                  túmdí-tí-và
              song<sup>L</sup>-[sing-VblN]
                                                  begin-Pfv1b-3PlSbj
              [=(a)]
         c. n\grave{a}w^n\grave{a}:^L-[k\grave{u}w-\hat{i}:]
                                                  túmdí-vè
              meat<sup>L</sup>-[eat-VblN]
                                                  begin.Ipfv-3PlSbi
               'They will begin to eat the meat.'
         d. [1
                              sùy-î:]
                                                  túmdí-tî:-Ø
              [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'.

- (574) a.  $\underline{i=n}$   $\underline{bir}\hat{e}^L$ - $[\underline{bir}-\hat{i}:]$   $\underline{gà:li-\emptyset}$  1Sg=Acc work(n)<sup>L</sup>-[work-VblN]  $\underline{prevent}.Pfv-3SgSbj$  'He/She prevented me from working.'
  - b. i=nì  $\dot{\epsilon}nj\dot{\epsilon}^L$ - $[tiy-\hat{\imath}:]$   $g\grave{a}:li-\varnothing$ 1Sg=Acc chicken<sup>L</sup>-[sell-VblN] **prevent**.Pfv-3SgSbj
    'He/She prevented me from selling the chicken.'

## 17.3.4 'Consent' (àwú-) plus nominal complement

The verb  $\frac{\partial wu}{\partial v}$  'receive, accept (sth given)', which is usually heard as  $\underline{\delta w}$ , 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).

- (575) a.  $y\check{\epsilon}-\hat{y}$   $\check{a}w-j\hat{\epsilon}:-\mathcal{O}$  come-VblN **receive**-RecPf-3SgSbj 'He/She has consented to come.'
  - b. [bàmàkś í lŏ-ŷ] áw-jê:-Ø
    [Bamako 1SgSbj go-VblN] receive-RecPf-3SgSbj
    'He/She has agreed (=consented) to my going to Bamako.'

# 17.3.5 Obligational 'must' (wá:jíbù) plus nominal subject

The noun  $w\acute{a}:jib\grave{u}$  or  $w\acute{a}:jib\grave{i}$  '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  $w\acute{a}:jib\grave{u}=\varnothing$  (576b).

- (576) a. [bàmàkó érné HL ló-ỳ] wá:jíbù = Ø
  [Bamako 3SgPoss HL go-VblN] **obligation**=it.is
  'He/She must go to Bamako.' (lit. "His/Her going to Bamako (is) an obligation")
  - b. [i)gú-rù wàs-î:]

    [here remain-VblN]

    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  $w\acute{a}:jib\grave{u}=\varnothing$  (or  $w\acute{a}:jib\grave{i}=\varnothing$ ) 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  $-\grave{m}$  since it is in a quotation (§17.1.1.2).

```
(577) wá:jibì = Ø [bérù-m ní-m] bà
obligation=it.is [goat-AnSg give-Ipfv] Quot
'She was obligated to give them a goat, they said.' [2005.2a.06]
```

## 17.3.6 'Dare' (dà:rí-, sú:sέ-) 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.

```
(578) yĕ-ỳ dà:rú-m
come-VblN dare-Ipfv.3SgSbj
'He/She dares to come.'
```

Another verb sú:sé-, from Fulfulde, is also used with a similar syntax.

```
(579) [ŋgú-rù èw-y-î:] sú:sé-m

[here sit-MP-VblN] dare-Ipfv.3SgSbj

'He/She dares to sit here.'
```

## 17.3.7 'Cease', 'desist' (dùwó-) plus nominal complement

The verb  $d\hat{u}w\delta$ - 'leave, abandon' may be used to indicate the abandonment of an activity. In this context it takes a verbal noun or similar nominal complement.

```
(580) dòrògù-[nŏ-ỳ<sup>n</sup>] dùwó-tî:-∅
drug<sup>L</sup>-[drink-VblN] leave-Pfv1b-3SgSbj
'She has given up drinking (alcohol).'
```

For 'finish' (VP-ing) with dùmdú-~dùmdí-'finish', see §17.4.1, below.

```
17.3.8 'Want' (j \partial r \delta-, m \dot{a}:-y \dot{i}- \sim m^b \dot{a}:-y \dot{i}-, negative m \dot{i}-r \dot{a}-) plus complement
```

The verb  $j\partial r\partial -$  'want' is morphologically regular as far as its paradigm goes. The common positive form is the unsuffixed imperfective (3Sg  $j\partial r\partial -m$  'he/she wants', 3Pl  $j\partial r\partial -y\partial e$  '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.

```
(581) a. b\dot{e}:n\dot{i}-[l\check{o}-\dot{y}] j\acute{o}r\acute{o}-\dot{y} Beni<sup>L</sup>-go-VblN want.Ipfv-1SgSbj 'I want (= would like) to go to Beni.' (b\acute{e}:n\dot{i})
```

```
b. n\acute{u}w^n\grave{\partial}y^n b\grave{u}:r\grave{u}-[n\check{e}-\grave{y}^n] j\acute{o}r\acute{o}-\grave{w} m\grave{a} now bread eat-VblN want.Ipfv-2SgSbj Q 'Do you-Sg want to eat some bread now?' (b\acute{u}:r\grave{u})
```

```
c. [i=n jiy-î:] jòrò-Ø
[1SgObj kill-VblN] want.Pfv-3SgSbj
'He/She wanted (= tried) to kill me.'
```

With different subjects, the verb of the complement takes imperfective form and ends with  $-\dot{m}$ , for all person-number categories of subject. The  $-\dot{m}$  could be taken as the inanimate imperfective participial suffix  $-\dot{m}$ , or else as a 3Sg subject imperfective suffix  $-\dot{m}$  that has generalized in this construction to all subject categories. A pronominal subject in the complement is expressed as a preparticipial pronoun.

```
(582) a. [[érʰé nâyʰ] í ló-m̀] jóró-m̀ [[3Sg with] 1SgSbj go.Ipfv-Ppl.Inan] want-Ipfv.3SgSbj 'He wants me to go with him.'
```

```
b. [nãy bû: 16-m] jóró-ỳ
[1Sg.with 3PlSbj go.Ipfv-Ppl.Inan] want.Ipfv-1SgSbj
'I want them to go with me.'
```

There is a less common near-synonym  $m\acute{a}:-y\acute{i}-$  or  $m^b\acute{a}:-y\acute{i}-$  'wish for, want (sth)', which is used with NP (not clausal) complement. There is a related noun  $mb\acute{a}$ : 'what one wants'.

The negative 'not want' verb is mi-rá- (the expected  $\#j\acute{o}r\acute{o}$ -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  $= r\acute{a}$ -. Nasalization-Spreading does not apply to the rhotic, suggesting an internal reconstruction \*mbì-rá-, which is supported by e.g. Bankan Tey  $m\acute{b}i$ -rá-.

mi-rá- occurs in the same syntactic constructions as positive  $j\partial r$ ó-, as just described: for same subject a verbal noun complement (583a), for different subject an imperfective participial complement (583b).

```
(583) a. n\check{\epsilon}-\dot{y}^n mi-r\acute{a}-\dot{y} eat-VblN want-Neg-1SgSbj 'I don't want to eat'.
```

```
b. [bû: ló-m] 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  $j \delta r \delta$  'wanting' (cognate to  $j \delta r \delta$ -) and  $m^b \hat{a}$ : '(one's) wish, what one wants'.

# 17.3.9 'Forget' (iré-), 'remember' (ili-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).

```
(584) a. yĕ-ŷ ìré:-rè-Ø come-VblN forget-Pfv1a-3SgSbj 'He/She forgot to come.'
```

```
b. t\grave{a}.^{nL}-[d\check{a}^n-\grave{y}^n] \grave{i}r\acute{e}-r\acute{e} door^L-[lock.up-VblN] forget-ImprtNeg 'Don't-2Sg forget to lock the door.' (t\grave{a}.^n, d\acute{a}^n-)
```

c.  $t\hat{a}$ :  $^{nL}$ - $[d\check{a}^n$ - $\mathring{y}^n]$   $il\hat{i}$ - $r\hat{i}$   $g\check{o}$ :- $r\hat{e}$ -y door  $^L$ -[lock.up-VblN] **remember** go.out-Pfv1a-1SgSbj 'I remembered to lock the door.'

# 17.3.10 'Be afraid to' (ú:-yí-) plus complement

The verb  $\dot{u}:-yi$ - 'fear, be afraid' (cf. archaic causative  $\dot{u}:-r\dot{u}$ - 'frighten, scare', noun  $\dot{u}w\dot{a}w$  '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.

```
(585) a. t am \partial r \partial^L - [k u w - i :] u - 2 u w a - w date date Rdp-fear-Stat.3SgSbj 'He/She is afraid to eat dates.'
```

```
b. [\acute{e}r^n\acute{e}=n\grave{i} \acute{u} s\acute{u}y\acute{o}-\grave{m} k\grave{u}] \grave{u}-?\acute{u}w\acute{a}-\grave{w} [3Sg=Acc 2SgSbj hit-Ipfv Def] Rdp-fear-Stat.3SgSbj 'He<sub>x</sub> is afraid that you will hit him<sub>x</sub>/him<sub>y</sub>.'
```

# 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"  $-s\hat{o}$ - (resultative),  $-j\hat{\varepsilon}$ - (recent perfect), and  $-t\hat{a}$ - (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.

## 17.4.1 'Finish' (dùmdú-) plus nominal complement or chained verb

dùmdú-~ dùmdí- is a transitive verb that can take a nominal complement (586a), or it can be directly chained to the nonfinal VP (586b).

```
(586) a. kòsŏy dùmdí-tî:-Ø harvest(n) finish-Pfv1b-3SgSbj 'He/She finished harvesting (= finished the harvest).'
b. [yû: kósí] dùmdí-tî:-Ø [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  $-j\hat{e}$ - and its negation  $-j\hat{e}$ -ri-. For example, 'finish eating' was expressed with the verb  $d\hat{u}md\hat{u}$ - by my assistant in contexts like the imperative (587a). However, in contexts favoring a perfect reading, he avoided  $d\hat{u}md\hat{u}$ - and used the recent perfect (587b).

```
(587) a. n \in d \tilde{u} m d - \tilde{a}
eat finish-Imprt
'Finish-Sg up eating!'

b. d \hat{o} m n \in \mathcal{V}^n
up.to.now meal eat-RecPf-PfvNeg-1SgSbj
'I haven't finished eating.'
```

# 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.

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.

# 17.4.3 Capability

## 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 {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.

```
(589) a. ínjírí béré-m-dó-Ø get.up can-Ipfv-Neg-3SgSbj 'He/She cannot get up.'
```

```
b. [tê: nó] béré-yè

[tea drink] can.Ipfv-3PlSbj

'They can drink tea.'
```

A more literal construal 'acquire the means to VP' (cf. English *be in a position to VP*) is possible in some cases. See  $b\acute{e}:n\grave{i}$   $b\grave{e}r\acute{e}$   $\grave{e}w-y\grave{e}-\varnothing$  'Beni was able to be settled' in B's second turn in (676) in the sample text, where  $b\grave{e}r\acute{e}$  is nonfinal in a verb chain.

# 17.4.3.2 $g \partial r^n \delta$ - 'be capable of'

 $g \partial r^n \delta$ - 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.

# 17.5 Purposive, causal, and locative clauses

# 17.5.1 Purposive clauses

# 17.5.1.1 Verb with purposive suffix $(-r\acute{a}: \sim -r\acute{\epsilon}:)$

In one construction, **purposive suffix**  $-r\acute{a}$ :  $\sim -r\acute{\epsilon}$ : 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.

```
(590) a. [pèré tìyè<sup>L</sup>-rá:] yè-ỳ
sheep.Pl sell<sup>L</sup>-Purp] come.Pfv-1SgSbj
'I came in order to sell sheep-Pl.'
```

```
b. [[á HL ísè:] tìwè L-rá:] yè-Ø [[3ReflSgPoss HL village] die L-Purp] come.Pfv-3SgSbj 'He has come back to his village to die.'
```

- c. [wóŋgóró wàrà<sup>L</sup>-ré:] ló:-rè-Ø [farming farm<sup>L</sup>-**Purp**] go-Pfv1a-3SgSbj 'He/She went to do some farming.'
- d. [bú:rù èwè<sup>L</sup>-rá:] ló-ỳ
  [bread buy<sup>L</sup>-**Purp**] go.Ipfv-1SgSbj
  'I will go and buy some bread.'
- e. [yû: lùgùrù<sup>L</sup>-rá:] lò-bɔ́ [millet look.for<sup>L</sup>-**Purp**] go.Pfv-3PlSbj 'They went to look for (=try to get) some millet.'

See also (138) in §7.1.2 and (469g) in §14.4.

The three  $Cvy^n$  verbs fuse their  $y^n$  with the suffixal r to produce l, hence apparent allomorph  $-l\acute{a}$ :. For the phonology see §3.5.4.4. The two clean examples are  $g\check{a}y^n$  'put' (hence  $g\grave{a}^L-l\acute{a}$ :) and  $k\acute{a}y^n$  'do'  $(k\grave{a}^L-l\acute{a}$ :). My assistant produced  $g\grave{u}^n-l\acute{a}$ : from  $g\check{u}y^n$  'say', in this instance preserving nasalization (on the vowel), but indicated that  $g\grave{u}^{nL}-l\acute{a}$ : 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)
                                  \int \varepsilon r^n \varepsilon
          tórú-m
                                                 gànjí-m
                                                                 n\hat{\varepsilon}
          warthog-AnSg [3SgSbj
                                                 dig-Ipfv
                                                                 now] ...
                       gànjí-m nè] [ér<sup>n</sup>é
                                                         gànjí-m nèl
          (repetitions)
           dà<sup>L</sup>-rá:
                              \varepsilon r^n \varepsilon
                                          d\check{\sigma} = n\grave{\imath}, \ldots
          arrive<sup>L</sup>-Purp 3SgSbj arrive=and.SS, ...
           '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 =ni is used.

```
(592) [g\ddot{o}: g\check{a}y^n = ni] k\grave{i}-k\check{a}: j\grave{i}y\grave{\varepsilon}-b\acute{o} [fire put=and.SS] Rdp-grasshopper kill.Pfv-3PlSbj 'They set a fire and killed (= in order to kill) the grasshoppers.'
```

#### 17.5.1.2 Quasi-purposive clause in manner-adverbial form $(day^n)$

In this construction, the purposive clause takes the form of a manner adverbial ( $\S15.2.3$ ), 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 ( $-\dot{m}$  after imperfective stem).

```
(593)
        [wògòtórò
                            cé:lé-ỳ∴
                                                      dè]
                            fix.Ipfv-1PlSbj
                                                      ifl
         cart
         [d\grave{a}y^{n^{L}}]
                             wá:lè
                                                           ló-m
                                             î:
        [manner<sup>L</sup>
                             Walo
                                             1PlSbj
                                                           go.Ipfv-Ppl.Inan]
         'We will fix the (donkey) cart, so that we may go to Walo (village).'
```

# 17.5.1.3 Clauses ending in purposive postposition gin

Here purposive postposition  $g\check{i}n$ ,  $g\grave{i}n\acute{i}$ ,  $g\check{u}n$ , or  $g\grave{u}n\acute{i}$  '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  $g\check{u}y^n$  'say', and specifically to  $g\grave{u}y^n = n\acute{i} \sim g\grave{i}y^n = n\acute{i}$  (same-subject past sequential subordinator, §15.1.8).

```
L+HL năr nà
(594)
                               ngú-rù
                                          i = n
        1SgPoss.HL mother
                               here
                                          1Sg=Acc
        [nî:
                  kówó-v
                                             gĭn]
                                                    tì-Ø
       [water
                  draw.water-QuotImprt
                                             for]
                                                    send.Pfv-3SgSbj
        'My mother sent me here (telling me) to draw water (at the well).'
```

Final gin is more common in causal ('because') clauses, see §17.5.4.2, below.

