A Grammar of Yanda Dom

Dogon language family Mali

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This version has consecutive numbering of examples, adds sample texts at the end, and updates prosodic notation in the form of tonosyntactic superscripts and [†] (for Rhythmic Tone-Raising). An index will be added later.

color codes

black: text written for this work

brown: carryover prose from the template, sections not yet written

blue: Yanda Dom transcriptions and underlying forms green: reconstructed, un, and non-Yanda Dom forms

pink: material to be incorporated

red: comments to myself (things to do etc.) orange: internal cross-refs to be modified later

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1 Introduction

1.1 Dogon language family

We currently think that there are somewhere around 20-25 distinct Dogon languages, some of them containing significantly divergent dialects internally. Even when the data are all in, there may be disagreements as to what is a dialect and what is a distinct language.

The Dogon languages have been considered for some decades to form part of the large Niger-Congo family, but this relationship has not been conclusively demonstrated and is doubted by some Africanists.

1.2 Yanda Dom language

Based on the Dogon languages that we have at least begun working on, Yanda Dom appears to have specific affinities with the Najamba-Kindigé (aka Bondu) language and perhaps with Tebul Ure and Dogulu. The relationship to Najamba-Kindigé is seen especially in the morphology of verbs and demonstratives, as well as in some lexical and phonological features.

Yanda (*yàndá*) is the name of a small zone containing several villages. The term can also be used for a cluster of three villages in the center, excluding Ogol and Ana. The people refer to themselves as *yàndá-[bòlò-mù]* 'Yanda people' (singular *yàndá-bòlò*) and to their language as *yàndá-dòm* 'Yanda language' (cf. *dòm* 'talk, speech, language').

Chapter 2 is a brief sketch of the major typological features of the language.

1.3 Environment

The old Yanda villages were located in flat spots on the slopes of the mountain separating the high plateau from the sandy plains that stretch eastward. One village was originally on the summit, i.e. on the high plateau. Around 1960 many of the people in the cliffside villages relocated to the lower slopes and base of the cliffs, in some cases not far away. These are collectively known as yanda-du (Lower Yanda), while the villages that remain on top (abandoned or sparsely inhabited) are called yanda-tembe (Upper Yanda).

Upper Yanda contains the villages named dènèlù, dàmzà, tógù, and kùlmàl, which are still occupied. Cliffside villages that have mostly or entirely relocated down to the foot of the cliffs, can be geographically grouped as in (1). Anana is somewhat apart from the others. The three villages of Yanda proper are nearly continuous, strung along the base of the mountain. A short distance away is the Ogol village cluster.

official name	native name		
Ana Ana (Anana)	ánà		
Yanda village cluster	unu		
Yanda-Songo	yàn zòŋ		
•	<i>túl</i>		
Yanda-Guinedia	gìnèndíyá ~ gìnàndìyá		
Ogol	?śwá:1		
Ogol-Komaga	(ʔɔ̯àːl-)kɔ́mâ:		
Ogol-Nimba	(ʔɔ̯àːl-)nímbá		
Ogol-Ongo	(?ɔà:1-)ô:n		
Ogol-Pepe	(ʔɔà:1-) pépêy		
	Ana Ana (Anana) Yanda village cluster Yanda-Songo Yanda-Tourougo Yanda-Guinedia Ogol Ogol-Komaga Ogol-Nimba Ogol-Ongo		

I have taken GPS readings for several of the villages that are at or near the base of the mountain. Coordinates are in degrees, minutes, and decimal fractions (.000 to .999) of minutes.

(2)		village	N latitude	W longitude
	a.	Anana	14 40.234	03 07.134
	b.	Yanda-Songo Yanda-Tourougo Yanda-Guinendia	14 09.058 14 38.999 14 38.831	03 08.323 03 08.605 03 08.890
	c.	Ogol-Komaga Ogol-Nimba Ogol-Ongo Ogol-Pepe	14 38.418 14 38.067 14 38.811 14 38.982	03 09.995 03 10.403 03 09.855 03 10.003

There is also a cluster of villages known collectively as Yanda-Kou, on top of the mountain ridge overlooking these villages. It is currently in the administrative district (commune) of Mori, whereas the villages listed above are in the distrinct of Bamba.

I am aware of no recent census reports on the population of Yanda. As reported by Hochstetler et al. (2004), the official 1987 census figure was 1400. Blench's recent suggestion of 2000 to 3000 is reasonable, given the rate of population growth throughout the Dogon region especially since the eradication of smallpox in 1980.

Most Dogon are farmers. The fields are in the flat plains below the cliffs. The few people who still live in Upper Yanda come down during the growing season (June-October) to work their fields. Millet (*Pennisetum glaucum*) is the primary crop. Two varieties of sorghum (*Sorghum bicolor*) are also grown. Rice is grown in one small area where water accumulates. Supplementary crops are cow-pea (*Vigna unguiculata*, local French *haricot*), sesame, roselle (*Hibiscus sabdariffa*, local French *dah* or *oseille*), peanut, and ground nut (*Vigna subterranea*).

There is a small amount of cash-crop gardening during the dry season, and some new irrigated gardens have been established for this purpose. Ogol has well-developed gardens, being blessed with year-round rock ponds (including a few crocodiles!). Dry-season cash crops include onion, tobacco, sweet potato, chili pepper, tomato, and African eggplant (*Solanum aethiopicum*). Gourds are also grown here and there.

The major weekly market is that of Bamba Dégéré, which is held on Saturday. This village, only 3 km from the main Yanda villages, also has a school, a medical center, and a government office (mairie). Bamba is a general term for a large cluster of villages including this one. This Bamba (Jamsay bàmá) is not to be confused with the Songhay-speaking town Bamba on the Niger River that is known in Mali for its tobacco.

As of our first visit in 2009, there were primary schools (*premier cycle*) in Tourougo, Ginendiya, and Ogol. Before these schools were built, some pupils walked to Bamba Dégéré to attend its primary school, and current pupils who have finished primary school can attend the middle school (*deuxième cycle*) in Bamba. High schools (*lycées*) are farther away in the large towns, for example Koro and Bandiagara.

The Yanda area can be reached by 4x4 vehicle from Douentza, Koro, or Sangha. Some vans and trucks from these towns make the weekly market in nearby Bamba, and Bamba is a stop for the vehicles that ply the Douentza-Koro route.

1.4 Contact languages

Three other Dogon languages occur in the area. Jamsay is the major Dogon language of the plains from Douentza to Koro and is useful as a second language throughout this area. Tebul Ure is a local Dogon language spoken nowhere but Upper Bamba. A much more populous language on the plateau, extending far to the north and west, is Tommo So.

Yanda Dom speakers typically speak Jamsay and Tommo So and understand Tebul Ure. Those who live at the foot of the cliffs also know some Fulfulde from their contacts with Fulbe, who are not numerous in the zone but do occupy some hamlets in the plains and come into Dogon villages to sell milk. Some Dogon own cattle, goats, and sheep that are tended for them by Fulbe.

Bambara is not (yet) much of a factor locally. However, many young people head to Bambara-speaking southern Mali for work after the growing season, so knowledge of this language is growing.

1.5 Previous and contemporary study of Yanda Dom

1.5.1 Previous work

There has been no substantial previous linguistic study of ths language.

Calame-Griaule's early survey of Dogon varieties mentioned Yanda Dom and suggested that it seemed to have a lexical affinity to Dogulu.

Some basic geographic and population data for Yanda Dom are included in the SIL survey of Dogon languages (Hochstetler et al. 2004). A 1987 census figure of 1400 was cited.

Roger Blench's website contains a Yanda Dom section, one of several such sections devoted to lesser-known Dogon languages. He summarized the geographical and population information previously given by Calame-Griaule and Hochstetler et al, added his own information (including native names and GPS coordinates for the villages), and presented a wordlist recorded in two days in March 2005. Although my Yanda Dom informants consider Ana (Anana) village to belong to the Yanda Dom speaking zone, Blench indicated that Ana had a "distinct lect" and made it the subject of another section of his website.

1.5.2 Fieldwork

My Jamsay-speaking assistant and factotum Minkailou Djiguiba did an initial reconnaissance of the area by bush motorcycle in 2008. He and I went to

Tourougo (=Turgo) village in May 2009 and remained for three days. As is my usual practice I began with plants and animals, showing images and giving descriptions of local species to a group of elders, with many children watching. We then returned to Douentza with an informant for several weeks of basic elicitation. The work continued off and on during my fieldwork stint January to August 2010. In December 2012 I was able to work for 10 days with one of my previous informants who came for this purpose to our other base in Bobo Dioulasso in neighboring Burkina Faso.

1.5.3 Acknowledgements

The work on Yanda Dom is part of a project on Dogon languages that aims eventually to describe all twenty or so languages of the family. The chronology to date has been as follows:

2004-6 fieldwork by me on Jamsay supported by NEH grant PA-50643-04

NSF grant BCS 0537435, Linguistics program

2009-13 NSF grant BCS 0853364, DEL program

NEH = National Endowment for the Humanities; NSF = National Science Foundation; DEL = Documenting Endangered Languages program jointly administered by NEH and NSF.

Most of the materials (grammars, lexicon, texts, images, videos, typological summaries) produced by myself and other Dogon project members appear on the project website: www.dogonlanguages.org.

2 Sketch

A few highlights of Yanda Dom will be given here, emphasizing points of divergence with other Dogon languages.

2.1 Phonology

2.1.1 Segmental phonology

There is a fairly standard Dogon consonant and vowel inventory. There are seven vowel qualities, including the ATR feature for mid-height vowels. Vowels have long and short forms. Nasalized vowels are present but not very common. Consonants include nasalized $\{r^n w^n y^n\}$, and j and z. Yanda Dom intervocalic d corresponds to r in several other Dogon languages.

2.1.2 Tones

Syllabic tones are H, L, <HL>, <LH>, and rarely <LHL>. The latter occurs in some Past imperfective negative forms like $m\ddot{a}$: = $b\acute{a}$ - $l\ddot{i}$ - (§10.2.1.10). Stem-level tone contours are similar: {H}, {L}, {HL}, {LH}, {LHL}, plus one noun stem with {HLH}, $h\acute{e}y\grave{e}nd\acute{e}$ 'index finger'. Unlike most Dogon languages, {L}-toned noun and other non-verb stems are common, though one could argue that they are lexically {L}+H with a final floating H-tone that is realized on following morphemes (such as definite morphemes). The argument that {L}-toned nouns are really {L}+H is based on their combination with the 'it is' clitic (§11.2.1.1), where this contour is audible; it could, however, also be analysed as Rhythmic Tone-Raising applied to the clitic. For animate nouns, there two subsets of {L}-toned nouns, differing only in their tonal effect on a following animate plural suffix $-m\grave{u}$. For stems with H-toned $-m\acute{u}$, one could again argue for a {L}+H lexical melody (§3.8.1.3).

Verbs have a variety of lexical tone contours, defined by the relationship between the tone of the bare stem and that of certain inflected forms, prototypically the perfective negative. The tone-contour classes defined in this fashion are $\{H\}/\{H\}$ associated with initial voiceless consonant, plus a remarkable range of at least partially L-initial classes: $\{LH\}/\{LH\}$ associated with initial $\{In\}$, $\{LH\}/\{L\}$ associated with other initial voiced consonants, and

 $\{H\}/\{L\}$ associated with stems that are either very light (Cv) or very heavy (e.g. Cv:Cv) and begin with a voiced consonant. It may be possible to reduce $\{H\}/\{L\}$ to $\{LH\}/\{L\}$ by proposing phonological rules that flatten <LH> syllables to H-toned ($\S3.8.5.1-2$).

As in other Dogon languages, lexical tones of all stem-classes are subject to modification or to erasure by superimposed tone overlays. For example, nouns preceded by a possessor have a contour, usually {L} but sometimes {H} or {LH}, depending on the type of possessor and (for kin terms) lexical features. This is **tonosyntax**, where a categorially defined controller imposes a tone contour on a targeted word or word string, based primarily on the syntactic category (noun, adjective, possessor, etc.) of the controller and target. Tonosyntax is most developed within NPs, including relative constructions. Yanda Dom differs somewhat from other Dogon languages, especially in that numerals (as well as postposed pronominal possessors) are somewhat resistant to being tone-dropped. There is also a considerable amount of tonosyntax, or perhaps we should say tonomorphology, in verbal morphology.

Yanda Dom also has **Rhythmic Tone-raising**, whereby an $\{L\}$ -tone stem or morpheme, or its first syllable, shifts to H-tone after a $\{L\}$ -toned constituent or morpheme. Tonosyntax and rhythmic alternations interact in a complex way.

2.1.3 ATR harmony

ATR harmony is not absolute. In particular, there is a three-way opposition of CeCe, CeCe, and CeCe, and similarly of CoCo, CoCo, and CoCo stems when the medial consonant is a nasal. In each trio, the mixed-ATR third member is an innovation due to a shift from [-ATR] $\{e\ o\}$ to [+ATR] $\{e\ o\}$ before the nasal. ATR phonological processes focus on the interaction between the stem-final syllable and suffixal syllables.

This situation is distinct from that in a close genetic neighbor, Najamba, where ATR processes involve stem-wide overlays.

2.1.4 Local phonological rules

The weak position metrically is the second syllable from the left in CvCv and CvCvCv. Vowels in the weak position may raise to $\{i\ u\}$ and may be deleted (syncopated or apocopated).

There is no systematic Nasalization-Spreading.

2.2 Inflectable verbs

In addition to underived verb stems, there are stems derived from other verbs by a -Cv suffix: reversive -lv, causative -mv, mediopassive -yv, transitive -dv. "v" here represents a variable short vowel. Many verbs occur with paired mediopassive and transitive forms, but the mediopassive suffix is also added to many other verbs.

Verbal inflectional categories are indicative and modal (deontic). Indicative categories expressed by suffixes on the verb (following any derivational suffixes) are organized into perfective positive, imperfective positive, perfective negative, and imperfective negative systems. Modal categories are imperative, prohibitive, hortative, and hortative negative. There is no distinct verb form for indirect (quoted) imperatives or wishes.

2.3 Noun phrase (NP)

For unpossessed NPs, the basic linear order is N-Adj-Num-Det-'all'. The bifurcation point in relative head NPs is between N-Adj-Num (i.e. the NumP) and Det-'all'. Adjectives and demonstratives control {L} tone contour on preceding words. Numerals, definite morphemes, and 'all' are not controllers. This is all typical of Dogon languages.

Kin terms are a special inalienable category. Both pronominal and nonpronominal possessors precede kin terms. With other (i.e. alienable) nouns, nonpronominal possessors precede the possessed NP, but pronominal possessors occur after the possessed NumP. Many of the postposed pronominal possessors are still internally segmentable. Preposed possessors are tonosyntactic controllers. The main possessor-controlled contour is {L}, when the possessor is (semantically) definite, but {H} is used with undetermined common noun possessors. For kin terms, the possessor-controlled contour is {H} or {LH} depending on the noun.

2.4 Case-marking and PPs

There is no case-marking of subject NPs, but there is an accusative case marker for objects. There is a set of postpositions including dative, instrumental-comitative, locative, purposive, and various more precise locatives (mostly expressed as composite postpositions).

2.5 Main clauses and constituent order

Linear order is SOV, with adverbs in various preverbal positions. Verbs have suffixal marking of aspect (perfective-imperfective plus several subcategories thereof), plus negation and mood (indicative, imperative, hortative). In main clauses, verbs are also marked by final-position suffixes for subject pronominal category. (For relative clauses, see §2.7 below.)