# 17.5.1.4 Purposive clause with [...j\'e\cdot y\'^{\text{HL}} nî:]\'^{\text{L}} w\'o\'

This construction occurred once in a text. For  $[X^{HL}n\hat{\imath}:]^Lw\delta$  as a causal PP, see §8.5.3.  $j\grave{\epsilon}y$  appears to be a purposive morpheme in (595). Without  $j\grave{\epsilon}y$ ,  $[X^{HL}n\hat{\imath}:]^Lw\delta$  is attested but uncommon in causal ('because') clauses, see §17.5.2.4 below.

```
HL kû:]
(595)
       dănnà-m<sup>†</sup>,
                        [[3ReflSgPoss HLhead]
                                                       LDat]
       hunter-AnSg,
                        HL níngì] élé-ré
                                                  jèy]
                                                                     Lwòl.
       [[á
                        HL sauce]
                                   be.sweet-Fact Purp] HLcause]
       [[3ReflSgPoss
       dănnà
                     túmdú-m
       hunt(n)
                    begin.Ipfv-3Sgs
       'A hunter, himself, in order to make his sauce (=meal) good-tasting, he begins a
       hunt.' [2005.1b.01]
```

## 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.

#### 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.

```
(596)
                                   ìrè-rí-Ø],
        [ŋgá-dá:
                         yû:
        [around.there
                         millet
                                   ripen-PfvNeg-3SgSbj],
        sábù
                     bòlú
                                    ógú-rú
                                                  vè-rí-∅
        because
                     rain(n)
                                    fast-Inch
                                                  come-PfvNeg-3SgSbj
        'The millet hasn't ripened (well) there, because the rain did not come early (=the rain
        came late).'
```

## 17.5.2.2 Causal clause with gin and variants

In §17.5.1.3 above, purposive-causal postposition gin, gini, gin, gini, gin, or gini (§8.5.1) occurs in a purposive clause. It is more common as a causal complement ('because'). The clause takes normal main-clause form.

```
(597) [[kô: â: yá só-w] gì-ní]
[[hunger ReflPlSbj Exist have-3SgSbj] for]
isê: gò-bó
village go.out.Pfv-3PlSbj
'They have left the village because they are/were hungry ("had hunger").'
```

The origin of  $g\check{n}$  as a same-subject anterior subordinated form of  $g\check{u}y^n \sim g\check{t}^n$  '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,  $g\grave{i} = n\acute{a}y^n$ , more transparently connected to 'say', is also attested (598).

```
(598) b\acute{e}:n\grave{i} y\acute{e}-\grave{m}-d\acute{o}-\varnothing,

Beni come-Ipfv-Neg-3SgSbj,

[t\acute{o}w s\grave{o}-l\acute{o}-\varnothing] g\grave{i}=n\acute{a}y^n

[kin have-Neg-3SgSbj] \mathbf{say}^{\mathbf{L}}=\mathbf{then.SS}

'She doesn't come to Beni, since (= on the grounds that she has no kin (there).'
```

 $gi = n\acute{a}y^n$  also occurs in a negative purposive clause in (601) in §17.5.3.

## 17.5.2.3 Clauses with final causal déngèy

Clause-final déngèy (with possessed {HL} overlay) is more or less interchangeable with clause-initial sábù.

```
(599)
       [ngá-dá:
                        yû:
                                   ìrè-rí-Ø],
                                   ripen-PfvNeg-3SgSbj],
       [around.there
                        millet
       bòlú
                                  yè-rí-∅
                     ógú-rú
                                                             déŋgèy
       rain(n)
                     fast-Inch
                                  come-PfvNeg-3SgSbj
                                                            because
        'The millet hasn't ripened (well) there, because the rain did not come early (=the rain
       came late).'
```

# 17.5.2.4 Causal clause with final HLnî: Lwò

The complex PP  $[X]^{HL}n\hat{\imath}:]^{L}w\hat{o}$  'because of X, on account of X', which generally refers to human motivation or reasoning rather than to physical causality (§8.5.3), is occasionally used with a clausal complement (600). For purposive  $[...j\hat{\epsilon}y]^{HL}n\hat{\imath}:]^{L}w\hat{o}$ , see §17.5.1.4 above.

```
(600)
         nέ:
                      n \hat{\varepsilon}:-w^n-\hat{\imath}:
                                                 ŋ̀gó-Ø,
         now
                      eat-Caus-VblN
                                                 not.be-3SgSbj
         [[[kà:nL
                                nàngù-rú-m]
                                                                      ŋ̀gó-Ø]
                     bû:
         \prod_{H} thing ^{L}
                                 be.ruined-Caus.Ipfv-Ppl.Inan]
                     3PlSbj
                                                                     not.be-3SgSbj]
           nî:]
                       <sup>L</sup>wò
         HL causel
                       Lin
         '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  $gi = n\acute{a}y^n$  'say and'.

```
(601) tèmbè-kû: bíré-ỳ∴
roof replaster.Ipfv-1PlSbj
nî: sí-yé-ré-y gì = náy<sup>n</sup>
water go.down-MP-ImprtNeg-QuotImprt say<sup>L</sup>=then.SS
'We will replaster the roof (with mud), so that (rain) water doesn't come down (=leak).'
```

# 18 Anaphora

#### 18.1 Reflexive and emphatic pronouns

The third person anaphoric pronouns are á (Sg) and â: (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."

## 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).

```
(602) a. i césé-tí-ỳ 'I cut myself.' 'We cut ourselves.'

b. ú césé-tú-ỳ 'You-Sg cut yourself.' 'You-Pl cut yourselves.'
```

For third person subjects, a direct object coindexed to the subject is expressed by a third-person reflexive pronoun, singular  $\acute{a}$  or plural  $\^{a}$ ; with optional accusative  $= n\grave{i} \sim = \grave{n}$ .

```
(603) a. á césé-tî:-Ø
3ReflSgObj cut-Pfv1b-3SgSbj
'He cut himself.'
b. â: césé-tí-yà
3ReflPlObj cut-Pfv1b-3PlSbj
'They cut themselves.'
```

```
c. \hat{a}:=\hat{n} d\hat{a}n\hat{g}i-\hat{m} tin\epsilon m b\epsilon -y\hat{\epsilon} 3ReflPlObj get.ready-Ipfv continue remain.Ipfv-3PlSbj '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.

```
(604) a. L+HL injè-m lăr-tí-ỳ 1SgPoss. HL dog-AnSg chase.away-Pfv1b-1SgSbj 'I chased my dog away.'
```

```
b. [ú HL ínjè-m] lăr-tú-ẁ [2SgPoss HL 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.

```
(605) a. sĕydù [á HL ínjè-m] lǎr-tî:-∅
Seydou [3ReflSgPoss HL dog-AnSg] chase.away-Pfv1b-3SgSbj
'Seydou<sub>x</sub> chased his<sub>x</sub> (own) dog away.'
```

```
b. sĕydù [érné HLínjè-m] lăr-tî:-∅
Seydou [3SgPoss HLdog-AnSg] chase.away-Pfv1b-3SgSbj
'Seydou<sub>x</sub> chased her<sub>y</sub> (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).

```
(606) a. sĕydù [â: Linjè-m] lăr-tî:-Ø
Seydou [3ReflPlPoss Ldog-AnSg] chase.away-Pfv1b-3SgSbj
'Seydoux chased theirxy (= hisx family's) dog away.'
```

```
    b. [sĕydù yà→†] [á:màdù yà→¹]
    [Seydou and] [Amadou and]
    [â: linjê-m] lăr-tí-yà
    [3ReflPlPoss Ldog-AnSg] chase.away-Pfv1b-3PlSbj
    'Seydoux and Amadouy chased theirxy (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'.

## 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. [[\acute{u} \quad ^{HL}k\^{u}:] \quad ^{L}m\grave{a}:] \quad k\grave{a}^n-w^n [[2SgPoss ^{HL}head] ^{L}Dat] do.Pfv-2SgSbj 'You did (it) to yourself.'
```

c. [[î: 
$$^{L}k\grave{u}$$
:]  $^{L}m\grave{a}$ :]  $k\grave{a}^{n}$ - $\grave{y}^{n}$ .: [[1PlPoss  $^{L}$ head]  $^{L}$ Dat] do.Pfv-1PlSbj 'We did (it) to ourselves.'

## 18.1.4 Emphatic pronouns with *nànàná*: 'all'

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).

```
(608) L+HL n\vec{n}\vec{v}: \tau_i: \tau_i'-\vec{y}, \\
\tau_i \text{SgPoss.}^{HL} \text{person.Pl send.Ipfv-1SgSbj,} \\
\text{g\vec{a}:} \text{[i} \text{HL n\vec{a}n\vec{a}n\vec{a}n\vec{a}n\vec{a}n\vec{a}\vec{a}\vec{v}} \\
\text{but} \text{[1Sg} \text{HL all]} \text{go-Ipfv-Neg-1SgSbj} \\
'I am sending my people, but I personally will not go.'
```

## 18.2 Logophoric and indexing pronouns

The logophoric pronouns are  $\acute{a}$  (Sg) and  $\^{a}$ : (Pl). The same forms are also used as third person reflexive pronouns (§18.1.1-2).

# 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. 'He<sub>x</sub> said that he<sub>x</sub> isn't coming' is a reformulation of the direct quotation 'He said: "I am not coming."

```
(609) a. [[á má:] yé-m̂-dó-∅] gìy<sup>n</sup>-∅

[[LogoSg QuotSbj] come-Ipfv-Neg-3SgSbj] say.Pfv-3SgSbj

'He<sub>x</sub> said that he<sub>x</sub> isn't coming.'

b. [[â: Lmà:] yé-m̂-n-ɛ́] gìy<sup>n</sup>-bɔ́
```

[**LogoPl** <sup>L</sup>QuotSbj] come-Ipfv-Neg-3PlSbj] say.Pfv-3PlSbj 'They<sub>x</sub> said that they<sub>x</sub> aren't coming.'

In (610), the logophoric functions as **direct object** within its clause.

```
(610) a.
              búrâ:
                               g\acute{u}^n-\grave{w}^n
                                                         dè,
              Boura
                               say-Ipfv.3SgSbj
                                                         if.
              Πú
                        má:]
                                                          sùyò]
                                                                         wà
                                     á
                       QuotSbj] LogoSgObj
              [[2Sg
                                                          hit.Pfv]
                                                                         Quot
              'Boura<sub>x</sub> says that you-Sg hit-Past him<sub>x</sub>.'
```

b. 
$$yi$$
- $t\hat{\epsilon}$ :  $b\hat{u}$ :  $g\acute{u}^n$ - $\grave{w}^n$   $d\grave{e}$ , child-Pl 3PlSbj say-Ipfv.3SgSbj if, [[í  $m\acute{a}$ :]  $\hat{a}$ :  $s\grave{u}y\grave{o}$ ]  $w\grave{a}$  [1Sg QuotSbj] **LogoPlObj** hit.Pfv] Quot 'The children<sub>x</sub> say that I hit-Past them<sub>x</sub>.'

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  $\acute{a}$  could be parsed either as a reflexive possessor coindexed to the immediate clausemate 3Sg subject or as a logophoric possessor coindexed at a higher level to the attributed author.

```
(611) a. \epsilon r^n \epsilon
                              g\acute{u}^n-\grave{w}^n
              3SgSbj
                             say-Ipfv.3SgSbj
                                                           if,
                                                        HL ínjè-m]
              Πú
                                      Γá
                                      [LogoSgPoss HLdog-AnSg] chase.away.Pfv]
              [[2Sg QuotSbj]
               wà
               Ouot
               'She<sub>x</sub> says that you-Sg chased her<sub>x</sub> dog away.'
                                                                         Lmà:]
         b. \xi r^n \xi
                           g\acute{u}^n-\grave{w}^n
                                                         [[sěydù
                                                                         LQuotSbj]
               3SgSbj
                           say-Ipfv.3SgSbj if,
                                                         [Seydou
```

```
b. Er E gu"-w" de, [[seydu ma:]

3SgSbj say-Ipfv.3SgSbj if, [Seydou LQuotSbj]

[á HL [injê-m] làri] wà

[LogoSgPoss HL dog-AnSg] chase.away.Pfv] Quot

[3ReflSgPoss ...

'Shex says that Seydouy (man's name) chased herx/hisy 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 a = n or a.

```
(612) a. [[í má:] á súyó-m] júwó-m

[[1Sg QuotSbj] LogoSgObj hit-Ipfv] know-Ipfv.3SgSbj

'He<sub>x</sub> knows that I will hit him<sub>x</sub>.'
```

```
b. [[sĕydù Lmà:] á=n yá lúgúró-m]
[[S LQuotSbj] LogoSg=Acc Exist look.for-Ipfv]
nù-Ø
hear.Pfv-3SgSbj
'She<sub>x</sub> heard that Seydou was looking for her<sub>x</sub>.'
```

My assistant did not use logophorics in (613), where the main-clause verb is  $t \in mbi$ -'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 ca trouve/trouvait c que ... is used in the same sense, and its impersonal c captures the pragmatics. So both Amadou and Seydou are resumed by ordinary c in (613). The phrasing is [A find S [S look for A]], with S and A pronominalized in the subordinated clause

```
(613) á:mádù sĕydù [érné=nì érné lúgúró-mì=bày]

A S [3Sg=Acc 3SgSbj look.for-Ipfv=Ppl.Past]

tèmbì-Ø

find.Pfv-3SgSbj

'Amadoux found (= arrived to find) that Seydou was looking for himx.'
```

#### 18.2.2 Non-logophoric topic-indexing function

## 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 kay. 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 meme, which is usual in local French (e.g. Moi quand meme, je pars à Beni).

```
(614) 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. [sĕydù kày] bê:n ló-m̀

[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)  $3Pl \ b\hat{u}$ :

```
(615) [[sĕydù yà→] [á:mádù yà→] bû: ló-m̀-n-є́

[[S and] [A and] 3Pl go-Ipfv-Neg-3PlSbj

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  $-\vec{w}$ ), 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  $\hat{a}$ :) under coindexation with 'hyena and hare' in the preceding clause.

```
(616)
                                                    yá→]]
        [[tì-tã:-m
                            yà→1
                                       [jž:<sup>n</sup>-m
        [[Rdp-hyena-AnSg and]
                                       [hare-AnSg and]
                    HL sérè]
        [kú
                                        sὲ-nέ.
                    HL awareness]
        [InanSg
                                        have-StatNeg.3PlSbj,
                                                           jìyέ-ẁ, ...
        ſùsú
              t \hat{u} w^n \hat{j} - m s \hat{u} : -m
                                             â:
        [day one-AnSg] francolin-AnSg 3ReflPlSbj 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 §16.1.2.

## 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  $(\acute{a}, \acute{a}:)$ . 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  $\acute{a}$  in the preverbal subject marker preceding the relative-clause participle. The head noun 'shoulderbag' plays no role in this anaphoric relation.

```
(617) a. [sĕydù èsè<sup>L</sup> dùwó-w kù] yǐ-jê-ŷ
[S shoulderbag<sup>L</sup> leave.Pfv-Ppl.Inan Def] see-RecPf-1SgSbj
'I found the shoulderbag that Seydou left.'
b. sĕydù [èsè<sup>L</sup> á dùwó-w kù]
S [shoulderbag<sup>L</sup> 3ReflSgSbj leave.Pfv-Ppl.Inan Def]
yǐ-jê:-Ø
see-RecPf-3SgSbj
'Seydou<sub>x</sub> has found the shoulderbag that he<sub>x</sub> (himself) left.'
```

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.

## 18.3 Reciprocal

## 18.3.1 Simple reciprocals (tŭ:)

The reciprocal pronoun  $t\check{u}$ : is invariant in form (i.e. it does not agree with the antecedent in pronominal category). It is related to the ordinary noun  $t\check{u}$ -m 'companion, colleague', plural  $t\check{u}$ :.

In the typical case, *tŭ*: 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 clause-mate subject as antecedent. The clause is not detransitivized.

- (618) a. *tǔ: yì-r-á* **Recip** see-PfvNeg-3PlSbj

  'They didn't see each other.'
  - b. [njé gìn] tǔ: sùyô-ẁ.: [what? for] Recip hit.Pfv-2PlSbj '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. [tŭ: HL ónjò] jè-bɔ́
    [Recip HL younger.sibing.Pl] marry.Pfv-3PlSbj
    'They (=two men) married each other's (younger) sisters.'

In direct-object function, accusative clitic  $= n\hat{i} (= \hat{n})$  is optionally added.