There are a few underived stative quasi-verbs (e.g. 'be [somewhere]', 'have', 'want'). Stative forms of regular verbs in some semantic domains can also be derived (e.g. 'be sitting' from 'sit down'). Statives of both types lack aspectual marking, and have a special stative negative suffix.

Each aspect-negation category has a special verb form for subject focus (§13.1.2). Nonsubject focus is much less clearly marked.

2.6 Verbal nouns

There are two morphological verbal nouns, one in $-l\acute{e}$ and one in $-y \sim -u$.

2.7 Relative clauses

The core of the head NP, consisting maximally of a N-Adj-Num, remains internal to the relative clause and is subject to tone-dropping. The head NP is bifurcated, as determiners and non-numeral quantifiers are placed after the verb of the relative clause.

Instead of the usual main-clause verb, a special relative form of the verb is used. In most inflectional categories, there is no actual agreement with either the head NP or the subject. The imperfective positive relative verb form does show agreement with third person categories (animacy, number). Since pronominal subjects are not expressed on the relative verb, they are expressed by separate pronominal forms proclitic to the verb.

There is no relative morpheme in the clause-internal head NP or at the end of the clause, except for the special morphological features of the relative verb.

2.8 Interclausal syntax

VPs are easily chained. There are some direct chains where nonfinal verbs are in their bare stem form, but in many combinations the usual chain form is the same-subject anterior subordinator $-\epsilon$: There are also imperfective

subordinated clauses sharing some morphology with the regular conjugated imperfective form of verbs.

2.9 Anaphora and quotations

There is a basic third person anaphoric pronoun á. It is used as a third person reflexive coindexed with the clausemate subject (§18.1), as a logophoric coindexed with the quoted speaker/thinker (§18.2.1), and to mark coindexation of a relative clause subject to a main-clause subject (§18.2.2). Anaphoric pronouns are not widely used to coindex with 1st/2nd person antecedents.

However, logophoric subject (this time including 1st/2nd person antecedents) is also marked by a pseudo-1Sg pronominal subject suffix on verbs in quoted clauses. If the subject of the quoted clause is not coindexed to the quoted speaker/thinker, a pseudo-3Sg verb form is used, and the subject is expressed by a preverbal proclicit pronoun (§18.2.1.2).

3 Phonology

3.1 General

The sequence in this chapter is: §3.2 syllables and metrical structure; §3.3 consonants; §3.4 vowels; §3.5 verb-stem vocalism; §3.6 segmental phonological processes; §3.7 cliticization; §3.8 tonology; and §3.9 intonation.

3.2 Internal phonological structure of stems and words

3.2.1 Syllables

In native Dogon vocabulary, most syllables are Cv with a short vowel; word-initially the C position may be empty. I use "v" to mean short vowel and v: to mean long vowel; there is no v consonant (voiced labial fricative) in the language so hopefully there will be no confusion.

CvC syllables typically end in a sonorant $\{m \ n \ l\}$. Word-final Cvm, Cvn, Cvn, and Cvl can in some cases be shown to derive synchronically from /Cvmu/ etc. with a final /u/ that apocopates. A good example of this is the bare-stem form of u-final verbs, where e.g. $s\acute{a}l$ (</sálú/) 'grind coarsely' is parallel to e.g. $\acute{a}b\acute{u}$ 'accept, receive', showing that apocope of a final /u/ is sensitive to the preceding consonant ($\S10.2.2.4$).

Long *Cv*: syllables are rare in native vocabulary except in monosyllabic stems and postpositions. Unsuffixed bisyllabic *Cv*:*Cv* stems are typically loanwords, especially from Fulfulde (directly or via Jamsay). There are also some suffixally derived *Cv*:-*Cv* and *Cv*:-*CCv* verb stems that reflect contraction of *CvCv- to *Cv*:-.

3.2.2 Metrical structure

In the sequence *CvCvCv*, the medial syllable from the left may be metrically weak. This is seen especially in some types of trisyllabic verbs, whose second vowel is a short high vowel, and in syncope and truncation in suffixed /CvCv-Cv/ derivatives of verb stems.

3.3 Consonants

The consonants of Yanda Dom are in (3). A voiced sibilant z is present, unlike the case in most northern Dogon languages. There is no v consonant; the symbol v is used throughout this work to denote a variable vowel.

(3) Consonants

	1	2	3	4	5	6	7	8	9	10
labial	p	b	m	<i>(f)</i>			W	$((W^n)$)	
alveolar	t	d	n	S	Z	1	r	\boldsymbol{r}^n		
alveopalatal	C	j	Ŋ	((š))	$((\check{z}))$		y	y^n		
velar	<i>k</i>	g	ŋ							
laryngeal									<i>(h)</i>	?

c is IPA [t \int], j is [d \bar{z}], š is [\int], y is [j].

key to columns: 1. aspirated voiceless stops (*c* is affricated); 2. voiced stops; 3.nasals, 4. voiceless fricatives (including sibilants); 6. laterals; 7-8. respectively unnasalized and nasalized sonorants; 9-10. laryngeals

All full-fledged consonants except glottal stop ? occur intervocalically within stems. The taps $\{r \ r^n\}$ only occur intervocalically. Full-fledged consonants other than taps and nasalized sonorants occur word-initially. Sonorants except taps occur word- and syllable-finally.

3.3.1 Alveopalatals (c, j)

I found no consistent distinction between c and k, or between j and g, before front vowels $\{i \ e \ e\}$. I generally heard an affricated release in words like $jid\dot{e}$ 'eye' and cin 'stone', and therefore favor the "affricate" symbols $\{c\ j\}$ in transcription. However, the affrication is often slight.

Before other vowel qualities the difference between $\{c\ j\}$ and $\{k\ g\}$ is clear. c is rare before non-front vowels; it appears mainly in loanwords (e.g. from Fulfulde). j is common at stem-suffix boundaries in verbal derivation, where it represents fortition of /y/ in mediopassive $-y\acute{v}$ - after a nasal or stop (a presurface cluster resulting from syncope), as in $t\acute{a}j$ - $j\acute{e}$ 'put on shoes', cf. reversive $t\grave{a}g\acute{a}$ - $t\acute{e}$ 'take off shoes'.

Intervocalic j and c are not common, especially in CvCv stems. Many intervocalic cases of j are geminates. However, the difference between Cvjv and Cvjjv is slight because of the fortis pronunciation of even ungeminated j, and

the same is true of Cvcv versus Cvccv. $h\acute{a}c\grave{e}$ 'sin' (< Fulfulde hakke) and $w\acute{e}j\grave{u}$ 'change (n., i.e. money back)' (< Fulfulde wecc-) appear to have degeminated the medial affricate. The only geminated/ungeminated minimal pair that I know is $p\grave{o}j\grave{u}$ 'cross-poles' and $p\grave{o}jj\grave{u}$ 'act of brushing against' (verb $p\acute{o}jj\acute{o}$). Other bisyllabic stems with ungeminated medial j are $\acute{i}j\acute{e}$ 'be used up' and $z\grave{o}j\grave{i}$ 'sprain (n)'. Medial geminate jj occurs in $p\acute{o}jj\acute{o}$ 'brush against', $k\acute{o}jj\acute{o}$ 'cling to', and $\acute{e}jj\acute{e}$ 'reappear'. One suspects that these cases of jj reflect original suffixal derivatives, cf. $\acute{o}j$ - $j\acute{e}$ 'get hot', $g\acute{o}j$ - $j\acute{o}$ 'carry on/over shoulder'.

3.3.2 *g* does not systematically spirantize

I did not observe consistent spirantization of g to $[\gamma]$ between back/low vowels.

3.3.3 Nasals (n, p)

Velar n and palatoalveolar n are distinct before $\{i \in \varepsilon\}$ as well as before back and low vowels. Examples of this opposition before i: $anili-y\epsilon$ 'became small' versus l = l 'l = l 'stop (halt)'. Before l = l 'chop' versus l = l 'versus l = l 'become' or 'pass' versus l = l 'stop' 'ate'.

p occurs initially in several words, e.g. $p \in m$ 'reins'. I know of no words with initial p.

Intervocalic n at the beginning of a second syllable from the left, as in $p\acute{a}n\acute{u}$ 'skin and butcher (animal)', is often articulated with a little extra duration. I initially transcribed such cases with nn but revised the transcription to n after finding no oppositions and after an assistant denied lengthening. Intervocalic n, especially in Cvnv, is usually from *nd via *nn, while original intervocalic *n is usually realized as r^n . For 'skin and butcher', compare Nanga and Bankan Tey $p\acute{a}nd\acute{l}$ and Ben Tey $p\acute{a}l\acute{l}$.

3.3.4 Voiceless labials (p f)

p occurs in numerous basic words, generally stem-initially, e.g. pè: 'sheep', púlá 'Fulbe (Pullo) person', pòndò 'earth', pílé 'fall(v)', pílè 'white', and píyél 'ten'.

f occurs in a few loanwords like $f\tilde{u}rn\hat{o}$: 'burner' (French fourneau). The regionally widespread particle 'all' is usually pronounced $p\tilde{u} \rightarrow$ rather than $f\tilde{u} \rightarrow$ (§6.6.1).

3.3.5 Laryngeals (h?)

h is limited to a few loanwords, chiefly from Fulfulde. It occurs only word-initially.

Glottal stop ? occurs word-initially in a number of bisyllabic stems and in one pronominal possessor morpheme (4).

```
(4)
             form
                          gloss
        a. H-toned syllable
             ?źló
                          'house'
             ?όρε
                          'eat (meal)'
             ? έρε
                          'right (hand)'
             ?án€
                          'goat'
             ?ání-vέ
                          'stop' (~ ?ί:nί-yέ)
             ?έΙέ
                          'go up'
                          'Ogol' (village name)
             ?áwá:1
                          'iron, metal'
             ?ánár<sup>n</sup>à
        b. L-toned syllable
             ?àlè
                          'ripe, cooked' (verb ?¿lé 'ripen, be cooked')
             ?àynàyn
                          'hard'
        c. pronominal
             ?ə́mó
                          '1Sg possessor'
```

These forms can be pronounced with a brief schwa-like vowel between the glottal stop and the following consonant, which is always a sonorant. Alternatively the glottal stop may be essentially clustered with the following consonant, as in ?ló 'house'. In the common 1Sg possessor form ?ómó, which follows the possessed noun, the glottal is often elided in allegro speech.

I use a bisyllabic transcription since the glottal syllable can carry a tone distinct from that of the following syllable. This is the case in some paradigmatic forms of the verbs in (4a) such as 'eat (meal)'.

3.3.6 Sibilants (s, z)

s and z are distinct phonemes.

I did not observe $[\int]$ as a regular allophone of s, or [3] as a regular allophone of z, before front vowels.

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

Nasalized sonorants do not occur word-initially.

 r^n (nasalized tap) can be autonomous of other nasals, or it can occur in a word following a nasal consonant and a vowel where it has arguably been secondarily nasalized. r^n is always intervocalic (5).

(5) Examples of r^n

```
form
                             gloss
a. autonomous
      bèr<sup>n</sup>à
                             'middle, interior' (cf. §8.2.5)
      zèr<sup>n</sup>à
                             'rainy season'
      dàr<sup>n</sup>á
                             'head'
      dèr<sup>n</sup>έ
                             'spend day'
                             'when?'
      à:r<sup>n</sup>á
      tèw-sé:rnè
                             'falcon'
b. after another nasal
      nà:r<sup>n</sup>à
                             'easy, cheap'
      nèr<sup>n</sup>á
                             'paternal aunt'
      mìr^n \varepsilon
                             'swallow(v)'
      tóŋòr<sup>n</sup>ò
                             'tree sp. (Bombax)'
      ìzù-cénèr<sup>n</sup>è
                             'catfish sp. (Synodontis)'
```

Alternations between n and r^n reflect the fact that r^n is forced to shift to n in syllable-final (i.e. preconsonantal or word-final) position, after syncope.

The adjective for 'red' is $b\check{a}n$ (animate plural $b\check{a}n-m\mathring{u}$). It belongs to a word family that includes the inchoative verb $b\check{a}n$ 'become red', a stem of the u-final verb class. The lexical form of this verb is $/b\grave{a}r^n\mathring{u}/$, though the /u/ apocopates to produce $b\check{a}n$. Other paradigmatic forms bring out the underlying CvCv shape, e.g. perfective negative $b\grave{a}r^n\grave{a}-l\acute{l}$ - 'did not become red'. Even the adjective $b\check{a}n$ occurs in 1Sg and 2Sg subject predicative forms like $b\grave{a}r^n\mathring{u}=\mathring{m}$ 'I am red' that

show r^n between vowels. The historically compound noun $iz\dot{u}$ - $bar^n\dot{a}$ 'hot season' contains a final that is related to the 'red' word family.

In the **imperfective negative** form of verbs, an informant fluctuates between $-n\acute{a}n$ - and $-r\acute{a}n$ - in all cases where the verb ends in a vowel. Only for the two n-final verbs did he insist on the $-n\acute{a}n$ - variant ($\grave{u}n$ - $n\acute{a}n$ - 'will not go', $z\acute{n}$ - $n\acute{a}n$ - 'will not take away'); this is predictable since r (like r^n) cannot occur as second member of a cluster. The n/r alternation here may have originated as an alternation between *-nán- and *- $r^n\acute{a}n$ -. If so, the *- $r^n\acute{a}n$ - variant lost its initial nasalization feature, which may have been difficult to hear in view of the following n.

 y^n may occur syllable-finally (hence word-finally) as well as intervocalically within a word, whether or not there is a preceding nasal consonant. Indeed, y^n is mostly word-final (6a-b), though it also occurs in a number of pronominal and demonstrative forms as a partially segmentable final animate singular or inanimate plural morpheme $-y^n \hat{\epsilon}$ (6c).

(6) Examples of y^n

```
form
                                     gloss
a. autonomous
      t \dot{o} y^n
                                      'deep'
      ?àvnàvn
                                      'hard'
      déy<sup>n</sup> gà
                                      'apart' (§8.4.7.2)
      gòy<sup>n</sup>è
                                      'elephant'
      w \dot{a} v^n
                                      'spacious'
      bàndéy<sup>n</sup>
                                      'sparrow, finch'
                                      'Nile monitor lizard'
                                      'striped ground squirrel'
      èndèkúy<sup>n</sup>ò
      bàràmatònzŏy<sup>n</sup>
                                      'tiny mouse sp.'
      cěv<sup>n</sup>-càv<sup>n</sup>
                                      'tree sp. (Cassia)'
      wày<sup>n</sup>à
                                      'tree sp. (Pterocarpus)'
b. after another nasal
      m \dot{a} y^n
                                      'dry'
c. grammatical
      \mathcal{J}-\mathbf{y}^{n}\hat{\varepsilon}
                                      'your-Sg' (animate singular, §6.2.2)
```

In perfective $m\grave{a}y\acute{e}$ - from verb $m\check{a}$: 'make (brick)', the y is essentially epenthetic and phonetically faint. It is not nasalized, but I am reluctant to consider it a true counterexample to the tendency for y to nasalize to y^n after a nasal.

I have no clear cases of w^n independent of other nasals. It occurs after another nasal in the onomatopoeic bird name $k a n g a r^n a w^n$ 'black-bellied bustard'

Suffixal -y and -w do not noticeably nasalize after a nasal-plus-vowel syllable. Thus perfective d e p e - y (1Pl) and d e p e - w (2Sg) 'chopped' do not significantly nasalize the suffixal semivowels.