- (619) a.  $t\check{u}:(=n\grave{i})$   $s\grave{u}y\grave{\partial}-b\acute{\partial}$  hit.Pfv-3PlSbj 'They hit each other.'
  - b.  $[\hat{n}j\acute{e} \quad g\grave{n}] \quad t\check{u}:(=n\grave{i}) \quad s\grave{u}y\grave{o}-b\acute{o}$ [what? for] **Recip(=Acc)** hit.Pfv-3PlSbj 'Why did they hit each other?'
  - c. [íyé HL úsù kálà] tǔ:=nì dùwó-sò-ló-ỳ.:
    [today 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 *tŭ-m* appears in possessed form with a reflexive possessor, but the sense is essentially reciprocal.

```
(620)
        [kú
                kày]
                        [sòsú-sòsú
                                         wó]
                                                  tó-w,
                                         in
                                                  sow.Ipfv-2SgSbj,
        Inan
                Top]
                        [near-near
                                    HL tû-m]
        w<sup>n</sup>à:r<sup>n</sup>ú
                    νĚ
                            Γá
                                                           níngí-m]
        spread.out come [3ReflP HL companion-AnSg] tangle.Ipfv-3SgSbj
        '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]
```

#### 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 3Sg object pronominal even when it is coindexed to the subject possessor.

```
(621) [ér<sup>n</sup>é HL ínjè-m] ér<sup>n</sup>é kùwò-∅

[3SgPoss HL dog-AnSg] 3SgObj bite.Pfv-3SgSbj

'His<sub>x</sub> dog bit him<sub>x</sub>.'

or: 'His<sub>x</sub> dog bit her<sub>v</sub>.'
```

A coordinand may not serve as antecedent with respect to the other coordinand. For example, in (622) there is no indication whether possessive  $\epsilon r^n \epsilon$  'his' in the right conjunct is coindexed with the left conjunct 'Amadou'.

```
(622) [á:mádù yá\rightarrow] [érné HL bô: yà\rightarrow] yě:-r-à:

[A and] [3SgPoss HL father and] come-Pfv1a-3PlSbj

'Amadou<sub>x</sub> and his<sub>x</sub> father came.'

or: 'Amadou<sub>x</sub> and his/her<sub>y</sub> 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.

- (623) a. [i=n érné sùy-î:] hàdê-ŷ [1Sg=Acc 3SgSbj hit-VblN] prevent.Pfv-1SgSbj 'I prevented him/her from hitting me.'
  - b. [á=n í sùy-î:] hàdê-∅ [3ReflSg=Acc 1SgSbj hit-VblN] prevent.Pfv-3SgSbj He<sub>x</sub> prevented me from hitting him<sub>x</sub>.'

# 19 Grammatical pragmatics

## **19.1** Topic

```
19.1.1 Topic (kày, kày dè, bàndè, kǒy<sup>n</sup>)
```

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.

```
(624)
      a. [1
                    kày]
                               ŋgú-rù
                                           wásá-ỳ
           [1Sg
                    Top]
                               here
                                          remain.Ipfv-1SgSbj
            '(As for) me, I'm staying here.
                                             bíré-m-dó-ỳ
       b. [íyé
                     kày]
                               bírέ
                                             work-Ipfv-Neg-1SgSbj
           [today
                     Top]
                               work(n)
           '(As for) today, I'm not working.'
```

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).

```
(625) kúwó-ý wá [ér<sup>n</sup>é bàndè]
eat.meat-QuotImprt Quot [3Sg Top]
'(they said:) she should eat it, as for her.' [2005.2a.06]
```

 $k \delta y^n$  is attested in texts, e.g. (626), and appears to function like the more common  $k \delta y$ .

```
(626)
          (one speaker:)
                [dùrê: Ltàrà
                                            tùw<sup>n</sup>5
                                                         kù]
                           <sup>L</sup>mountain
                [D
                                                         Def
                                            one
                                                      ^{L}k\hat{\partial}:^{n}]=\varnothing]]
                \int k \vec{u} = \vec{m}
                                   [[û:
                                                      Lthing]=it.is]]
                                   [[2PlPoss
                [Inan=Foc
                'Dure Mountain alone, that's what belongs to you-Pl?'
          (other speaker)
                                                               ^{L}k\delta:^{n}=\varnothing 1
                é:,
                         ľkú
                                    k<sub>ð</sub>y<sup>n</sup>]
                                              Γî:
                                                               Lthing]=it.is]
                                    Top] [1PlPoss
                         Inan
                yes,
                '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).

```
19.1.2 'Now' (n\acute{u}w^n\grave{\partial}y^n, n\acute{\varepsilon}.')
```

The most common 'now; at this time' adverb is  $n \hat{u} w^n \partial y^n$ . It may be used by itself as in (627). Topicalized as  $n \hat{u} w^n \partial y^n k \partial y$  '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).

```
(627) a. n\acute{u}w^n\grave{\partial}v^n
                                      bírέ
                                                                bírέ-ỳ∴
                                      work(n)
                                                                work.Ipfv-1PlSbj
                 now
                  'Now we will work."
           b. [núw<sup>n</sup>\doc)y<sup>n</sup>
                                      kày]
                                                    ùsú
                                                                 d\grave{\epsilon}r^n\acute{\epsilon}:-r\grave{\epsilon}-\varnothing
                  now
                                      Top]
                                                    sun
                                                                 spend.daytime-Pfv1a-3SgSbj
                  'Now the day is over (= it's night).'
```

There are several examples of  $n\dot{u}w^n\dot{\partial}y^n$   $k\dot{a}y$  in the sample text, e.g. in line 4 of (668).

There is also a morpheme  $n\acute{e}$ : (variant  $n\acute{e}$ :  $\sim n\acute{e}y^n$ ) 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  $k\grave{a}y$  in the phrase  $n\acute{e}$ :  $k\grave{a}y$ , as in (628a) and in C's second turn in (656) in the sample text. Another combination is  $n\acute{e}$ : with a preceding personal pronoun as in (628b), or with an NP as in line 1 of (659) in the sample text.

```
(628) a. [né: kày] dɔ̃:-rɛ̂-ŷ.:
[now Top] arrive-Pfv1a-1PlSbj
'Now we have arrived.'
```

```
ſmò:<sup>L</sup>
b. ngú-dá:†,
                    ſú
                            nέ:]
                                                   ŋ̀gú
                                                                dá:]
                                      [mouth<sup>L</sup>
    aroundhere,
                    [2Sg now]
                                                   Prox.Inan
                                                               around]
    ſú
             bú-ŵ
                         kù]
                                  pí:r<sup>n</sup>í-tú-ẁ
                                                        dè.
            be-2SgSbj Def]
                                  open-Pfv1b-2SgSbj 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  $n\hat{\epsilon}$  following a constituent can be analysed as an encliticized form of  $n\hat{\epsilon}$ . There are two examples at and near the end of (684) in the sample text.

## 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 (629d).

```
(629) a. [í kálà] ló-ỳ
[1Sg too] go.Ipfv-1SgSbj
'I too will go.'
```

- b. [íyé bíré bíré-ỳ.:]
  [today work(n) work.Ipfv-1PlSbj]
  [[[éy<sup>n</sup> dé] kálà] bíré-ỳ.:]
  [[[tomorrow] too] work.Ipfv-1PlSbj]
  'We're working today, and we'll work tomorrow too.'
- c. [gìyé gíyé-m],
  [dance(n) dance-Ipfv.3SgSbj],
  [[nùw<sup>n</sup>5 kálà] núw<sup>n</sup>5-m]
  [[song too] sing-Ipfv.3SgSbj]
  'He dances, and he sings too.'
  (lit. "He dances dances, and songs too he sings.")
- d. lé:térè tí-tî:-Ø, yì-yé-m 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.

```
(630) a. [ámbírì-m kálà] jìyé jìyè-Ø [chief-AnSg even] dance(n) dance.Pfv-3SgSbj 'Even the chief danced.'
```

```
b. [pŏ: 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  $y\hat{a}$ , which is probably related to  $y\hat{a}$  used in conjunctions of the type  $(X \ y\hat{a} \rightarrow ', \ Y \ y\hat{a} \rightarrow ')$ , see §7.1. Favorite combinations are those involving temporal sequences:  $l\tilde{a} - w \ y\hat{a}$  'another one' (as in 'tell us another one'),  $p\hat{i}n\hat{i}w^n\hat{i}$  y\hat{a} 'again'. That  $y\hat{a}$  '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.

#### 19.2 Presentential discourse markers

```
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]

```
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.

```
19.2.3 'Lo, ...' (jákà)
```

The preclausal particle *jákà*, which I gloss as 'lo, ...', is used in narrative preceding a clause denoting a surprising or key event. This is another regional particle found in most local languages.

## 19.3 'Only' particles

```
19.3.1 'Only' (săy)
```

The basic 'only X' phrase takes the form [X săy]. In many contexts including prepausally, săy has low pitch, but I normalize transcription as săy and take the low pitch to be intonational rather than phonological.

In the examples below, *săy* follows a pronoun (632a), a nonpronominal NP (632b-c), an adverb (632d), and a PP (632e).

```
(632) a. [ú HL bár-i] mì-rá-ỳ,
[2SgPoss HL help.Nom] want-StatNeg-1SgSbj,
[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. [[nă: yèy] săy] sò-y
  [[cow two] only] have-1SgSbj
  'I have only two cows.'
- c.  $[[n\check{a}: y\check{e}y] \quad s\check{a}y] \quad b-\hat{\varepsilon}:^n$   $[[cow \quad two] \quad only] \quad be-3PlSbj$ 'There are only two cows.'
- d. [íyé sǎy] bíré bíré-m̀ [today only] work(n) work-Ipfv.3SgSbj 'He/She will work today only.'
- e. bû: [[nǔ: yěy mâ:] sǎy] nì-bó
  3Pl [[person two Dat] only] give.Pfv-3PlSbj
  'They gave (some) to two people only.'

When  $s \check{a} y$  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  $s \check{a} y$  to attach to, it may **follow the verb** (633b).

```
(633) a. wóŋgóró wárá-m̀-dó-Ø,
farming farm(v)-Ipfv-Neg-3SgSbj,
[yɔ̃: sày] yɔ̃:-rà-w
[weeping only] weep-Ipfv-3SgSbj
'He doesn't do farm work, he just cries.'
```

```
b. y\acute{e}-\grave{m}-\varnothing sày come-Ipfv-3SgSbj only 'She just comes.'
```

A clause-final particle  $n \grave{a} \rightarrow$  can sometimes be translated as 'merely' or the like, but it is pragmatically more complex; see §19.3.4.

# 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 ...').

```
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 §16.2.2), can be used in the sense 'only' in phrase-final (typically prepausal) position, as an alternative to *săy*.

```
(635) a. [kú
                         dò:-wôv1
                                      àr<sup>n</sup>à-bérù
            [DiscDef
                         all]
                                      help
                                                   only
            'All that is simply helping (someone).' [2005.2b.04]
                        HL yí-tè:
                                     bû:]
        b. //ú
                                               ló
                                                      bíré-yè]
                        HLchildren DefPl]
            [[2SgPoss
                                               go
                                                      work.Ipfv-3PlSbj]
                         bì-yé-w
            [úrò
                                                   tán]
                        lie.down.Ipfv-2SgSbi
            [house
                                                   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'.

#### 19.3.4 Clause-final adverbial nà→ 'just'

Clause-final adverbial  $n \ge 1$ , 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.

```
(636)
                c \approx m n \hat{\epsilon} := \emptyset
                                                nà→,
                amusement=it.is
                                               just,
                 \int k \dot{\mathfrak{Z}}:^{nL}
                                    l\check{a}-\grave{w}l=\emptyset=r\acute{a}-\emptyset
                [thing<sup>L</sup>
                                    other-Inan=it.is=StatNeg-3SgSbj
                 'It's just (for) fun now, it's not anything else.' (cèmné, lă-w)
           b. tìyè-mánù
                                                             j\hat{a}y = \emptyset = r\hat{a} - \emptyset
                                                 nà→,
                cross.cousin-laughter just,
                                                             fight(n)=it.is=StatNeg-3SgSbi
                 'It's just horseplay (among cross-cousins) mind you, it's not a (real) fight.' (jáy)
```

Textual examples are in (637).

```
(637) a. [ŋgú má:] sèsù-mánù wà nà→
[Prox.Inan QuotSbj] grandparent-laughing Quot merely
'That was merely fun (=kidding) with the grandmother, it is said.' [2005.2a.06]
```

```
    b. [íyé û: nùw<sup>n</sup>5:-rè·ù.: nà→]
        [today 2PlSbj be.long.time-Pfv1a-2PlSbj merely]
        [[û: kò:<sup>n</sup>] = Ø kù]
        [[2PlPoss Lthing]=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. [[[isè: L j]gú] HLk3:n] = Ø nà→]

[[[villageL Prox.Inan] HLthing]=it.is just]

[[isè: L j]gá] HLk3:n] = Ø = rá

[[villageL FarDist] HLthing]=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  $n \grave{a} \rightarrow \text{might}$  be related to the ending of  $n \acute{a} \eta \acute{a} n \grave{a}$ : 'all, entirely' (§8.6.7.5). Indeed,  $n \grave{a} \rightarrow \text{is}$  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.

# 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.

# 19.4.1 Clause-final kòy

**kòy** is a common clause-final emphatic. It is occasionally heard as **kòy** 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.

```
(638) Q: úrò nàw²á:-rè-Ø mà
house be.ruined-Pfv1a-3SgSbj Q
'Was the house ruined?'
A: nàwá:-rè-Ø 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).

#### 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.

```
(639) a. yàyá-ré dé
fall-ImprtNeg Emph
'Don't fall down, now!'
b. gùrú táykà dè
thief.Pl watch.out.Imprt
'Watch out for thieves, now!'
```

There is one example in the sample text, see end of (654).

# 19.4.3 Clause-final yà:

A clause-final particle  $y\hat{a}$ : 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) t\acute{e}r\grave{e}w = \emptyset y\grave{a}:
truth=it.is Emph
'It's definitely the truth!' [2005.1b.05]
```

#### 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,  $g\acute{a}$  is often pronounced [ $\gamma a$ ], 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.

```
Lbèrì-yì-m]
(641)
        áywà
                  [[bû:
                  [[3PlPoss
                               <sup>L</sup>goat-child-AnSg] QuotSbj]]
        well
                                            HL pírè]
                          kú]
                                                        yá
                                                                      gá]
                                                                 bú
                                            HLinside] Exist
        [[[small.house<sup>L</sup> NearDist.Inan]
                                                                 be
                                                                      Emph]
        [d5
                    wò-ý]
                                        wá
                   catch-QuotImprt] Quot
        [[arrive
        '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.

```
nàfà: L
(642)
                        tégé-ŵ
                                             kù
                                                   kày,
                                                               0,
       value<sup>L</sup>
                1PlSbj speak-Ppl.Ipfv.Inan Def Top,
                                                         ah
                                                               O.
        [bàrí béré-w
                                dè] [dêm→
                                                bàrú-w
                                                                    gà]
       [add can.Ipfv-2SgSbj if]
                                      [a.little
                                                add.Ipfv-2SgSbj
                                                                    Emph]
        '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  $k \check{o} y$ . In (643), ga seems to mark the building of suspense.

```
(643)
       ló
                 bàngì-yí-w,
                                                sí-yé-yè,
                 hide-MP.Ipfv-2SgSbj,
                                                go.down-MP.Ipfv-3PlSbj,
       go
                                                     wó-m,
       júwó-m̀-n-έ
                                         íyà
                                gá,
       know-Ipfv-Neg.3PlSbj 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)

```
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  $p \not\in y$ , or its iteration  $p \not\in y - p \not\in y$ . 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.

```
(644) a. b \delta l u m r^n \hat{\epsilon} - r^n i - \emptyset p \epsilon y rain(n) rain.fall-PfvNeg-3SgSbj not.at.all 'It didn't rain (or: hasn't rained) at all.'
```

```
    b. Q: [û: <sup>L</sup>mà: dá:] bòlú mìr<sup>n</sup>έ-ẁ
    [2Pl <sup>L</sup>Dat around] rain(n) rain.fall.Pfv-Stat.3SgSbj
    'Has it rained in your-Pl area?'
```

```
A: péy-péy
not.at.all
'Not a bit.'
```

A variant *pés* is also in use. Cf. *fés* in Fulfulde.

One may also use the emphatic adverb  $s \acute{o} y$  'everything' with a negative predicate, as in  $s \acute{o} y \ mir^n \grave{e} - r^n \acute{l} - \varnothing$  'it didn't rain at all'.

#### 19.5 Greetings

The general verb 'greet (someone)' is  $p\acute{o}:-l\acute{l}$ , which ends in a transitive suffix that is also used as a causative and inchoative suffix allomorph. The noun 'greeting' is  $p\acute{o}$ . The verb phrase 'reply to a greeting' is  $p\acute{o}$ :  $s\acute{a}$  (with verb  $s\acute{a}$  'reply').

**Time-of-day** greetings and their responses are in (645). The  $-n\hat{\imath}$  in the plural-addressee version of some greetings can be identified with plural imperative  $-n\hat{\imath} \sim -\hat{n}$ . The reply form  $\delta$ : has protracted dying-quail intonation.

```
(645)
                 greeting (G)
                                         gloss
                                                                               situation
                response (R)
           a. náy<sup>n</sup>
                                          'good morning-Sg'
                                                                               morning to 11 AM
                                         'good morning-Pl'
                 náv<sup>n</sup>-nì
                 ná:-kò
                                         (reply, archaic)
                                         (reply preferred by younger speakers)
                 ó∴
                 (\underline{n}\underline{a}\underline{y}^n) is irregularly related to verb \underline{n}\underline{a}- 'spend night')
           b. pŏ:
                                         'good day-Sg'
                                                                                11 AM to dusk
                                         'good day-Pl'
                pŏ:-nì
                 ó∴
                                         (reply)
           c. d \hat{\epsilon} r^n \hat{\epsilon} - \hat{v}^n
                                         'good evening-Sg'
                                                                               after sundown
                                         'good evening-Pl'
                 d\hat{\epsilon}r^n\hat{\epsilon}-\hat{v}^n-n\hat{\imath}
                 dér<sup>n</sup>úw<sup>n</sup>â:
                                         (reply, archaic)
                 ó∴
                                         (reply preferred by younger speakers)
```

The stems  $n\acute{a}y^n$  (645a) and  $d\grave{e}r^n \check{e}y^n$  (645c) have a fairly clear (to native speakers) connection with the verbs  $n\acute{a}$ - 'spend night' and  $d\grave{e}r^n \acute{e}$  'spend the mid-day', respectively. The apparent  $-\acute{y}$  suffix here is most likely the quoted imperative suffix  $-\emph{y}$  (§10.5.7), which is used in indirect commands. Given the time references, (645a,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**.

```
(646) jǐnjà [ɛ̀sú wó] î: ná:-w<sup>n</sup>ì-ỳ<sup>n</sup>
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  $\frac{\partial \hat{s}}{\partial t} = \frac{\partial \hat$ 

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.).

```
(647) greeting gloss at or coming from...

a. \frac{\partial r^n \delta : p \delta :}{\partial r^n \delta : p \delta : -n i} 'hello-Sg in the field' field(s)

\frac{\partial r^n \delta : p \delta :}{\partial r^n \delta : p \delta : -n i} 'hello-Pl in the field'

\frac{\partial r^n \delta : p \delta :}{\partial r^n \delta : p \delta : -n i} (reply)
```

```
b. tă: pŏ:
                       'hello-Sg at the well'
                                                     well
                       'hello-Pl at the well'
    tă: pŏ:-nì
    ó∴
                       (reply)
c. dùyó-r<sup>n</sup>ù pŏ:
                       'hello-Sg at pounding'
                                                     pounding place
    dùyó-r<sup>n</sup>ù pŏ:-nì
                       'hello-Pl at pounding'
    ó∴
                       (reply)
                                                     weekly market
d. éwá: pŏ:
                       'hello-Sg at market'
                       'hello-Pl at market'
    éwá: pŏ:-nì
    ó∴
                       (reply)
```

 $\delta$ .: (in all contexts) has a variant  $\grave{a}w\acute{a}$ →. In work contexts,  $\grave{b}\grave{i}r\acute{a}$ → is used by older speakers as a response to  $p\acute{o}$ : greetings.

An alternative greeting to someone in a field is  $[\acute{u} \ y\acute{a} \rightarrow] \ [\grave{\delta r}^n 5: \ y\acute{a} \rightarrow]$ , literally 'you-Sg and (the) field(s)'. The plural-addressee equivalent replaces 2Sg pronoun  $\acute{u}$  with 2Pl  $\^{u}$ :. The greeting construction 'you and X' that this illustrates is common in regional languages including Songhay. Another alternative in the same situation is  $p \acute{o}$ :  $b \grave{i} r \grave{a} \rightarrow$ .

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 nse: (Bambara), jam 'peace' (Fulfulde and Jamsay), jam say 'only (= nothing but) peace' (Jamsay, the source of the language name). Another follow-up, not (to my knowledge) borrowed, is kanja-kanja 'peace'.

 $j\hat{a}m$  'peace' and  $s\hat{\epsilon} \rightarrow w$ , another term vaguely meaning 'well-being' or the like and confined to greetings, occur in phrases like (648) in these greeting sequences. Those with  $j\hat{a}m$  may be borrowings from Jamsay.

```
a. sé→w bú-w well.being be-2SgSbj 'Are you well?'
b. jâm dèr<sup>n</sup>é-ŵ<sup>n</sup> peace spend.day-2SgSbj 'Has your day been (spent) in peace?'
c. jâm ná-ŵ<sup>n</sup> peace spend.night-2SgSbj 'Did you spend the night in peace?' (= 'Did you sleep well?')
```

The reply to  $j\hat{a}m \ n\hat{a}-\hat{w}^n$  is  $j\hat{a}m \ s\hat{a}y$  'peace only!'.

'Excuse me!' (e.g. after accidentally bumping someone) is  $k \check{a} w r \mathring{u} k \acute{a} y^n$  or just  $k \check{a} w r \mathring{u}$ . Here  $k \acute{a} y^n$  'do' is imperative. The response is  $k \check{a} w r \mathring{u} b \grave{a} - r \acute{\iota} - \emptyset$ .

On either of the two major Islamic holy days, and at marriages, the formulaic wish (649) is uttered.

```
(649) jǐnjè [nàngírì <sup>L</sup>jìrè] î: cɛ́:rì-ỳ
God [next.year <sup>L</sup>face] 1PlObj show-QuotImprt
'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.

```
<sup>L</sup>bìrèl
                                       L<sub>này</sub>n]
(650)
        A: [[jǐnjè
                                                 pŏ:-nì
                        Lwork(n)]
             [[God
                                       with]
                                                 greeting-Imprt.2P1
             'Greetings to you on the occasion of God's doing!'
        B: ó.:
             [reply]
        A: màyní
                                          yá:pà-n
                               \varepsilon r^n \varepsilon
                               3SgObj pardon-Imprt.2Pl
             take.courage
             'Take-2Pl heart and forgive him/her (the deceased)!'
        B: vá:pέ-ν∴
                                   ſû:
                                           và1
                                                   \varepsilon r^n \varepsilon
                                                              vá:pà-n
             pardon.Ipfv-1PlSbj [2Pl and] 3SgObj pardon-Imprt.2Pl
             'We pardon (him/her). And you-Pl too, pardon-2Pl him/her!'
        A: yá:pέ-ỳ∴
             pardon.Ipfv-1PlSbj
             '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.

```
(651)
            greeting
                                                              situation
                                    gloss
        a. jǐnjè ú jề:-Ø
                                    'God brought you-Sg!'
                                                              arriving traveler
           jĭnjὲ û: jἒ:-Ø
                                    'God brought you-Pl!'
            ó.:
                                    (reply)
        b. ló jâm dó
                                    'go arrive-Sg in peace!' departing traveler
                                    'go arrive-Pl in peace!'
            ló jâm dó-nì
            àmí:nà
                                    'amen!' (reply)
        c. jǐnjè jâm ú dǒ:-lì-ỳ
                                    'may God deliver you-Sg in peace!' (= b)
                                    'may God deliver you-Sg in peace!'
           jĭnjê jâm û: dŏ:-lì-y
                                    'amen!' (reply)
            àmí:nà
```

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.

This is text 2005.2a.08, which like my other BenT texts was recorded in 2005. The live-burial sacrifice of Yasumoy (yà-sùmɔȳ '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.

### The founding of Beni and Yasumoy's sacrifice

```
(653) S: \hat{u}:
                               bê:n
                                             a\eta \hat{a}y^n = \emptyset
                                                                     èw-yè
                  2P1
                               Beni
                                            how?=Foc
                                                                     sit-MP
      C: hà:
                        В
                                     d\grave{\varepsilon}r^n\grave{\varepsilon}-\acute{v}^n
                        В
                                     spend.day-(greeting)
            well
      B: dér<sup>n</sup>úw<sup>n</sup>â:
            spend.day(greeting)
                             d\grave{\varepsilon}r^n\acute{\varepsilon}-\grave{w}^n
      C: jâm
            peace
                             spend.day.Pfv-2SgSbj
      B: jâm
                             sày
                             only
            peace
                                     d\hat{\varepsilon}r^n\hat{\varepsilon}-\hat{w}^n
      C: hénjân
                                     spend.night.Pfv-2SgSbj
            greeting
      B: jâm
                             sàv
                             only
            peace
      C: [î:
                             Lnù:1
                                                                       d\hat{\varepsilon}r^n\hat{\varepsilon}-b\hat{\sigma}
                                                   sέ:₩
            [1PlPoss
                             Lperson.Pl]
                                                  well.being
                                                                      spend.day.Pfv-3PlSbj
      B: àlhámdùrùllâ:y
            praise.to.God
      C: [bà:s<sup>L</sup>
                               kâ:<sup>n</sup>]
                                              d\hat{\epsilon}r^n\hat{\epsilon}-r^n\hat{\iota}-\emptyset
            [trouble<sup>L</sup>
                                              spend.day-PfvNeg-3SgSbj
                               any]
      B: jâm
                               sày
            peace
                               only
      C: tà:ré:yò:
            Fine
                         d\grave{\varepsilon}r^n\acute{\varepsilon}-\grave{w}^n
      B: jâm
                        spend.day.Pfv-2SgSbj
            peace
      C: jâm
                               sày
            peace
                              only
```

```
HL kórò:jù]
                               jâm
                                          dèr<sup>n</sup>è-bà
B: /ú
                 HL family]
                               peace
                                         spend.day.Pfv-3PlSbj
    [2SgPoss
C: jâm
                 sày
                 only
    peace
B: [bà:s<sup>L</sup>
                               d\hat{\epsilon}r^n\hat{\epsilon}^L-r^ní-\varnothing
                   kâ:<sup>n</sup>]
    [trouble<sup>L</sup>
                              spend.day-PfvNeg-3SgSbj
                   any]
C: jâm
                 sày
                 only
    peace
B: tà:→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 §19.5 for general treatment; dérnúwna: and hénjan are archaic, no longer
 used by young people; 2Sg \frac{d\hat{\epsilon}r^n\hat{\epsilon}-\hat{w}^n}{\epsilon} '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 3Pl perfective suffix allomorphs -b\hat{a} and -b\hat{o}]
```

```
(654) B: bìsímílà
              please
    C: háyà
                   wó:dì
                             yà
                   yes
         well
                             also
    B: [úsúrí
                                         yĕ:-rà-ỳ∴
                         w \delta = h
         [question
                        in]=Acc
                                         come-Prog-1PlSbj
    C: mhm
         uh-huh
                                                \int \partial r^n \partial^{\mathrm{L}}
    B: áywà
                           bé:nì
                                      kù→.
                                                            kà:<sup>n</sup>]
                   î:
                                                                    g\check{o} = ni,
                                                [place<sup>L</sup>
         well
                   1P1
                           В
                                      Def,
                                                            Rel]
                                                                    go.out=and.SS,
```

```
come=and.SS, [place<sup>L</sup> Rel] 1PlSbj sit-MP.Pfv-Ppl.Inan Def,
         here
                       HL kábà:r] [ú
                                           mâ:] bèrè-ỳ∴
                                                                     dè1
         [[kú
         [[InanPoss HL news]
                                  [2Sg Dat] get.Pfv-1PlSbj if]
                                                                           want.Ipfv-1PlSbj
    C: já:tì
         exactly
    B: \hat{u}: /n\dot{u}^L
                          diy^n \hat{a} [jinj\hat{\epsilon} Ls\hat{a}w] = \emptyset
                                                                               ^{L}sàwl = \emptyset
                                                            dé
                                                                    Γû:
         2Pl [person<sup>L</sup> big.Pl] [God <sup>L</sup>trust]=it.is Emph [2PlPoss <sup>L</sup>trust]=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
         vou-Pl.
      [accusative = \dot{n} after nonsubject constituent other than direct object §8.2; relative
      morpheme k\grave{a}: ^{n} §14.1.10; =n\acute{a} = \acute{n} same-subject subordinator §15.1.8; n\grave{u}^{L} d\acute{i}y^{n\grave{a}} 'old
     people' in collective without adjectival animate plural -y\hat{\epsilon}, §4.5.1; [jinj\hat{\epsilon}^Lsàw] = \emptyset [\hat{u}:
      [x]^{L} sàw] = \emptyset is a common but somewhat opaque formulaic phrase, with noun săw 'trust,
     act of entrusting']
                                              ^{\rm HL}sâw]=\emptyset,
(655) C: [[jǐnjè
                           òyò-ná:m]
                                              HLtrust]=it.is,
             [[God
                          Almighty]
                   ^{L}òrù-m^{b}ò:
                                                   kày],
         [bê:n
                                       kú
                    <sup>L</sup>door
         [B
                                       Def
                                                   Top],
                     ^{L}sawl = \emptyset
                                                    ^{L}sawl=\emptyset,
         [jǐnjè
                                        Гû:
                     Ltrust]=it.is
                                                    Ltrust]=it.is.
         [God
                                       [2P1
                                                     g\check{o} = ni, \dots
         gà:
                                  màndé
                    d̃∂:,
         but
                   Dogon,
                                  M
                                                     go.out=and.SS, ...
    B: wó:dì
         yes
                                           HL 15s31
                        yěy,
                                                       dìmbì-yí-mù
    C: ... búnúgóy
                                  [[mǎ:
                                                                                      y \hat{a} \rightarrow \uparrow ]
                                           HL road]
                                                      follow-MP.Ipfv-Ppl.AnPl and]
         ... group
                         two,
                                 [[dry
                      Llàsà]
                                    dìmbì-yí-mù
         [[nî:
                                                                      yà→1
                                    follow-MP.Ipfv-Ppl.AnPl
         [[water
                      road]
                                                                      and]
    B: wó:dì
         yes
                        HL búnùgòy
    C: /kú
                                           vèv
                                                        kú],
                        <sup>HL</sup>group
         [DiscDef
                                           two
                                                        Prox.Inan],
                            káwá-w
                                                           kù
                            separate.Pfv-Ppl.Inan
                                                           Def
         3ReflPlSbj
    B: wó:dì
    C: It's entrusted to Great God. The opening ("doorway") of Beni, it is entrusted to God
```

 $[\partial r^n \partial^L \quad k \grave{a}:^n] \hat{i}$ :

éw-yé-ŵ

kù,

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.

[dîmbì-yí-mù imperfective participle for animate plural (archaic allomorph, usually dîmbì-yú with zero suffix; â: 3Reflexive plural marking coindexation of relative-clause and main-clause subject §18.2.3; káwá-w perfective participle with inanimate head §14.1.6.1]

```
Llàsà]
(656) C: [nî:
                                      dìmbì-yí-mù
                                                                       kù,
             [water
                          <sup>L</sup>road]
                                      follow-MP.Ipfv-Ppl.AnPl
                                                                       Def.
         [píníw<sup>n</sup>ú
                         và]
                                   [káwrà
                                                     věv1
                                                                kàwà-bò
         again
                        too
                                   [division
                                                     two
                                                                divide.Pfv-3PlSbj
    B: wó:dì
         yes
    C: [né:
                    kày]
                                               lá:té:-rè-Ø,
                                  tă:n
         Inow
                    Top]
                                  three
                                               become.real-Pfv1a-3SgSbj,
                     áyí-m
         áywà,
                                        áyí-m
                                                              v \check{\varepsilon} = n i,
        yes,
                     take-Ipfv
                                        take-Ipfv
                                                              come=and.SS,
                     yì:-rà<sup>L</sup>
                                                                         Lnù:].
         ſú
                                      ŋ̀gú]
                                                    û:
                                                            [bé:nì
                     see-Prog.Ppl<sup>L</sup>
                                                                         Lperson.Pl],
         [2SgSbj
                                      Prox.Inan 2P1
                                                           ſΒ
         [dày<sup>nL</sup>
                        î:
                                         n\acute{u}-\grave{w}^n
         [way^L]
                         1PlSbj
                                         go.in.Pfv-Ppl.Inan]
         [màndé
                                             gŏ-w],
                        3ReflPlSbj
                                             go.out.Pfv-Ppl.Inan]
         [M
    B: nâ:m
        yes
    C: éw-yé-m
                            éw-vé-m
                                                                 múnwîl
                                                 yĚ
                            sit-MP-Ipfv
         sit-MP-Ipfv
                                                                 M
                                                 come
    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-mì áyí-mì (and éw-yé-mì éw-yé-mì) backgrounded imperfective clause §15.2.1.4;  $\dot{u}$   $\dot{y}$ ì:- $\dot{r}$ à  $\dot{\eta}$ g $\dot{u}$  'this that you see' with participle tone-dropped before demonstrative  $\dot{\eta}$ g $\dot{u}$  §14.1.9, participle here in animate plural form perhaps referring to population (of village);  $\dot{d}$ à $\dot{y}$ <sup>n</sup> heading a manner adverbial clause §15.2.3; "Mande" refers to the Mande Empire of Sundiata in southern Mali]