3.3.8 Consonant clusters

3.3.8.1 Word- and morpheme-initial CC clusters

Three complex onset types are discussed here: a) nasal plus consonant initials (nC...), b) glottal initials, and c) Cw... initials.

Some cases of nasal plus homorganic stop (hereafter **nC-initial** stems) are attested as variants, perhaps reflecting historical loss of initial *i. $\acute{n}d\acute{e}$ 'give' has no other variant, and its cognates likewise begin with nd (Tebul Ure $\acute{n}d\ifmmode{i}$). Najamba $\grave{n}d\acute{e}$, Nanga $\acute{n}d\acute{e}$, Ren Tey and Bankan Tey $n\ifmmode{i}$). The nasal is capable of carrying a tone distinct from that of the following full syllable, as in 'water' and in the imperative of 'give'.

The **glottal-initial** stems like *?516* 'house' listed in §3.3.5, above, might also be analysed as beginning with a cluster (/?16/), since the schwa is probably epenthetic and is not always heard. The glottal syllable may carry a tone distinct from that of the following full syllable in certain paradigmatic forms of glottal-initial verbs.

Some bisyllabic nCv and $2 \circ Cv$ verb stems, along with some vowel-initial vCv verb stems, have paradigms that appear to mix {H} and {LH} lexical tones. This pattern may be associated with **marginal bisyllabicity**, i.e. with (a subset of) verbs with a noncanonical initial syllable. See discussion of $\acute{n}d\acute{e}$ - 'give' (§10.2.2.1), $2 \circ \acute{l}\acute{e}$ 'go up' (§10.2.2.2), and $\acute{u}b\acute{o}$ 'pour' (10.2.2.3).

Cw-initial stems, actually C_2 -initial, include $g_2 \hat{a}$: 'granary' and arguably $f_2 \hat{a}$: 'grass, herbs'. The g_2 is more open than g_2 in the perfective.

3.3.8.2 Medial geminated *CC* clusters

Geminated clusters are uncommon except for a few like ll, jj, and less often yy that occur at morpheme boundaries (especially between verb stem and derivational suffix). Within uncompounded stems I can cite the cases in (8). # indicates number of examples in my working lexicon. The examples of gg and kk are loanwords. There are a few native Dogon stems with $\{ll\ mm\}$. Since n tends to be slightly lengthened phonetically in the position $Cv_{_}v$ (which facilitates recognition vis-à-vis r^n), it would be difficult to hear an opposition of n to nn. The only clear case of nn is in variation with mn and is opaquely composite. For mm versus m, note s óm ó 'impoliteness (eating before others)' versus s ómm ó 'praise, congratulate'.

(8) Geminated *CC*

cluster	#	example
gg	1	bággàm 'slightly soured milk'
<i>kk</i>	1	hókkò 'livestock night quarters'
11	10+	tíllé 'exchange'
mm	4	sómmó 'praise, congratulate'
nn	1	<i>ŏnnà</i> ∼ <i>ŏmnà</i> 'here it is!'
jj	5	see §3.3.1

3.3.8.3 Medial non-geminate *CC* clusters

(9) Medial *CC* clusters

	example	gloss
a. homorganio	e nasal-stop	
mb	sŏ:mbò	'Abdim's stork'
nd	kóndó	'rock dassie (mammal)'
nj	cènjù	'agama lizard'
nc	bìncèndè	'tree sp. (Sarcocephalus)' (compound?)
ŋg	àŋgùŋgùrù	'giant tortoise (Geochelone)'
other nasal-ob	ostruent	
md	zámdé	'termite'

```
òyè-sènzú
                                          'shrew (Crocidura)'
    nz
                                          'giraffe'
    ms
                     yámsà
                     àr<sup>n</sup>àgùmzò
                                          'tree sp. (Hexalobus)'
    mz
nongeminate nasal-nasal
                                          'monkey'
                     òmnò
    mn
                                          'aardvark'
                     ámpá
    mп
                     bánŋò
                                          'barbet (bird)' (variant)
    nŋ
I plus consonant
    lb
                     tà:-célbà
                                          'bush sp. (Solanum incanum)'
    1y
                     ùlyèm
                                          'tree sp. (Acacia sieberiana)'
consonant plus semivowel
                                          'bateleur hawk'
    kw(k\mathfrak{z})
                     àr<sup>n</sup>àkọà:
                                          'bush sp. (Pergularia)'
                     pólyám
    ly
                                          (compound?)
                     sìnwâ:r~ sìnwá:
                                          'eucalyptus' (loanword)
    nw
other
                                          'tick'
                     cíbzù
    bz
                     sàptèrè
                                          'chili pepper'
    pt
```

3.3.8.4 Medial triple *CCC* clusters

I can cite *lmb* in *gŭlmbà* 'pigeon', *kòlmbà* 'tree sp. (*Piliostigma*)', and *kólmbó* 'burrgrass (*Cenchrus*)'. The other *CCC* clusters are *wnd* in *céwndé* 'shape (sth) into a faceted form' and *ynd* in *záyndé* '(surface) be shiny', both of which are likely Fulfulde loanwords.

3.3.8.5 Final *CC* clusters

No final clusters are attested.

3.4 Vowels

The vowel inventory is the usual one for Dogon languages: seven short vowels, their long counterparts (much less common), and long nasalized vowels (rare).

```
(10)
              short oral
                                       long oral
                                                             nasalized (long)
                                       u:
                      u
                                                             o^{n}
                      0
                                       o:
                                                             \mathfrak{I}^{n}
                      0
                                       o:
                                                             a^{n}
                      a
                                       a:
                                                             \varepsilon:<sup>n</sup>
                                       \varepsilon:
                      \varepsilon
                                                             e:<sup>n</sup>
                                       e:
                      e
                                       i:
                                                             i:^n
```

There is a tendency to merge short ε into e, and o into o, in the presence of a nasal(ized) consonant. This tendency may be spreading from Jamsay (where it is rampant) into the speech of younger Yanda people. As an example, I was told that older people carefully pronounce 'tree' as $tim\dot{\varepsilon}$, while many younger people pronounce it $tim\dot{\varepsilon}$ (compare Jamsay $tiw^n\dot{\varepsilon}$, Pergué $tiw^n\dot{\varepsilon}$). Nasal consonants are also responsible for some unusual mixed-ATR stems, especially verbs (§3.5.1.4).

3.4.1 Short and (oral) long vowels

There is a distinction between *Cv* and *Cv*: monosyllabic stems, though stemclass and vowel quality partially skew the vowel-length possibilities. In (11) the possibilities for verbs are shown; only one example per attested vowel is given.

(11) *Cv* and *Cv*: verb stems

```
a. Cv
    wś
                     'see'
                                 (A/O stem wa-)
                     'go out'
    gó
                                 (A/O stem va-)
                     'weep'
    Vέ
b. Cv:
                     'shave'
    ká:
    tó:
                     'spit'
    té:
                     'sprout'
                                 (behaves like /téyé/)
```

For other stem-classes the attested data are in (12). Short-voweled *Cv* nouns are uncommon and seem to be limited to high-frequency, semantically light stems.