(657) C: 
$$m \dot{u} n w \hat{i} l$$
,  $k \dot{u} = \dot{m}$   $n \dot{i}$ ,  $n \dot{u} w^n \partial y^n$  [[ $b \hat{e} : n \ ^L t \hat{i} : r \dot{a} : ]$   $^L w \partial^t J$  M, DiscDef=it.is and, now [[B  $^L f amily.name$ ]  $^L in$ ],

```
ká:-kùn-wà-nàm
kà:gŏy
           mòrògŏy,
                                                      bà,
                         mouth-be.in-?-difficult
Kagoy
           Morogoy,
                                                      Quot,
sénér<sup>n</sup>é-ìsé-bèrè-Ø
                                  wà,
S-village-get.Pfv-3SgSbj
                                  Quot,
\int \hat{a} - n = \hat{i}:
                     lòrò-Ø
                                                        mà]
[man-HumSg=Foc be.pregnant.Pfv-3SgSbj
                                                        Q]
                          lòrò-Ø
                                                          mà]
[n\varepsilon - n = \hat{i}:
                         be.pregnant.Pfv-3SgSbj
                                                          Q]
[woman-HumSg=Foc
lórú-lòrú-kúrê:
                               pŏ:
                                              kù,
pregnant-pregnant-belly
                               knife
                                              Def,
          múnwîl
                                       déyá-w
íyé
                         yá
today
                         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-boythat-she-is-pregnant-with-or-Is-it-a-girl-that-she-is-pregnant-with? The pregnantbelly-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:gŏy and mòrògŏy are common in Beni; kà:gŏy is here etymologized as Jamsay ká: 'mouth' plus gŏ-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 năm 'difficult'; stative yá déyá-w' it is set down' §10.2.1.10]

```
[bèlè<sup>L</sup>
(658)
         S: [múnwîl
                               kù]
                                                              án-dá: ] = m
                                            [side<sup>L</sup>
              [M
                               Def]
                                                              where?]=it.is
    C: [múnwîl
                      kù]
                                [wá:lè
                                            ló:-rè-ẁ
                                                                     dè]
         ſΜ
                      Def
                                [W
                                            go-Pfv1a-2SgSbj
                                                                     if]
         [múnwîl
                           16-w]
         M
                           go.Pfv-2SgSbj]
    B: wó:dì
                            p\acute{a}:m\acute{\varepsilon}-\grave{y}^n
                            understand.Pfv-1PlSbj
         yes
                                   <sup>HL</sup>múnwìl
                    [[kú
    C: áywà
                                                   kù1
                                                                wó],
                                   ^{\text{HL}}M
         well
                    [[DiscDef
                                                   Def
                                                                in],
                                                                déyá-ẃ,
         [íyé
                     'úsù
                              kálà] [pŏ:
                                               kù] yá
                  HL day
         [today
                             also] [knife Def] Exist
                                                                be.set.down.Stat-3SgSbj,
    B: wó:dì
         yes
    C: íyé
                        [[úrò
                                           kù]
                                                              wó],
                       [[house
                                          Def]
         today
                                                              in]
         [àsùw<sup>n</sup>è<sup>L</sup>
                          \tilde{a}m = \emptyset
                                               d\hat{u}md\hat{s}:-\hat{m}=\emptyset
                                                                      mà,
         [boy<sup>L</sup>
                          who?=Foc]
                                               last-AnSg=it.is
                                                                      Q,
         [púmbérè
                                dó-m
                                                            dè]
         [ritual.ground
                                arrive.Ipfv-3SgSbj
                                                           if]
                                                  dàrìyí-w
                                                                                      dè]
         [[íyé
                     kálà]
                               ſpŏ:
                                         kù]
         [[today
                                                 carry.on.shoulder.Pfv-3SgSbj if]
                     even]
                               [knife
                                         Def
```

- C:  $k\acute{u} = \grave{m}$   $l\acute{e}r\acute{l}\grave{e}r\grave{i}-k\acute{u}r\acute{e}y\acute{e}$   $[p\check{o}: k\grave{u}] = \grave{m}$  DiscDef=it.is LLK [knife Def]=it.is
- *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 <u>he</u> [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  $w\phi$  H-toned after definite  $k\dot{u}$  §8.4.2;  $\ddot{a}m = \emptyset$  'who/which is it?', i.e.  $\ddot{a}m$  plus 'it is' (=focus) clitic;  $d\dot{a}r\dot{i}y\dot{i}-\dot{w}$   $d\dot{e}$  clause with  $-\dot{w}$   $d\dot{e}$  §15.2.1.2]

```
(659)
         B: bày
                        ſî:
                                      nù:
                                                     kú
                                                                néy<sup>n</sup>],
                        [1PlPoss
                                      person.Pl
                                                     Def
              so
                                                                now],
         [àŋây<sup>n</sup>
                           Lpày<sup>n</sup>]
                                            k \acute{a} w \acute{a} = \acute{n},
                           <sup>L</sup>Inst]
         [how
                                            separate=and.SS,
                                                             èw-yè-bà]
         [[gǎm
                        kù]
                                        kárá
                       Def]
                                        K
                                                             sit-MP.Pfv-3PlSbj]
         [[certain
                                                  Lwò]
         [[gǎm
                                      [vúlì
                                                               èw-yè-bà]
                          kù]
                                                  Lin]
                                      ſΥ
                                                               sit-MP.Pfv-3PlSbj]
         [[certain
                          Def]
    C: áywà,
                      kárá
                                    gŏ-m̀
                                                                kù
                                                                            yà→ ...
         yes,
                      K
                                    go.out.Pfv-Ppl.AnSg
                                                                Def
                                                                            and ...
    B: wó:dì
         yes
    C: ... áywà,
                         ὴgú-dá:
                                         yě-m
                                                                    kù
                                                                            yà→
                         around.here
                                         come.Pfv-Ppl.AnSg
                                                                   Def
         ... yes,
                                                                            and
    B: nâ:m
         yes
                        tùw<sup>n</sup>5†1
                                                    tùw<sup>n</sup>51
    C: [nàr<sup>n</sup>á
                                      ľbš:
         [mother
                        one
                                      [father
                                                    one
    B: já:tì
```

- 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; găm ~ gàmbú 'certain one(s)' repeated to denote two parallel subsets §6.3.2; Kara and Youli were villages near Beni; perfective participle with -m for animate singular head NP §14.1.6.1;  $\dot{\eta}g\dot{u}$ -dá: 'around here, this way' §4.4.2.1; NP conjunction with repeated  $ya \rightarrow \S7.1.1$ ]

```
(660) C: áywà
                                            lò-m
                                                               bá,
                             VĚ
                                            go-Hort
                                                               Ouot,
             yes
                             come
         [mba
                         kù
                                   kày]
                                              [[á
                                                            má:
                                                                             kày]
                                              [[3ReflSg QuotSbj
         [FarDist.Sg
                         Def
                                  Top]
                                                                             Top]
                        yì:-rà-ẁ<sup>L</sup>
                                                        ὴgú]
                        see-Prog-Ppl.Inan<sup>L</sup>
                                                       Prox.Inan]
         [2SgSbj
         kárá:-rè
                                              nà→]
         be.independent-Pfv1a-3SgSbj
                                              just]
         [[á
                       má:
                                    kày]
                                              ló
                                                      béré-m-dó]
                                                                             wá
                                                      can-Ipfv-Neg]
         [[3ReflSg
                       QuotSbj
                                   Top]
                                                                             Quot
                                              go
    B: xxx
         [inaudible]
    C: [ŋgú
                        wó]
                                [kú
                                              nây<sup>n</sup>]
                                                         hèddè-∅
                                                         remain.Pfv-3SgSbj
         [Prox.Inan
                        in
                                [DiscDef
                                              Inst]
    B: wó:dì
         yes
    C: kú
                                 h \dot{\varepsilon} dd \dot{\varepsilon} = n \dot{\varepsilon},
                       \varepsilon r^n \varepsilon
         DiscDef
                       3Sg
                                 remain=and.SS,
                    <sup>L</sup>lòsù
                                             [má:bà
                                                           bè] ...
         ſî:
                                 bé]
         [1PlPoss Luncle
                                 P1]
                                             ſΜ
                                                           P1] ...
    B: wó:dì
         yes
                                  HL dòsù l
                                                Lwò]
    C: ... y \check{\varepsilon}
                       [[bû:
                                                            èw-yè-bà
                       [[3PlPoss HLbeside]
                                                Lin]
         ... come
                                                            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: ... 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  $mb\acute{a} \sim m\acute{b}\acute{a}$  in obviative indexical function §4.4.1; u yì:-rà-w<sup>L</sup>  $\eta gu$  'this one that you-Sg see' has inanimate-head perfective participial form, see §14.1.6.1 and §14.1.2, here also L-toned before demonstrative  $\hat{\eta}g\hat{u}$ ; clause-final  $n \stackrel{\rightarrow}{a} \rightarrow \S19.3.4$ ; quotative subject particle  $m \stackrel{\leftarrow}{a}$ :  $\S17.1.1.1$ ; verb  $b \stackrel{\rightarrow}{e} r \stackrel{\leftarrow}{e}$  'get, obtain' meaning 'can, be able to' with a preceding chained VP §17.4.3.1;  $= n\hat{\epsilon}$  variant of

```
Lnù:]
(661) C: áywà
                       \partial r^n \partial :-d\acute{a}n\acute{a}^{\dagger}.
                                          [bê:n
                                                                      là:mè-b5<sup>†</sup>,
                                                    Lperson.Pl]
                                                                     govern.Pfv-3PlSbj,
             yes
                       territory,
                                          ſΒ
         š:,
                                              bé]
                                                       là:mè-bò,
                                  lòsù
                                Luncle
         uh,
                  [1PlPoss
                                              P1]
                                                       govern.Pfv-3PlSbj,
    B: wó:dì
         yes
                                  HL úsù-dèr<sup>n</sup>ì:
    C: hâl
                    [iyé
                                                        \eta g u],
                                  <sup>HL</sup>day
                                                       Prox.Inan]
                    [today
         until
                       <sup>L</sup>lòsù
         ſî:
                                     b\hat{e}:]=\emptyset
                                                        \hat{\mathfrak{I}}:=\emptyset-b\mathfrak{I}
                       Luncle
                                                       Hogon=it.is-3PlSbi
         [1PlPoss
                                     Pl]=Foc
    B: wó:dì
         yes
    C: [[òr<sup>n</sup>ò:-dáná
                                                   <sup>L</sup>sàw
                           yá→]
                                     [tëy
                                                             yà→1
                                                                        cêm]
                                     [language
                                                   <sup>L</sup>trust
                                                             and]
                                                                        all]
         [[territory
                           and
         [[[bê:n
                                     nà→1
                                                wò1
                                                        bù-Ø
                     Lperson.P1]
                                                       be-3SgSbj
                                     just]
         [[B]
    B: já:tì,
                          pá:mέ-ỳ∴
                                                        kòy
                          understand.Ipfv-1PlSbj Emph
         exactly,
    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.
    C: Both the territory and the entrusting of the words are in the hand(s) of the people of
         Beni.
    B: Exactly. We understand.
     [[... b\hat{e}:]=\varnothing focalized form of plural b\hat{e} §6.6; =\varnothing-b\delta 'they are ...' §11.2.1.3; NP-final
     nà→, slightly emphatic 'just' §19.3.4]
(662) C: [bê:n]
                                      yĕ:-rè-Ø
                                                                   dè,
                       dá:]
                                                                   if.
              [B
                       around]
                                      come-Pfv1a-3SgSbj
                                          k\acute{u} = \grave{m}
         mòrògŏy<sup>†</sup>,
                            kà:gŏy
                                                            bù-∅
         M(name),
                           K(name)
                                         DiscDef=it.is
                                                            be-3SgSbj
    B: wó:dì
         yes
                                          à:wàndú†,
                                                            mé:má
    C: [wá:lè
                    kù]
                                wó.
         [W
                    Def]
                                in,
                                                            M
                                         Α,
    B: mŭ:
                        bè
                                     yěy
                        P1
         Prox.An
                                     two
    C: b\hat{u} = \hat{m}
                       kásárú†,
                                       à:dúró:
                                                       yá
         3Pl=it.is
                       K,
                                       0
                                                       and
    B: wó:dì
         yes
    C: [1
                      kày]
                                   1SgPoss. HLknowledge
         [1Sg
                      Top]
                                  Prox.Inan=Foc
```

= ni different-subject subordinator §15.1.10; plural  $b\dot{e} \sim b\dot{e}$  §6.6;  $[[X]^{HL}d\acute{o}s\grave{u}]^{L}w\grave{o}]$  'next

to X' §8.4.6]

- 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).

[mŭ: bè 'these' §4.4.1, here followed by a numeral 'two'; jŭwô 1Sg possessor form of júwô 'knowledge', whose basic possessed form is also júwô with overlaid HL tone]

- (663)B: [[à:dúró: kù yà→], [kásárú kù yà→ yà] [[O]]Def and], ſΚ Def and also [[nàr<sup>n</sup>á tùw<sup>n</sup>5<sup>†</sup>] [bš: tùw<sup>n</sup>5]] gùy<sup>n</sup>-bà [[mother say.Pfv-3PlSbj one [father one bày yà] mà also] how=it.is O so [DiscDef
  - <sup>L</sup>nù:] ήgòy C: ávwà. û: Гbê:n bù-ŵ∴ gà, Lperson.Pl] here's 2P1 ſΒ be-2PlSbi Emph, yes,  $^{L}s\grave{a}w] = \emptyset$  $^{L}s\grave{a}w^{\dagger}] = \emptyset$ [kú kày] [jǐnjê [û: kòy Ltrust]=it.is Ltrust]=it.is [DiscDef Top] [God [2PlPoss **Emph**
  - B:  $[i \quad k\acute{a}l\grave{a} \quad d\grave{e}] \quad [k\grave{b}:^{n^{L}} \quad y\^{a}: \quad i \quad n\check{u}-\grave{w}^{n} \quad d\acute{e}y]$ [1Sg also if] [thing<sup>L</sup> there 1SgSbj 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 ŋgòy '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)]
- (664)S: *wâ:y*, [[á má:] kárá:-rè nà→] QuotSbj] be.independent-Pfv1a grandpa, [[3Sg just] ló-ṁ-dó-Ø  $g \dot{u} y^n - \emptyset$ , go-Ipfv-Neg-3SgSbj say.Pfv-3SgSbj, HL kórð] [[kárá:-rè kù]  $\hat{n}j\hat{e}:=\emptyset$ HL meaning] what?=it.is [[be.independent-Pfv1a Def] C: kárá:-rè kù. [be.independent-Pfv1a Def. *yì:-rà-ẁ*<sup>L</sup> dê:] [[[í ſú ὴgú→] Top] see-Prog-Ppl.InanSg Prox.Inan] [[[1Sg [2SgSbj <sup>HL</sup>pírè] HL**kórð]** [ùrò-m<sup>b</sup>ŏ: kárá:-rè] HL inside] HL meaning] [doorway be.independent-Pfv1a] nŭ-jέ-ẁ tán. hear-RecPf-2SgSbj if, [nù<sup>L</sup>  $\check{a}w$ - $s\grave{o}$ - $l\acute{o}$ - $\grave{m}$ ] = m- $\grave{i}$ : í 1Sg [person<sup>L</sup> accept-Reslt-Neg-Ppl.AnSg]=it.is-1SgSbj

```
B: \acute{a}r^n\grave{a}-m
                           tángí:-rè-Ø
     man-AnSg
                          become-Pfv1a-3SgSbi
                                                            /k3:nL
C: [nŭ-m
                         g\hat{\mathbf{u}} = n\hat{\mathbf{a}}\mathbf{v}^n
                                                                           kâ:n]
                                          lă-w
                                          other-Inan
                                                            [thing<sup>L</sup>
     [person-AnSg for]
                                                                           any]
                    injiri-m]
                                                 bôy
                                                            yâ:
                                                                        ὴgó-Ø,
                    get.up.Ipfv-1SgSbj]
                                                 all
                                                            there
                                                                        not.be-3SgSbj,
     [1SgSbj
     k\acute{u} = \grave{m}
                           kárá:-rè-Ø.
     Inan=it.is
                          be.independent-Pfv1a-3SgSbj
B: p\acute{a}:m\acute{\varepsilon}-w^n\acute{u}-\grave{w}^n
     understand-Pass-3SgSbj
C: à nhán
     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.

[ $w\hat{a}:y$  'grandpa!' (vocative); the contextual sense of the verb  $k\hat{a}r\hat{a}$ - (homophone and folk-etymological source of village name  $k\hat{a}r\hat{a}$ ) 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  $d\hat{e}$ : after a pronoun is typical of this speaker; noun  $k\hat{o}r\hat{o}$  'meaning' here is possessed by the preceding factive-quotative phrase;  $n\hat{j}\hat{e}:=\emptyset$  'it is what?' §13.2.3;  $p\hat{i}r\hat{e}$  'inside' §8.4.3;  $t\hat{a}n$  'if' §16.2.2;  $-s\hat{o}-l\hat{o}$ - negative of resultative  $-s\hat{o}$ - §11.5.1, here in participial form §14.1.6.3;  $l\hat{a}-w$  is adverbial 'otherwise, further' (here, as often), §4.5.1;  $b\hat{o}y$  for  $w\hat{o}y$  'all' after a nasal, §6.8..1; passive  $-w\hat{u}-w$  §9.3]

```
(665) B: [1
                      kálà]
                                                                        déy,
             [1Sg
                      also]
                                 1Sg
                                             hear.Pfv-Ppl.Inan
                                                                       if.
        [kárá
                        kù]
                                      wó.
        ſΚ
                        Def]
                                      in,
                                                          dùwò-bò,
        [gǎm
                      kù]
                                       vâ:
                                                          leave.Pfv-3PlSbj,
        [certain
                      Def]
                                       there
        [gàm<sup>L</sup>
                           kà:n7
                                           ínjírí-mà
        [certain<sup>L</sup>
                                          get.up.Pfv-Ppl.AnPl
                          Rel
        [[ònjŏ-m
                                          [dèrě-m
                                                                yá→]
        [[younger.sib-AnSg and]
                                          [elder.sib-AnSg
                                                               and]
         ínjírí-mà
                                     kù,
                                     Def.
        get.up.Pfv-Ppl.AnPl
        [[bû: Lmà:]
                                    ^{L}w\dot{o}] y\check{\varepsilon}=\acute{n}]
                                                               èw-vè-b5
                             [yúlì
                                     Lin]
        [[3Pl <sup>L</sup>QuotSbj] [Y
                                            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:*<sup>n</sup> 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 tone-dropped as relative head NP §14.1.3]

```
Lwò]
(666)
          B: [yúlì
                                 y \check{\varepsilon} = \acute{n}
                                                       bû:
                                                                  \acute{e}w-y\acute{e}=nì,
                         <sup>L</sup>in]
              [Y
                                 come=and.SS] 3PlSbj
                                                                  sit-MP=and.DS,
                      \int \varepsilon r^n \varepsilon
          áywà
                                  kù]
                                              [dèrě-m
                                                                     kù],
         yes
                      [3Sg
                                 Def
                                              [elder.sib-AnSg
                                                                   Def].
          d\check{a}nn\grave{a}-m=\emptyset
                                    bà.
          hunter-AnSg=it.is
                                    Quot,
                                                   yárá-m yárá-m
                                                                             injiri = ni^{\dagger},
          dănnà-m
                           yárá-m
          hunter-AnSg walk.around-Ipfv (repetitions)
                                                                             get.up=and.SS,
                      HĽ ló:lù
          ΠόΙόν
                                          ngú]
                                                                 pírè]
                      ^{\rm HL} valley \\
          []O
                                          Prox.Inan]
                                                                 inside
                              sí-vé-w,
          á
          3ReflSgSbj
                              go.down-MP.Pfv-Ppl.Inan,
                     Lwò] sóró
          [úlì
                                                    á
                                                                     láwá-w,
                     Lin] penetrate.through 3ReflSgSbj pass.Pfv-Ppl.Inan,
          [forest
          [[tɔ́rɔ̀
                         kù]
                                wó] yě
                                               \dot{u}r\dot{j} = ni
                                                                  \varepsilon r^n \varepsilon
                                                                             k\acute{a}v^n=n\grave{i},
          [[mountain Def] in] come go.up=and.SS 3SgSbj do=and.DS,
                                    \varepsilon r^n \varepsilon
          [bòlô:
                         kù]
                                                  tin = ni,
          [below
                         Def
                                                  look=and.DS.
                                    3SgSbj
          [ór<sup>n</sup>∂
                               έndêm→,
                                                  ὲsú
                                                              bû:-Ø
                                                                            sánné,
                     kù]
          [place
                     Def]
                               pleasant,
                                                              be-3SgSbj very,
                                                  good
          ∫òr<sup>n</sup>ò<sup>L</sup>
                        wárá-vèl
                                                             èsú
                                                                       bû:-Ø
          [place<sup>L</sup>
                       do.farm.work.Ipfv-3PlSbj]
                                                                       be-3SgSbj
                                                             good
     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.

[ $y\acute{a}r\acute{a}-\grave{m}$  repeated as background durative §15.2.1.4;  $\acute{e}nd\^{e}m \rightarrow$  expressive adverbial §8.6.7; adjectival predicate with  $b\^{u}$ - 'be' §11.4.1; nonspecific 3Pl subject  $-y\grave{e}$  in compounds §5.1.9 and §14.1.6.2]

```
B: [mànî: kù kálà dè] [\partial r^n \partial^L
                                                          éw-yé
(667)
                                                                    jíyé-yè],
               [above Def also if] [place<sup>L</sup>
                                                          sit-MP kill.Ipfv-Ppl.AnPl],
          hà:
                                       kù]
                                                 kú
                                                           l\acute{a}:t\acute{\epsilon}=n\grave{i}.
                    ſὴgú
          well
                    [Prox.Inan
                                       Def
                                                 Inan
                                                           become.real=and.DS.
                                         [tèmbèrù L
                                                              tùw<sup>n</sup>5],
          áywà
                          yâ:
                                         [brick<sup>L</sup>
                         there
          yes
                                                              one],
```

```
m\check{a}-\grave{w}^{n\dagger}.
    3ReflSgSbj
                       make.brick.Pfv-Ppl.Inan,
    [[tàngày<sup>L</sup>
                ŋ̀gú]
                               wó] á
                                                   dùwó-ŵ
                                                                           kù⁺.
    [[side<sup>L</sup>
                 Prox.Inan in 3ReflSgSbj leave.Pfv-Ppl.Inan Def,
                                          <sup>HL</sup>ónjò-m]
    injiri = ni,
                       ló [á
    get.up=and.SS, go [3ReflSgSbj HL younger.sib-AnSg]find.Pfv-3SgSbj,
                                                 témbú-ŵ
                            kù] á
                                                                         kù.
    [younger.sib-AnSg Def] 3ReflSgSbj find.Pfv-Ppl.Inan
                                                                         Def,
    áywà
                    t\acute{e}r\grave{e}w = \emptyset
                                       wà.
                    truth=it.is
                                      Quot,
    yes
                            όr<sup>n</sup>ὸ kú-dá:
                má:]
                                                           yì-sò-ŵ
    Γá
                                                    yá
                                                                           wà,
    [3ReflSg QuotSbj] place there.DiscDef Exist see-Reslt-Ppl.Inan Quot,
     \partial r^n \partial^{\mathrm{L}}
                                                  kú-dá:
                    éw-yé-yè
    place<sup>L</sup>
                   sit-MP.Ipfv-3PlSbj
                                                  there.Def
               yì-sò-ŵ
    yá
                                          wà.
    Exist
               see-Reslt-Ppl.Inan
                                          Quot,
B: On top too, an excellent place for them to settle. When that had taken place, well, he
```

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.

[jìyé- 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; yì-sò-w is an L-toned version of yǐ-só-w, participle based on resultative -sô- §14.1.6.5]

```
(668)
         B: \epsilon r^n \epsilon
                           g\check{u}y^n=ni,
              3SgSbj
                           say=and.DS,
                                                         sá-ŵ
         [ònjŏ-m
                                kù yà] á
         [younger.sib-AnSg Defalso] 3ReflSgSbj reply.Pfv-Ppl.Inan Def if,
                           HL dérè]
                                              Lmà:,
                           HLelder.sib]
                                              LDat,
         [3ReflSgPoss
         [núw<sup>n</sup>∂y<sup>n</sup>
                                    Γá
                                                       dùwś
                                                                   ti = náy^n
                         kày]
                                    [3ReflSgSbj
                                                                   Perf=then.SS]
         now
                         Top]
                                                       leave
         ló-rέ-ý
                                         Γέr<sup>n</sup>έ
                                                     mâ:]
                                                               lèmdè-∅.
                                wá,
         go-Hort.Neg.3rd
                                Quot,
                                         [3Sg
                                                     Dat]
                                                               beg.Pfv-3SgSbj,
                                                          nè] [bû: bú
                         ſbû:
                                   bú nè]
                                              [bû: bú
         okay Quot, [3PISbj be while] (repetitions)
                                                            t \hat{u} w^n \hat{\jmath} - m
         [ònjŏ-m
                                         kálà]
                                                  [ùsú
                                kù
         [younger.sib-AnSg Def
                                         also]
                                                  [day
                                                            onel
         yárá-m
                                yárá-m
                                                            vě-ŵ
                                [repetition] 3ReflSgSbj go.Pfv-Ppl.Inan Def if,
         walk.around-Ipfv
         [έr<sup>n</sup>έ
                  kálà]
                           [∕ár<sup>n</sup>à
                                      kù]
                                                  vì-Ø,
                  also]
                                      Def
                                                  see.Pfv-3SgSbj,
         [3Sg
                           [place
                                          tiní-\hat{w}^n
         s\acute{\varepsilon}^n \rightarrow
                                                                   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;  $-\dot{w} k\dot{u} d\dot{e}$  §16.1.2, perfective linker  $t\dot{t}$  (here in  $t\dot{t} = n\dot{a}y^n$ ), §15.1.11; QuotImprt negative  $-r\dot{e}-\dot{y}$  §10.5.7;  $b\dot{u}$   $n\dot{e}$ , see end of §15.2.1.2]

```
HL dérè l
                                                               Lmà:1
(669)
          B: //á
                                     HLelder.sib]
                                                               LDat]
                [[3ReflSgPoss
                                                               kù
                                                                          dè,
                               reply.Pfv-Ppl.Inan
                                                               Def
                                                                          if,
          3ReflSgSbj
          ∏ér<sup>n</sup>€
                           má:]
                                            térèw
                                                            tégé-m
                                                                                             bà1
                                                            speak.Ipfv-3Sgs
                                                                                             Quot]
          [[3SgSbi
                           QuotSbj]
                                           truth
           \int \partial r^n \partial^{\mathrm{L}}
                              èw-yè<sup>L</sup>
                                                 èsú]
          [place<sup>L</sup>
                              sit-MP<sup>L</sup>
                                                 good]
           \int \partial r^n \partial^{\mathrm{L}}
                             \varepsilon r^n \varepsilon
                                              gŭy<sup>n</sup>-rà-ŵ
                                                                               kù],
          [place<sup>L</sup>
                             3SgSbj
                                              say-Prog-Ppl.Inan
                                                                               Def]
           Γá
                             má:
                                         kálà] íyé yâ:
                                                                         dŏ-ŵ
          [LogoSgSbj QuotSbj also] today there.Def arrive.Pfv-Ppl.Inan Quot,
           áywà
                     [ŋ̀gú
                                      nây<sup>n†</sup>],
                                                    injiri = n
                                                                          [ùsú
                                                                                   t \hat{u} w^n \hat{\jmath} - m ]^{\dagger},
                      [Prox.Inan Inst],
          yes
                                                    get.up=and.SS [day
                                                                                   one],
          [â:
                                                                 yὲ-bà,
                              yěy]
                                            yâ:
                                           there.Def
                                                                 come.Pfv-3PlSbi
          [3ReflPl
                              twol
```

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.

 $[\partial r^n \partial \hat{e}w - y\hat{e}]$  (tone-dropped by the following adjective) is probably haplologically elided from  $\partial r^n \partial \hat{e}w - y\hat{e} - y\hat{e}$  'a place to sit (=settle)';  $\hat{a}$  occurs in this passage both in logophoric function §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)]

```
(670)
            B: vâ:
                                        bû:
                                                            v\acute{\varepsilon}-r\grave{\varepsilon}^{\dagger},
                  there.Def
                                        3PlSbj
                                                            come-before,
                                                                       ^{\mathrm{HL}}s\dot{\varepsilon}:d\grave{\varepsilon}]
            [[dèrě-m
                                                                                        dùwó-tî:-Ø]
                                      kù] [á
                                                                      HLmarker] leave-Pfv1b-3SgSbj]
            [[elder.sib-AnSg Def] [3ReflSgPoss
                                              \stackrel{\text{HL}}{n\hat{u}-m} = \emptyset
                                                                                       k\acute{u} = \grave{m},
            k\acute{u} = \grave{m}
                               [kásárú
                                              HLperson-AnSg]=it.is
                                                                                       Inan=it.is,
            Inan=it.is
                              ſΚ
                           <sup>HL</sup>sέ:dὲ</sup>
            Γέr<sup>n</sup>έ
                                                                             tèmbù-wù-Ø,
                                                 kù]
                                                             vâ:
            [3SgPoss HL marker
                                                                             find-Pass-3SgSbj,
                                                 Def]
                                                             there
                                                            gá<sup>n</sup>-m-dó-ý
            [[lŏ-ŷ
                                  kù
                                           k \hat{\sigma} v^n
                                                                                                 kòy],
                                  Def
                                                            put-Ipfv-Neg-1SgSbj
            [[go-VblN
                                           Top]
                                                                                                 Emph]
                             ^{\mathrm{HL}}s\acute{\epsilon}:d\grave{\epsilon}
            \int \varepsilon r^n \varepsilon
                                                          yâ:
                                                                       tèmbù-wù-Ø,
                                                kù]
                             ^{\rm HL}marker
            [3SgPoss
                                                Def]
                                                          there
                                                                       find-Pass-3SgSbj,
                                                 n\hat{a}y^{n\dagger}],
            hà:
            well
                          [DiscDef
                                                 Inst],
```

```
[∕ór<sup>n</sup>ờ
Γá
                  sá-wl
                                                             kù]
[3ReflSgSbi
                  reply.Pfv-Ppl.Inan]
                                                             Def]
                                              [place
[yàrí
          mbayô:]
                        [sùmŏy
                                         mbàyô:]
                                                        wà,
          claimed]
                                         claimed]
sky
                        Fland
                                                        Quot,
               nây<sup>n</sup>†,
                            [śr<sup>n</sup>à
ὴgú
                                        kù]
                                                   hèwtè,
Prox.Inan
               Inst,
                                       Def]
                                                   recover.Pfv-3SgSbj,
                            [place
```

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.