(12) *Cv* and *Cv*: stems (noun, verb, numeral)

```
a. Cv
    cí
                      'thing'
                      'meal'
    zá
                      'woman'
    yὲ
                      'person'
    пò
b. Cv:
                      'foot'
    nà:
                      'cow'
    nà:
                      'roan antelope'
    kà:
    kà:
                      'grasshopper (generic)'
                      'hyena or leopard'
    tà:
                      'head'
    kó:
    pὲ:
                      'sheep'
    sè:
                      'iackal'
    H dé:
                      'father (possessed)'
    <sup>H</sup>ní:
                      'mother (possessed)'
                      'yam (Dioscorea)' (< Bambara)
    kŭ:
```

In uncompounded stems of two or more syllables, long vowels are generally in nonfinal syllables. Bisyllabic: $k\grave{e}:z\grave{u}$ 'cold', $k\acute{a}:n\grave{a}$ 'pied crow', $\grave{u}:r^n\grave{u}$ 'grey monitor lizard', $b\check{a}:l\grave{a}$ 'tree sp. (Acacia nilotica)', $s\acute{e}:nd\acute{e}$ 'balanzan tree', $p\grave{i}:z\grave{u}$ 'mistletoe', $b\grave{o}:r\grave{o}$ 'beetle sp. (Trachyderma)'. Third of four syllables (compound or compound-like segmentation): $\grave{e}m\grave{a}-s\acute{a}:r^n\acute{a}$ 'earwig', $\grave{a}n\grave{a}s\acute{a}:r^n\acute{a}$ 'white person' (loanword). Trisyllabic: $\grave{a}^ns\acute{a}:r^n\grave{a}$ 'striped tree snake (Psammophis elegans)', $n\grave{a}-n\grave{a}:r^n\grave{a}$ 'algae; spider'.

A few nonmonosyllabic stems do end in a long vowel: jàbî: 'henna' (loanword), tùmá -> 'one' (§19.4.1), ném-[sì-sí:] 'jacana (bird)' (frozen compound?), ól-sò: 'viper sp.' (compound < Tommo So), ènà: 'frog', sà:yú: 'wild fonio grass'.

3.4.2 Nasalized vowels

Nasalized vowels are relatively uncommon. The examples in (13) are basic lexical items (including a local toponym) including a long nasalized vowel. Those in (13b) are loanwords. $bw-\hat{\varepsilon}$: "their' in (13c) is one of several similar pronominal possessor forms that end in $\hat{\varepsilon}$:", likely as a result of contraction from e.g. $/b\acute{o}-y^n\check{\varepsilon}/$.

(13) Long nasalized vowels

```
a. zà:<sup>n</sup>
                       'normal, proper' (§8.4.4.2)
     pâ:n
                       'bamboo (Oxytenanthera)'
    gà:n
                       'cat'
     sà: nzíyà
                       'piapiac (magpie)'
     \hat{\mathfrak{J}}^{n}
                       'crocodile'
     ?ɔà:1 ò:n
                       (village name)
     s\check{i}."
                       'sharp (blade)'
     bi:^n
                       'tree sp. (Sclerocarya)'
b. mílyà:n
                       'million'
c. bw-\hat{\varepsilon}^{n}
                       'their' (</bó-ynè/
```

Following a cross-linguistic trend, nasalization is most common with open vowel qualities like $\{a \circ \varepsilon\}$. Stems with nasalized long $i:^n$ like $s\check{i}:^n$ 'sharp' (13a) are glaring exceptions, but this vowel could perhaps be analysed as /iyⁿ/ in these stems.

Possible cases of **short nasalized vowels** involve position before a homorganic sibilant, where there is no phonological distinction between e.g. vnzv and v^nzv . I transcribe these phonemically with n plus sibilant, but the nasalization is realized on the preceding vowel. Because these sequences occur medially within stems, their phonological structure may not be transparent to native speakers. Examples are in (14), where for example $\partial nz\partial - \partial nz\partial$ is heard as $[\partial^n z\partial \partial^n z\partial]$.

(14) Short nasalized vowels

```
ònzò-ónzò'tree sp. (Grewia flavescens)'mìnzù'shea tree (Vitellaria)'sénzà'tree sp. (Cola laurifolia)'pénzà'vetiveria grass'òyè-sènzù'shrew (Crocidura)'
```

3 4 3 Initial vowels

Stems may begin with vowels. Examples are in (15).

```
(15) a. short vowels

ànàn 'bird'

ún 'go'
```

```
ízù
                            'fish (generic)'
                            'child'
      èné
      έτε
                            'milk'
                            'sit'
      óbí-yé
                            'spitting cobra'
      дbà
b. long vowels
                            'grey monitor lizard'
      ù:r<sup>n</sup>ù
      \hat{\mathfrak{I}}^{n}
                            'crocodile'
      \hat{\varepsilon}:r^n\hat{\varepsilon}
                            'tree sp. (Spondias)'
                            'wild-pea bush (Boscia senegalensis)'
      è:rè
```

Initial i is sometimes dropped before a nasal-stop cluster in inju 'water' and ingile 'get up'. An initial *i or *u may have been originally present in the noun 2516 'house' and in glottal-initial verbs like 251e 'go up', to judge by cognates in other Dogon languages.

3.4.4 Stem-final vowels

There is no ban on any stem-final vowel at the lexical level. See §3.6.3.2 on Apocope of word-final short /u/ certain phonological conditions.

3.4.5 Vocalic harmony (ATR)

In general, a stem may have [+ATR] vowels $\{e\ o\}$, [-ATR] vowels $\{e\ o\}$, or neither, but not a mixture of both. Except as noted below, this constraint applies to non-borrowed verb stems (including some suffixal derivatives), and is generally true of uncompounded non-verb stem-classes. However, many nouns (especially those with three or more syllables) likely originated as compounds, so the constraint does not hold in any strong way for nouns.

An important development in Yanda Dom is that stems of the original shape *CeNe and *CoNo, with [-ATR] vowels and a medial nasal, have become CeNe and CoNo. That is, the first vowel has shifted to [+ATR] under the influence of the nasal, but the final vowel remains [-ATR]. This cannot now be captured by a synchronic phonological rule, since some new CeNe and CoNo stems have arisen (generally from reconstructed forms with medial clusters). So there is now a three-way lexical contrast between CeNe, CeNe, and CeNe, and a three-way lexical contrast between CoNo, CoNo, and CoNo. That is, at the lexical level, there are fully [+ATR], fully [-ATR], and mixed-ATR stems. For

the verbs, these lexical contrasts then feed into, and are partially neutralized by, ATR stem modifications required by derivational or inflectional morphology.

In the rules for vowel sequencing possibilities in verb stems, it can be seen that high vowels $\{i\ u\}$ may co-occur with vowels of either ATR class. Therefore high vowels are taken here as extraharmonic. Readers are free to attribute covert ATR values to them in particular stems, based on which other vowels occur. However, this seems rather circular and I avoid it.

The relationship of a to the ATR system is complex. In some respects, a tilts toward [+ATR]. For example, verbs have an A/O-stem such that stem-final [-ATR] $\{\varepsilon \ o\}$ converge as a, while [+ATR] $\{e \ o\}$ remain unaffected or converge as a. One interpretation of this is that stem-final vowels shift to [+ATR] and toward the back/low region. This suggests an association between a and [+ATR].

More concrete evidence for the [+ATR] association of a is the fact that the E-stem of verbs, which ends in ε or e depending on the lexical [ATR] class of the stem, appears as [+ATR] e rather than ε in stems with a-vocalism. This applies to Ca: stems and to u-final stems with shapes like CaCu, from |CaCa| with the final |a| shifted to u. Thus perfective $k\acute{a}y\acute{e}$ 'shaved' from $k\acute{a}$:, and $n\grave{a}m\acute{e}$ 'stepped on' from u-final $n\grave{a}m\acute{u}$. (There are no stems with all high vowels, so the E-stem test cannot be applied to high vowels.)