[- $r\hat{e}$  'before' §15.2.1.6; - $t\hat{i}$ - perfective-1b §10.2.1.5;  $s\hat{e}$ : $d\hat{e}$  'marker' denotes a sign that lays claim to land;  $\hat{m}^b\hat{a}y\hat{o}$ : is a semantically obscure word (cf.  $\hat{m}^b\hat{a}$  far-distant demonstrative) used in the context of claiming land]

- Lninje] (671)B: [kú-dá: *161* Lgear] [around.there.DiscDef go] [3ReflPlPoss â: bàrá-w kù dè. Def 3ReflPlSbi gather.Pfv-Ppl.Inan if,  $c \hat{\varepsilon} w^n \hat{\varepsilon} - b \delta$ , injiri = ni, áywà  $y \check{\varepsilon} = ni$ , úrò get.up=and.SS, yes come=and.SS, house build.Pfv-3PlSbj, bú [úrò  $c \varepsilon w^n \varepsilon = ni$ bû: yâ: nè, [house build=and.SS] there.Def 3PlSbj be while, àwá lóyó:-r-à:, kù-kòsú, overflow-Pfv1a-3PlSbj, Rdp-viper, snake kúwó-tî:-Ø kù-kɔ̀sú lóyó:-r-à:, dé wôy, Rdp-viper overflow-Pfv1a-3PlSbj, bite-Pfv1a-3SgSbj if all, nì:-[tègìr-î:] sò-ló-Ø, hé!, antivenin have-Neg-3SgSbj, hey!, [ŋ̀gú kày] [Prox.Inan Top]  $[d\grave{a}y^{n^L}]$ dà:yí-m wôy] ngó-Ø wá [way<sup>L</sup> be.suitable.Ipfv-Ppl.Inan not.be-3SgSbj Quot, all]
  - 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 tégírí 'revive, breathe life back into (sb on the brink of death)']

```
Lmà:]
(672)
        B: /kú
                                   Γâ:
                      yà]
             [Inan
                      also]
                                   [LogolP1
                                                    <sup>L</sup>OuotSbi1
         dá:-wó
                       dàrá
                                     ὴgú-dá:
                                                    ùrò-m
                                                                      bá.
         a.little
                                     this.way
                       move.over
                                                    go.up-Hort
                                                                      Quot,
                       HL wáyàtù]
                                        [kú
         [kú
                                                    nây<sup>n</sup>],
                       HLtime]
         [DiscDef
                                        [Inan
                                                     Inst]
```

```
HL nánànà:]
\int \int \partial r^n \dot{\partial}^L
               ngú]
                                                      [kùn-tàwr\hat{a}:]=\emptyset
                                                                                   sóy,
                                HL entirely 1
[[place<sup>L</sup>
              Prox.Inan]
                                                      [rocky.shelf]=it.is
                                                                                   completely,
sùmŏy
                   ὴgó-Ø,
                   not.be-3SgSbj,
land
hà:
            [kú
                         nây<sup>n</sup>]
                                        [[kùn-tàwrá
                                                                 kù]
                                                                                    wó],
well
                                        [[rocky.shelf
                                                                 Def]
            [Inan
                         Inst]
                                                                                   in],
v \check{\varepsilon} = \acute{n}
                                                úrò
                                                                  c \hat{\epsilon} w^n \hat{\epsilon} - b \hat{a}.
                          vâ:
come=and.SS
                          there.Def
                                                house
                                                                 build.Pfv-3PlSbj,
c \varepsilon w^n \varepsilon = ni
                           bû:
                                          bú
                                                         nὲ,
build=and.SS
                           3PlSbi
                                                         while,
                                          be
```

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; *náŋànà:* 'entirety' (possessed form) and *sóy* 'entirely', §8.6.7.5]

```
(673)
        B: yâ:
                               kálà
                                               bèv.
             there.Def
                               also
                                               well,
         áywà
                     wá:jíbì
                                    péyí
                                              pègè-r-á
                                                                            dé.
        yes
                     necessity
                                   post
                                             implant-PfvNeg-3PlSbj
                                                                            if,
                    pègè-r-á
                                                     dé
        péyí
                                                               wôy,
                    implant-PfvNeg-3PlSbi
                                                     if
        post
                                                              all,
                            HL éw-vèl
        ∏ór<sup>n</sup>∂
                                                          bû:-Ø
                   kù]
                                           nŭm
                                                                        wà.
                            HL sit-MP]
                  Def]
                                           difficult
                                                          be-3SgSbj
        [[place
                                                                       Quot,
                                        bě:-rè-∅
        áywà
                      wò
                                                                   dè.
                      in(that)
                                        remain-Pfv1a-3SgSbj
                                                                   if,
        yes
                     <sup>HL</sup> bόηὸ]
         [à:-dùró
                                                 sá-ŵ
                                                                        kù
                                                                              dè.
                                  á
                     HL owner]
        [O
                                  3ReflSgSbj reply.Pfv-Ppl.Inan Def if,
                           <sup>HL</sup> b όη ὸ ]
                                             Lmà:],
        [[kásárí
                          HL owner]
                                             <sup>L</sup>Dat1
        [K]
```

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 {HL} tone overlay; Lwò for [kú wó] 'in that' or the like; compound with 'owner' §5.1.7]

```
(674)
        B: wá:jíbì
                         [péyí kù] \xi r^n \xi = m pégé-m
                                                                            bà
                                                                                  kòy,
             necessity [post Def] 3Sg=it.is implant.Ipfv-3SgSbj Quot Emph,
         sábù
                       [[[ár<sup>n</sup>à
                                   lá-jê:]
                                                      tùlù]
                                                                   wò1
                                   claim-RecPf]
                                                      behind]
         because
                      [[[place
                                                                   in]
         [péyí
                   \varepsilon r^n \varepsilon = m
                                  pégé-m]
                                                                bà.
                   3Sg=it.is
                                  implant.Ipfv-3SgSbj]
         post
                                                                Ouot,
                            kà:"] írù
                                                      c\acute{e}l\acute{e}=\acute{n}
                                                                            bû:-Ø]
         [[yà-gùrɔ̀
                                            gŏ
         [[woman-young Rel] breast go.out be.good=and.SS]
                                                                            be-3SgSbj]
```

```
séllé-só-m,
be.healthy-Reslt-3SgSbj,
                                           <sup>L</sup>wò] bĕ:-rè-Ø
         [núw<sup>n</sup>ɔ̂y<sup>n</sup>
                       kày]
                               [áηày<sup>n</sup>
                                                                            dè.
                                           Lin]
                                                  remain-Pfv1a-3SgSbj if,
yes
         Inow
                       Top] [thus
                                                     HL dû:1
Γá
               má:]
                            [[péyí
                                         kù]
                                                    HL load]
[3ReflSg
               QuotSbj] [[post
                                         Det]
dŭ-jê:
                                    wà.
carry.on.head-RecPf-3SgSbj
                                    Quot,
```

B: (Younger brother said:) <u>He (=elder)</u> [focus] would perform the sacrifice, because after (=since) he (=older) was the first to claim the place, <u>he (=elder)</u> [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 3Sg subject  $-\dot{m}$  §13.1.1;  $s\acute{a}b\grave{u}$  'because' §17.5.2.1; possessor relative 'a young woman whose ...', this passage discussed in §14.4;  $[X^{\text{HL}}t\acute{u}l\grave{u}]^{\text{L}}w\grave{o}]$  'after X' §8.4.8]

```
(675)
          B: \int d\check{u} - j\hat{\varepsilon}:
                                                 wà1
                                                                           g\check{u}y^n = ni,
                                                                           say=and.DS,
               [carry.on.head-RecPf
                                                 Quot]
                                                           3SgSbj
                                                <sup>L</sup>wò]
                         díy<sup>n</sup>à]
                                     [áŋày<sup>n</sup>
                                                          bě:-rè-∅
                                                                                          dè,
                                                 Lin]
          [person<sup>L</sup>
                         big.Pl]
                                    [thus
                                                          remain-Pfv1a-3SgSbj
                                                                                         if,
          [jìy\hat{\varepsilon} = n\acute{a}y^n
                                                                              wá
                                                                                       kŏy⁺,
                                 nì]
                                          pégé-m-n-é
          [kill<sup>L</sup>=then.SS
                                          implant-Ipfv-Neg.3PlSbj
                                                                             Quot Emph,
                                 (?)
                       HL wó]
                                 [śr³à
          ľúw<sup>n</sup>5
                                                  gànjí-yè]
                                                                             wà
                       ^{\text{HL}}in]
          [life
                                  [place
                                                  put.Ipfv-3PlSbj]
                                                                            Quot
                                  w^n \partial n \dot{u} - r^n u - \dot{m}
                                                                        bà.
          [hâl
                      ló
          [until
                                  deep-Inch.Ipfv-3SgSbj]
                                                                        Quot,
          yâ:
                                                    g\acute{a}^n-y^n\grave{\varepsilon}
                                                                             wà.
          3Sg=Acc
                               there.Def
                                                    put.Ipfv-3PlSbj
                                                                            Ouot,
                                          ^{\rm HL}dây^n
                                                          dó-m
                                                                                       bà,
          hâl
                      ſὴgú
                                          HL way]
          until
                      [Prox.Inan
                                                          reach.Ipfv-3SgSbj
                                                                                       Quot,
          bìy<sup>n</sup>ĭ
                          dúwó-yè
                                                       wà,
                          leave.Ipfv-3PlSbj
          cover.up
                                                       Ouot,
                                                                        HL iâm l
          [ìsê:
                               Lmà:]
                       kù
                                                Γá
                                                                        HL well.being]
                               <sup>L</sup>QuotSbj]
                                                [3ReflSgPoss
          [village
                       Def
          bέrέ-m
                                      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 *ni* with no clear grammatical function, §15.1.10]

```
(676)
         B: èsú
                           bû:-Ø
                                              wà,
                           be-3SgSbi
              good
                                              Quot,
                           HL bɔ̂:-ùrò
         [á
                                                 ŋ́]
                                                                   jâm
                          HL father-house
         [LogoSgPoss
                                                 Prox.Inan]
                                                                   well.being
         bì-béré-m
                                        dé
                                                       wôy,
         Rdp-get.Ipfv-3SgSbj
                                        if
                                                       all,
                                                           HL kû:-dù:]
                       kálà]
                                   [[kú
                                               kù]
         Γá
                                                           HL head-load]
                       also]
                                   [[Inan
                                               Def]
         [LogoSg
         dŭ-jê:
                                               wà,
         carry.on.head-RecPf
                                               Quot
                              pây<sup>n</sup>], ér<sup>n</sup>é kásárí <sup>HL</sup>yá:-yì-m
                                                                                 k\dot{u} = \dot{n}^{\dagger},
                [ŋ̀gú
                                                    HL woman-child-AnSg
         well [Prox.Inan Inst], 3Sg K
                                                                                 Def=Acc.
                                ^{\rm HL}t\hat{a}:y^n
         [[yà-sùmɔˇy<sup>n</sup>
                                                 kù]
                                                             wó],
                               ^{\rm HL}shed
         [[Y]]
                                                 Def]
                                                             in]
                                  \varepsilon r^n \varepsilon
         y\hat{a}:=\hat{n}
                                                    pègè-bà
         there.Def=Acc
                                  3SgObj
                                                    implant.Pfv-3PlSbj
    C: já:tì
         exactly
                  n\hat{a}y^n = nil^{\dagger}
                                      bé:nì
                                               bèré
    B: /kú
                                                        èw-yè-∅,
                  Inst=Acc],
                                               get
                                                        sit-MP.Pfv-3SgSbj,
         [Inan
                                     В
                   ^{\mathrm{HL}}úsù
                                                              HL wó]
         [íyé
                                kálà]
                                                 [kú
                                                                            bù-ỳ∴
                                                              HLin]
                   <sup>HL</sup>day
                                                                           be-1PlSbj
         [today
                               also]
                                                 [Inan
    C: já:tì
         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.
     [\acute{\eta}] reduced from \grave{\eta} g \acute{u} proximal inanimate demonstrative, §4.4.1; reduplicated
     imperfective §10.2.2.2; accusative = \hat{n} with direct object, then again with focused y\hat{a}:
      'there' §8.2; bèré 'get' as nonfinal verb in chain means something like 'acquire (the
     means) to ...']
                                gây<sup>n</sup>→1
(677)
         B: /ŋgú
                                              n\hat{\mathbf{u}}-\hat{\mathbf{y}}^n,
                                                                    [kú
                                                                               yà]
              [Prox.Inan
                               like]
                                              hear.Pfv-1SgSbj,
                                                                    [Inan
                                                                               also]
                                                                        ^{\rm HL}sâw]=\varnothing
         [jǐnjè
                  ^{L}saw = \emptyset
                                   dé:] [ú
                                                 kálà]
                                                           [2SgPoss HLtrust]=it.is
                   Ltrust]=it.is
                                   if]
                                          [2Sg also]
         [God
                                       HL s\hat{a}w] = \emptyset,
    C: [[jǐnjè
                                                             \dot{a}\eta \dot{a}y^n = \dot{m}
                      òγò-ná:m]
                                        HLtrust.]=it.is,
                                                             thus=it.is
         [[God
                      Almighty]
    B: nâ:m
         yes
    C: jĭnjê
                            sú:rè-ỳ
         God
                   1PlObj preserve-QuotImprt
    B: àmî:n
```

amen

```
n\acute{a}:-w^n\grave{\imath}-\grave{v}^n
                                                                k\dot{u}] g\check{u}^n-\dot{w}^n
    D: [á
         [LogoSgObj spend.night-Caus-QuotImprt Def] say.Pfv-Ppl.Inan
                                               ná:—.
    C: \partial^n h \delta^n,
                           á
                           LogoSgObi
         uh-huh,
                                               spend.night—,
                                n\acute{a}:-w^n\grave{\imath}-\grave{y}^n\widecheck{\jmath}
         [LogoSgObj
                                spend.night-Caus-QuotImprt]
          \varepsilon r^n \varepsilon
                                                          kù
                          say.Pfv-Ppl.Inan
                                                          Def
         3SgSbj
    B: é:
                      kú
                                                         dò-bò
                                      ăγ
                      Inan
                                      take
                                                         burn.Pfv-3PlSbj
         yes
    C: háyà,
                                             n\acute{a}:-w^n\grave{\imath}-\grave{v}^n]
                         Γá
         well,
                        [LogoSgObj
                                            spend.night-Caus-QuotImprt]
                        g\check{u}^n-\mathring{w}^n
          \varepsilon r^n \varepsilon
                                                       kù
         3SgSbj
                        say.Pfv-Ppl.Inan
                                                       Def
    B: já:tì
         exactly
                         kú
                                       k\acute{u} = \grave{m}
    C: háyà,
                                       Inan=it.is
         well,
                        Inan
    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 -\(\darkapprox\) \§ 10.5.7; verb
    n\acute{a}:-w^n\acute{t}- is morphologically the causative of n\acute{a}:- '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]
         C: \int t \hat{u} w^n \hat{\jmath} - m
                                              Lmà:†]
(678)
                                   kù
                                  Def
                                              <sup>L</sup>QuotSbj]
               [one-AnSg
                        yì:-rà-ẁ<sup>L</sup>
          ſú
                                                       ngú]
                        see-Prog-Ppl.Inan<sup>L</sup>
                                                      Prox.Inan]
         [2SgSbj
                                                              Lmà:]
```

kù

<sup>L</sup>QuotSbj]

[kú

[Inan B: wó:dì ves C:  $j \partial \eta g \hat{\mathbf{u}} - \hat{\mathbf{m}} = \emptyset$ 

tégé-m

heal.Agent-AnSg=it.is Quot

speak.Pfv-Ppl.AnSg Def

bà

```
heal.Agent-AnSg=it.is
    C: jòŋgú-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]
                                        kárá:kíndé:
(679) C: [ \epsilon r^n \epsilon = m = n i ]
                                                             k\acute{u} = \grave{m}
              [3Sg=Foc=Acc]
                                                             Inan=it.is
                            k\acute{u} = \grave{m},

\varepsilon r^n \varepsilon = \dot{m}

                                                           j \partial \eta g \acute{u} - \grave{m} = \emptyset
    B: kárá:kìrí:
         K
                            Inan=it.is,
                                           3Sg=Foc
                                                           healer-AnSg=it.is
    C: é→
         yes
    B: wó:dì, wó:dì
         yes,
                   yes
    C: \grave{a}m^b\acute{a}
                                 kù
                                               y \hat{a} - s \hat{u} m \check{o} y^n = \hat{m},
         FarDist.Sg
                                Def
                                               Y=it.is
                                      kóró:-rè-Ø
         háyà
                       [yǎr
                                                                   tán]
         well
                                      dry.up-Pfv1a-3SgSbj
                       [sky
                                                                   if]
                             ná:-w<sup>n</sup>ì-ỳ<sup>n</sup>]
         Γá
                                                                   wà
                             spend.night-Caus-QuotImprt] Quot
         [LogoSgObj
    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.
      [\not \epsilon r^n \not \epsilon = \vec m = n \vec i] with focus = \vec m plus, apparently, accusative = n \vec i 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]
                                                                    k\dot{u}] HL n\hat{i}: 1
                                                                                      Lwò],
                                 n\acute{a}:-w^n\grave{\imath}-\grave{v}^n
(680)
         C: [[[á
              [[[LogoSgObj spend.night-Caus-QuotImprt Def] HL cause]
                                                                                      Lin]
                                  <sup>ĦL</sup>dáw<sup>n</sup>à
          ívé
                   [kú
                                                 kù]
                                                          vě:-rè-Ø
                                                                                      dè,
                                 HL matter
         today
                   [DiscDef
                                                 Def]
                                                          come-Pfv1a-3SgSbj
                                                                                      if,
         áywà
                          nij\hat{e} := \emptyset
                                                 k\acute{u} = \grave{m}.
                          what?=foc
                                                 Inan=it.is
         yes
```

B:  $j \partial \eta g \hat{u} - \hat{m} = \emptyset$ 

[song:]  $iy\acute{e}$   $y\grave{a}$ -sùm $\acute{o}y^n$   $\acute{u}ng\acute{u}r\acute{o}$   $w\acute{a}$  today Y get.up.Imprt Quot

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  $w\acute{a}$ , here and below, is arguably external to the song proper]

(681) C:

[song:] kárá:kìndé: úŋgúró wá,
[yá yǎ:-ŷ] [yá yèré-ŷ]
kárá:kìndé: úŋgúró wá
yà-sùmŏy<sup>n</sup> hà:hây wà
yà-sùmŏy<sup>n</sup> 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.

- (682)B: *já:tì*, *té→*  $anay^n = m$ kòy, exactly thus=it.is Emph, exactly, gây<sup>n</sup>→ té→]  $n\hat{\mathbf{u}}$ - $\hat{\mathbf{y}}^n$ :.] [[ŋgú [[Prox.Inan like exactly] hear.Pfv-1PlSbj]  $^{\mathrm{HL}}m^{b}\hat{o}:J$ //nù<sup>L</sup> díy<sup>n</sup>à kù]  $k \vec{u} = \vec{n}$ HL mouth] [[person<sup>L</sup> big.Pl Def] Inan=Acc
  - C:  $[\hat{i}\hat{j}\hat{g}\hat{u} \qquad \hat{g}\hat{a}\hat{y}^n \rightarrow ] \qquad \hat{g}\hat{i}\hat{y}^n \hat{b}\hat{\delta}$ [Prox.Inan like] say.Pfv-3PlSbj
  - B:  $inšá:l\hat{a}:w$   $\acute{e}r^n\acute{e}$   $jiy\grave{e}-\acute{m}$   $[n\acute{u}w^n\grave{\partial}y^n$   $k\grave{a}y]$  if.God.wills 3SgSbj kill<sup>L</sup>-Hort [now Top]
  - D:  $\partial r^n \partial^L$   $g \tilde{\jmath}: w-\mathcal{O}$ ,  $\partial r^n \partial^L$   $g \tilde{\jmath}: w-\mathcal{O}$  short-Inan, matter 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.

[ $k\acute{u} = \grave{n}$  might alternatively be analysed as definite and bracketed with the preceding NP;  $j\acute{a}:t\grave{i}$  and  $t\acute{e} \rightarrow$  are both glossed 'exactly' but  $j\acute{a}:t\grave{i}$  is often a one-word utterance that confirms the truth of another speaker's statement, while  $t\acute{e} \rightarrow$  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)
       D: áywà [mégé mégé [yǎ-m
                                                   kù] dàyá
                                   [woman-AnSg Def] abject
            yes
                   [more more
                                                                  3Sg=Acc
        [d\grave{a}y^{nL}]
                 kà:<sup>n</sup>]
                         tángú-w]
                                                    [yà-sùmɔˇy<sup>n</sup>
                                                                    kù],
        [way^L]
                         become.Pfv-Ppl.Inan]
                 Rell
                                                   ſΥ
                                                                    Def]
    B: wó:dì
       yes
    D: áywà,
                 nŭ-m
                                yâ:
                                         nú:-rè-Ø
                                                                  dè,
                 person-AnSg there
                                         go.in-Pfv1a-3SgSbj
                                                                  if,
        yes,
        [àwá
                    kù]
                                kùwò-[jìy-î:],
                                bite<sup>L</sup>-[kill-VblN],
                    Def]
        snake
        kú
                  núm-dó:-rè-Ø
                  difficult-Inch-Pfv1a-3SgSbj
        Inan
    B: wó:dì
        yes
```

- D: Well, the way the woman came to be more abject, (namely) Yasumoy.
- D: Well, if a person goes in there (=Beni), the snake's biting and killing, that (=living) became difficult (=intolerable).
- B: Yes.

[dɔ̄yɔ denotes an impoverished (abject, miserable) and socially very low status; kùwò-[jìy-î:] consists of the simple verbal noun jìy-î: 'killing' with a preceding chained verb stem kúwó- 'bite' in {L}-toned compound initial form, see §15.1.1; núm-dó- 'become difficult/expensive' is pronounced [númndó] or even [númndó]; another case of clause-final *nì* with no clear function, §15.1.10]

```
(684)
          D: áywà
                            t\acute{e}r\grave{e}w = \emptyset
                                                   wà.
                                                   Quot,
                            truth=it.is
                yes
                                         ^{L}k\dot{\partial}:^{n}]=\emptyset
           ìsê:
                        ſbû:
                                                                  g\check{u}^n-v\grave{\varepsilon},
                                         Lthing]=it.is
                        [3PlPoss
                                                                  say.Ipfv-3PlSbj,
          village
                                                                     [[ìsê: kù] HL pírè],
                                                [bû: Lmà:]
          b\hat{u}: = \hat{m} l\hat{a}^{\dagger},
                                       íyà
                                       again [3Pl LQuotSbj] [[village Det] HLinside]
          3Pl=Foc claim.Pfv,
          [núw<sup>n</sup>∂y<sup>n</sup>
                             kày]
                                           [péyí
                                                          p \not\in g \not\in -\dot{m} - n - \not\in ]
          [now
                              Top]
                                                          implant-Ipfv-Neg.3PlSbj]
                                           post
          \ln \tilde{u} = ni
                                    àwá
                                                kúwó
                                                              jíyé-yè]
                                                bite
                                                              kill.Ipfv-3PlSbj]
          [person.Pl=Acc
                                    snake
          //k \hat{\sigma}:<sup>nL</sup>
                         kâ:<sup>n</sup>]
                                       nŭ:
                                                       dě:-w-vèl
          [[thing<sup>L</sup>
                                       person.Pl
                                                       be.tired-Caus.Ipfv-3PlSbj]
                         any]
                         màní-m
          ſbû:
                                                  n\hat{\varepsilon}
          [3PlSbj
                         laugh-Ipfv
                                                  now]
                            ló-mà
                                                     dè]
                                                               màní-yè]
          [[tǎ:
          [[pond
                            go.Pfv-3PlSbj
                                                    if
                                                               laugh.Ipfv-3PlSbj]
          [dùy<sup>n</sup>5r<sup>n</sup>ù
                                    màní-vèl
          [pounding.place
                                    laugh.Ipfv-3PlSbj]
          ſbû:
                        bàgùrú-m
                                                           nὲ],
          [3PlSbj
                        make.hubbub-Ipfv
                                                           now],
```

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'), §15.2.1.2; perfective ló-mà 'they went' §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]

```
HLb3:1
                                                                                 Lmà:1
(685) D: [kú
                             [n\hat{a}y^n] = n\hat{i} [[\delta
               [DiscDef Inst]=Acc [[3ReflSgPoss HL father]
          d\partial y\partial :=\emptyset
                                    gà]
          abjectness=it.is
                                    Emph
                               <sup>HL</sup>kû:]
                                            Lwò]
          [[á
                                                      pégέ-ý
                                                                                 wá.
                               HL head]
                                            Lin]
                                                       implant-QuotImprt Quot,
          [[LogoSgPoss
          yăr
                     gŏ:-rè-Ø
                                                    dé
                                                               wôy,
                     go.out-Pfv1-3SgSbj
          sky
                                                    if
                                                               all,
                                  <sup>HL</sup>tíwè
                                                  kù]
                                                            yò-ý
          [[á
                                                                                     wá]
                                  <sup>HL</sup>death
          [[LogoSgPoss
                                                 Def
                                                            weep-QuotImprt
                                                                                     Quot]
          [ìré-ré-ý
                                                           wá],
          [forget-NegImprt-QuotImprt
                                                           Quot]
                                                    g \dot{u} y^n
                                                                         wà⁺,
          [έr<sup>n</sup>έ
                       má:]
                                      áηày<sup>n</sup>
          [3Sg
                       QuotSbj]
                                     thus
                                                    say.Pfv
                                                                         Quot,
                                          p\acute{a}:m\acute{\varepsilon}-w^n\acute{u}-\grave{w}^n,
     B: já:tì
                          já:tì
          exactly
                          exactly
                                          understand-Pass.Pfv-3SgSbj,
          té→
                          áηàyn
                                          sèllè-Ø,
          exactly
                          thus
                                          be.healthy.Pfv-3SgSbj
          [núw<sup>n</sup>ɔ̂y<sup>n</sup>
                             kày]
                                         \varepsilon r^n \varepsilon
                                                                 jùw<sup>n</sup>ò-m
                                                     jìγέ
                                                     kill
          Inow
                            Top]
                                        3SgSbj
                                                                 proceed-Hort
     D: k \vec{u} = \vec{m}
```

- 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.

Inan=it.is

[ $juw^n 5$  'do first' in a chain with the sense 'proceed to' §15.1.13]

# Abbreviations and symbols

Abbreviations	<b>S</b>	Hort Imprt Inan	hortative, §10.6.2 imperative inanimate
Acc	accusative (in 1SgAcc), §6.7)	Inch	inchoative ('become' with adjective), §9.5
Adj	adjective	Inst	instrumental, §8.1.2
Agent	agentive nominal	Ipfv	imperfective
An	animate	Iter	iteration (full
ATR	advanced tongue root		reduplication)
	(vowel feature)	L	low (tone)
BenT	Ben Tey language	Loc	locative
C	consonant (in e.g. CvCv)	Logo	logophoric
Caus	causative, §9.2	MP	mediopassive
Char	characteristic (nominal	N	noun
	derivative)	(n)	noun (in interlinearl
Dat	dative, §8.3		glosses)
Def	definite, §4.4.3	Neg	negative
Dem	demonstrative	Nom	nominalization
Det	determiner (demonstrative	NP	noun phrase
	or definite)	Num	numeral
DF	discourse-functional	Obj	object
	elements	Pass	passive
Dimin	diminutive, §4.2.3	Pf	perfect (in ExpPf, RecPf)
DiscDef	(strong) discourse-	Pfv	perfective
	definite, §4.4.2	Pl	plural
Dist	distant, in NearDist and FarDist (demonstratives)	Poss	possessor, possessive ( <i>kè</i> ), §6.2.3
DS	different-subject	PP	postpositional phrase
EA	expressive adverbial,	Ppl	participle
	§8.4.5	Pss	possessor
Emph	emphatic (clause-final	Prog	progressive
	particle), §19.4	Pron	pronoun
Exist	existential particle,	Prox	proximal (demonstrative)
	§11.1.1.1	Proh	prohibitive
ExpPrf	experiential perfect,	Purp	purposive
	§10.1.1.4	Q	question
Fact	factitive ('cause to	QTop	interrogative topic ('what
	become' with adjective),		about X?'), §19.1.4
	§9.5	Quot	quotative particle, §17.1.3
Foc	focus	QuotSbj	quotative subject particle,
Fut	(delayed) future, §10.2.2.4		§17.1.4
Н	high (tone)	Rdp	reduplication

Recip	reciprocal, §18.3	Stat	stative, §10.4 (derived),
Refl	reflexive, §18.1		§11.2-4 (lexical)
Rel	relative clause (verb	Top	topic
	participle)	Tr	transitive, §9.3
Rev	reversive (verb derivation,		(derivational suffix),
	§9.1		§10.1.3.1 ( <i>děn</i> )
Sbj	subject (in e.g.	V	verb (in e.g. S-O-V)
	"2PlSbjbj")	(v)	verb (as part of a gloss)
SFoc	subject-focus	V	vowel (in e.g. CvCv)
Sg	singular	VblN	verbal noun
SS	same subject	VP	verb phrase
	(subordinator)		

# **Symbols**

```
reconstructed
                   ungrammatical, unacceptable, unattested
á, à, â, ă, ã
                   tones on vowels (or syllables), §3.7
\bar{x}, \hat{x}, \hat{x}, \hat{x}, \hat{y}
                   tone changes on stem in compounds, chapter 5
<...>
                   a) contour tones on a single syllable, e.g. <HL> and <LH>
                   b) false starts in texts (omitted from translations), e.g. (665)
/.../
                   a) lexical tone melody, e.g. /LH/, /H/
                   b) underlying or lexical representation, e.g. /gàrá/
{...}
                   a) tone overlay, e.g. {HL}, {H}, {L}
                   b) enclosing any set, e.g. {u a i}
                   a) phonetic (IPA) representation, e.g. [bǔ:]
                   downstep
\begin{bmatrix} \dots \end{bmatrix}^{L} \begin{bmatrix} \dots \end{bmatrix}^{L+H} ^{HL}[\dots], \ ^{H}[\dots] ^{L}[\dots]
                   {L} tone overlay controlled by an element to the right, §6.1.4
                   like preceding but with extra H-tone on final syllable/mora
                   {H} or {HL} tone overlay controlled by a possessor to the left, §6.2.1
                   {L} on demonstrative or numeral in certain combinations, §3.7.3.5, §4.6.1.4
                   "intonational" prolongation of final vowel or sonorant, §3.8.3
                   dying-quail terminal intonation effect, §3.8.4
                   clitic boundary, §3.6
&
                   conjunction (in interlinears, e.g. X.& Y.& 'X and Y')
```

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```
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# 2. selected Ben Tey morphemes

["v" represents a variable vowel]	<i>bě</i> , 'remain', §11.2.6.1		
[ $\varepsilon$ follows $e$ , $o$ follows $o$ , $\eta$ and $p$ follow $n$ ]	causative $b\hat{c}$ :- $w\hat{u}$ -, §10.1.3.5		
[c rollows c, v rollows c, tj and ji rollow ii]	- $\dot{m}$ wò $b\check{e}$ , 'be really true that', §15.2.7		
-∅, suffix	'become' after expressive adverbial,		
animate plural suffix	§8.6.7		
on noun, §4.1.1	bé (see bè)		
on relative-clause imperfective	bè		
participle, §14.1.6.2	plural		
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perfective negative -r-á, §10.2.3.2	§8.4.9		
-â:, in animate plural perfective Neg	$=b\hat{\varepsilon}-$ = $b\hat{\varepsilon}$ -, past clitic on verbs, §10.4.1		
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à-mâ:n, 'so-and-so', \\$4.1.4, \\$13.2.9	§14.1.6.3		
án, 'where?', §13.2.4	bèré-, 'get'		
án-dá: 'be where?', §13.2.4	'be able to' with chained complement,		
ángòy 'where?', §13.2.4	§17.4.2		
àŋây" 'how?', §13.2.6	bérkèlàw, 'between' postposition, §8.4.11		
áŋày <sup>n</sup> , 'like this/that', §4.4.2.3	HL bólò L wò, complex 'under' postposition,		
à:ŋgá, 'how much/many?', §13.2.7	§8.4.10		
àηgú, 'which?', §13.2.8	$-b\delta \sim -b\delta$ , 3Pl subject suffix allomorph		
àsú→, 'always', §8.6.7.3	with perfective, §10.2.1.1		
àwú-, 'receive, consent'	attested once with recent perfect,		
complement of 'consent', §17.3.3	§10.2.1.8		
<i>bă</i> -, 'be equal to', §12.2.2	stative - <i>w</i> - <i>b</i> 5, §10.2.1.10		
bă→, 'equally', §12.2.4	with imperfective and progressive,		
bàndè, topic, §19.1.1	§10.2.2.3		
bàrí-, 'help', §17.4.2	with 'it is' clitic, §11.2.1.3, §11.2.1.6		
= bay, 'while', §415.2.1.2	<i>b</i> 5:, 'father', §4.1.3		
in complement of 'see', §17.2.3	$b \frac{\partial \eta}{\partial s} \sim b \frac{\partial \eta}{\partial s}$ 'owners', §5.1.7		
$b\ddot{a}y^n \rightarrow$ , 'many', §4.5.1	compounds ( <i>X bóŋgð</i> ), §5.1.7		
, , , , , ,	1 ( 30 // 0		

bù-, 'be' (locational-existential), §11.2.2-3	$d\hat{\varepsilon}$ :- in prolonged-action
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$b\hat{u}$ :- $\emptyset$ , 3Sg form of $b\hat{u}$ - with adjectival	in 'because' clause, §17.5.2.3
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célè, 'liver/heart'	to, near' postposition, §8.4.6
in emotion expressions, §11.1.4	dŏ-, 'arrive, reach, attain'
cêm ~ cêw ('all' in Jamsay)	in comparatives, §12.2.5
reduplicated or iterated in sense	dùmdó:, 'last' (adjective), §4.7.2.1
'equal(ly)', §12.2.3)	dùmdú-~ dùmdí-, 'finish', §17.4.1
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