However, the same u-final stems have suffixal derivatives with [-ATR] vowels $\{\varepsilon\ o\}$ in the suffix. This applies even to those derivational suffixes whose vocalism elsewhere harmonizes with the ATR value of the input stem. Thus mediopassive $b\grave{a}mb\acute{i}-y\acute{e}$ 'carry on back' (stem $/b\grave{a}mb\acute{a}-/$) rather than $\#b\grave{a}mb\acute{i}-y\acute{e}$ (compare $s\acute{e}:-y\acute{e}$ 'flip [intr]'), transitive $t\acute{a}:-d\acute{e}$ 'put shoes on (sb)' (stem $/t\acute{a}g\acute{a}/$) rather than $\#t\acute{a}:-d\acute{e}$ (compare $s\acute{e}:-d\acute{e}$ 'flip [tr]'), and reversive $t\acute{a}l-l\acute{e}$ '(sth affixed) be removed' (stem $/t\acute{a}g\acute{a}/$) rather than $\#t\acute{a}l-l\acute{e}$ (compare $m\acute{l}l-l\acute{e}$ 'unbraid').

Therefore while high vowels $\{u \mid i\}$ are truly neutral (extraharmonic), a seems to play both sides in different morphological contexts.

3.5 Phonology of verb-stem vocalism

3.5.1 Bare stem, E-stem, A/O-stem, U-stem

Verbs take different forms in the various AMN categories, the differences being expressed in the stem-final vowel, which I will focus on in this section. First, there is the **bare stem**, used in verb chains and also in several AMN categories. There is an **E-stem** used in the perfective (positive) that always ends in e or e, the choice depending on the ATR-harmonic class of the verb. One could argue

that this final vowel is a suffix that (fully or partially) replaces the final stemvowel.

There is an A/O-stem found in several AMN categories. It shifts stem-final [-ATR] $\{\varepsilon\ o\}$ to a, and (to varying extents) stem-final e to o. The latter shift is obligatory in the imperative, is avoided in the perfective negative (except in the 3Pl subject form), and is inconsistently applied in other A/O-stem contexts. One could divide the A/O-stem (in the broad sense) into subcategories to recognize these nuances. I choose not to distinguish them formally, but will sometimes refer to the perfective negative version as the A/O-stem (o-less variant).

In earlier versions of this grammar I recognized a [+ATR]-stem found before -Ca... suffixes (imperfective negative -nán- and variants, prohibitive -la, and hortative -ma). The only difference between the bare stem and the +ATR-stem was that lexical -ATR vowels merged with +ATR, i.e. $\varepsilon \rightarrow e$ and $o \rightarrow o$, leaving other vowels unaffected. I now regard the supposed [+ATR]-stem as just a special case of the bare stem. My first informant seemed to me to convert -ATR stem vowels to +ATR in the presence of the suffixal a-vowel, but my second informant (whose articulation is generally clearer) maintains lexical ATR values in this context. I am revising this grammar accordingly.

For a possible **U-stem** limited to one class, see the discussion of the u-final verbs in (§3.5.1.6), below.

Most of the AMN categories are expressed by a suffix, so one can say that suffix X "takes" a particular stem-vocalization type. There are, however, also some unsuffixed forms (perfective, imperative) that are expressed only by stem vocalism (E-stem for the perfective, A/O-stem for the imperative). For purposes of this introductory section, a set of five forms (the bare stem used in chains, the imperative, and three stems that can be followed by pronominal-subject suffixes) will illustrate the stem-vocalism types. Tone contours are not considered in this section.

3.5.1.1 Stem ends in lexical $\{o \ a\}$

The verbs in (16) end {o o: a:} in the bare stem. Since these vowel qualities are already [+ATR], or (in the case of a:) are compatible with [+ATR], these stems show no audible change in the A/O-stem or in the [+ATR] stem. However, since they do not already end in a mid-height front vowel, the E-stem does require an audible change. Monosyllabic Co: and Co "break" into what I usually transcribe as Cwe-, which is really Coe- including a desyllabifed and shortened o(:). Ca: stems become Caye- (with epenthetic y). The fact that Caye- ends in a [+ATR] vowel is noteworthy; it suggests that a(:) favors [+ATR] rather than [-ATR] surroundings. The nonmonosyllabic stems with final o shift this vowel to e in the E-stem.

```
Perf
(16)
        bare
                         Imprt
                                     PerfNeg
                                                 ImpfNeg
                                                               gloss
        stem
                E-stem A/O-stem A/O-stem
                                                 bare stem
        a. Ca:
                káyé-
                                     ká:-lì-
                                                 kà:-nán-
                                                               'shave'
        ká:
                         kâ:
        b. Co
        gó
                goé-
                         gó
                                     gò-lí-
                                                 gò-nán-
                                                               'go out'
        c. Co:
        tó:
                toé-
                         tô:
                                     tó:-lì-
                                                 tò:-nán-
                                                               'spit'
        d. nonmonosyllabic with final o
        óbí-yó óbí-yé- óbí-yò
                                     óbí-yó-lì-
                                                               'sit'
                                                 òbì-yò-nán-
        gùló
                gùlé-
                         gùló
                                     gùlò-lí-
                                                 gùlò-nán-
                                                               'dig'
                         tólò
                                     tóló-lí-
                                                 tòlò-nán-
                                                               'pound'
        tóló
                tólé-
                dòné-
                         dònó
                                     dònò-lí-
                                                 dònò-nán-
                                                               'become blunt'
        dònó
```

The last verb here, $d\partial n\dot{o}$ 'become blunt', should be contrasted to verbs of the shape CoN_{2} from etymological *CoNo that have stem-final a in the A/O-stem, see §3.5.1.4, below.

Verbs with variable stem-final $e \sim o$ are covered in the following section. In some cases there is doubt as to whether e or o is lexical.

3.5.1.2 Stem ends in lexical e or in variable $e \sim o$

A number of verbs have lexical vocalism e...e or i...e. The final e alternates with o in a complex way. The basic patterns, as I understand them based primarily on data from my first informant, are summarized in (17).

- (17) Stem-final $e \sim o$ alternation in nonmonosyllabic verbs
 - a. E-stem always has final e
 - b bare stem

unsuffixed bare stem has variable $e \sim o$ (perhaps lexicalized) suffixed forms based on bare stem normally have e imperfective negative always has e prohibitive and hortative have variable $e \sim o$

c. A/O-stem

imperative always has o

```
stem before suffix-initial m (imperfective) favors o stem in past imperfective negative has long o: (< *o-m) perfective negative has variable e \sim o but favors e
```

There is a suggestion that the unsuffixed bare stem might be gravitating toward the imperative with respect to vocalism. There is also a suggestion that subgroupings can be (faintly) perceived in both the A/O- and bare stems. However, it is difficult to disentangle categorial from phonological factors. For example, the labial m of imperfective suffixes might have tilted the stem toward o, while the high front vowel of perfective negative -li- may have favored e.

Some examples of this type of verb are in (18). Here again it is possible that the medial labial consonants in 'roast, grill' and 'catch' are at work.

```
(18) stem gloss

símbé (símbó) 'roast, grill'
íbé (íbó) 'catch'
cézó (cézé) 'cut (by slicing)'
pídé 'shut'
dèné 'fell (tree)'
```

My impression is that some verbs have gone farther than others in shifting from stem-final e to o, especially in the unsuffixed bare stem. For example,. I heard final o frequently in $c\acute{e}z\acute{o}$ 'cut (by slicing)' but less often with $p\acute{i}d\acute{e}$ 'shut'. The situation is further complicated by the existence of another set of stems of the shape CeNe but from original *CeNe that still have stem-final a in the A/O-stem, see §3.5.1.4, below.

Sample partial paradigms for verbs with $e \sim o$ alternation are in (19). Some further variants are likely to occur but are not attested at present.

(19) Paradigms of *cézó* 'cut (slice)', *pídé*- 'shut', and *símbé*- 'roast'

'cut'	'shut'	'roast'	category
E-stem cézé-	pídé-	símbé-	Perf
unsuffixed bar cézó (cézé)	re stem <i>pídé</i>	símbé símbó	bare stem

suffixed form based on bare stem

```
cézè-zè-
                pídè-zè-
                               símbè-zè-
                                                  recent perfect
                                                  imperfective Neg
    cèzè-nán-
                pìdè-nán-
                               sìmbè-nán-
    cézó-là
                pídó-là
                               símbé-là
                                                  prohibitive
A/O-stem: imperative
    cézò
                pídò
                               símbò
                                                  imperative
A/O-stem: form with suffix-initial imperfective -m
    cézó-m
                pídó-m
                               símbé-m
                                                  imperfective 3Sg
                               símbó-m
A/O-stem: perfective negative
    cézé-lì-
                pídé-lì-
                               símbé-lì-
                                                  perfective negative
    cézó-lì-
                pídó-lì-
```

3.5.1.3 Stem ends in [-ATR] lexical ε or σ

The stems in (20) belong to the $\{\varepsilon \ o\}$ [-ATR] vowel-harmonic class. Those already ending in ε show no audible change in the E-stem, while those with final o shift it to o. In the A/O-stem, the final $\{\varepsilon \ o\}$ shifts to o. Vowels in nonfinal syllables are unaffected by these stem-final shifts (but see comments below).

```
(20)
            bare
                    Perf
                             Imprt
                                        PerfNeg
                                                   ImpfNeg gloss
            stem
                    E-stem
                            A/O-stem A/O-stem bare stem
        a. final \varepsilon
            yέ
                    yέ-
                             yá
                                        yá-lì-
                                                    yè-nán-
                                                               'weep'
            cédé
                    cédέ-
                             cédà
                                        cédá-lì-
                                                    cèdè-nán- 'gather (wood)'
            dìγέ
                    dìyέ-
                             dìyá
                                        dìyà-lí-
                                                    dìyè-nán- 'carry on head'
        b. final o
            wś
                    wέ-
                             wá
                                         wà-lí-
                                                    wò-nán-
                                                               'see'
                                                    dògò-nán- 'leave, abandon'
            dàgá
                    dàgέ-
                             dògá
                                         dògà-lí-
                                         ùbà-lí-
            úbś
                    úbέ-
                             úbà
                                                    ùbò-nán-
                                                               'pour'
            dàdá
                    dàdέ-
                             dàdá
                                        dàdà-lí-
                                                    dàdà-nán- 'roast on fire'
```

The presence of an a-vowel in a following syllable tends to shift [-ATR] vowels toward their [+ATR] counterparts. This applies to the nonmonosyllabic A/O-stems, and to all of the imperfective negatives forms in (20). I now believe that this is a gradient phonetic effect, and that the ATR opposition is not fully

neutralized. My older informant showed the effect, but my second informant (whose articulation is more precise) maintains the opposition much more clearly. I have therefore corrected earlier transcriptions, e.g. *cédá-lì*- and *cèdè-nán*- for 'gather (wood)', to the forms given in (20).

In addition to the native Dogon stems illustrated in (20), there are some syllabically heavy stems ending in ε or \mathfrak{I} that are not subject to the vowel-sequence constraints typical of CvCv stems, but that do obey the stem-final vowel changes. These include Fulbe loanwords like $p\acute{a}:b\acute{\varepsilon}$ 'protect', causatives in $-m\acute{\varepsilon}$ (or $-m\acute{\mathfrak{I}}$), and other suffixal derivatives like $n\acute{a}:-nd\acute{\varepsilon}$ 'cause to go past' (cf. $n\check{a}n$) 'go past') and homonyn $n\acute{a}:-nd\acute{\varepsilon}$ 'put up on' (cf. $n\acute{a}n$ - $i\acute{\varepsilon}$ 'go up on').

3.5.1.4 Mixed-ATR CeN ε or CoN σ stem with final a in A/O-stem

This discussion is based on the speech of my older informant who belongs to the chiefly clan. See the end of this section for variations.

The verbs in (21) are of the bimoraic type $CeN\varepsilon$ or CoNo, where N is a nasal (or nasalized) consonant (the initial C may be vacant). In their vocalism, these verbs are intermediate between the [+ATR] type dono 'become blunt' and deno 'fell (tree)' in §3.5.1.1-2 on the one hand, and the [-ATR] type cede 'gather (wood)' and dono 'leave, abandon' in §3.5.1.3 on the other. The A/O-stem of the mixed-ATR stems ends in a, showing that the choice between a and o in this stem is determined by the final lexical vowel.

(21) Mixed-ATR bisyllabic stems

```
Perf
                                            PerfNeg
                                                           ImpfNeg
      bare
                             Imprt
                                                                                gloss
      stem
                 E-stem A/O-stem A/O-stem bare stem
a. CeNe from *CεNε
      dèmέ
                 dèmé- dèmá
                                            dèmà-lí-
                                                            dèmè-nán-
                                                                                'hit'
      nèr<sup>n</sup>é
                                                           nèr<sup>n</sup>è-nán-
                 n e^{n} \epsilon - n e^{n} 
                                            nèr<sup>n</sup>á-lí-
                                                                                'hone (blade)'
     pér<sup>n</sup>é
                 pér<sup>n</sup>έ- pér<sup>n</sup>á
                                            pér<sup>n</sup>á-lì-
                                                           pèr<sup>n</sup>è-nán-
                                                                                'trim (beard)'
b. CoNo from *CoNo
                 gòηέ-
                            gòŋá
                                            gòŋà-lí-
                                                            gòŋò-nán-
                                                                                 'go around'
      gòŋś
                 dòr<sup>n</sup>έ- dòr<sup>n</sup>á
                                            dòr<sup>n</sup>à-lí-
                                                            dòr<sup>n</sup>ò-nán-
                                                                                 'sell'
      dòr<sup>n</sup>5
      gòr<sup>n</sup>5
                 gòr<sup>n</sup>é- gòr<sup>n</sup>á
                                            gòr<sup>n</sup>à-lí-
                                                           gòr<sup>n</sup>ò-nán-
                                                                                'be stronger'
```

In the phrase $d\delta n \ d\delta r^n \delta$ 'sell (=make) a sale', the noun has δ . The agentive compound is $d\delta n - d\delta n$ 'seller'.

One relevant pair of nearly homophonous verbs is $g \delta m \delta$ 'rot' with A/O-stem goma- (perfective negative $g \delta m \delta$ -li-), versus $g \delta m \delta$ 'pull in (stomach)' with A/O-stem gomo- (perfective negative $g \delta m \delta$ -li-). Cognates of 'rot' include Najamba $g \delta m \delta$ and Bankan Tey $g \delta m \delta$ with [-ATR] vowels. Cognates of 'pull in (stomach)' include Nanga $g \delta m \delta \delta$, Pergue $g \delta m m \delta$, and Bey Tey $g \delta m \delta$ with [+ATR] vowels. The noun $g \delta m \delta \delta$ 'courtyard' is homonphonous to 'pull in (stomach)'.

Another pair, instructive from a different perspective, is the verb *émé* 'milk, draw milk from (e.g. a cow)' with perfective negative *émá-lì*- (*émé, cf. Nanga *émé*), versus *émé* 'squeeze' with perfective negative *émá-lì*- (*émbé, cf. Nanga *émbî*). This pair suggests that synchronic *CeNe* and *CoNo* stems that still have full [-ATR] lexical vocalism may have formerly had a medial cluster. In this event, the shift of the first vowel to [+ATR] was limited to stems with precisely *CeNe and *CoNo shapes at the time, and did not affect stems that later acquired these shapes due to simplification of a medial cluster.

The inventory of [-ATR] $C \in N \in E$ and $C \ni N \ni E$ stems from my working lexicon is given in (22), with selected cognates. Except as noted, there is evidence for an original *CvCCv shape.

(22) [-ATR] $C \in N \in \text{ and } C \ni N \ni \text{ verbs}$

```
gloss
                                 cognates
   stem
a. C \in N \in
 good evidence for original *CECCE
             'squeeze'
                                 Nanga émbí
   έmέ
              'pick up'
    zèné
                                 Tommo So jènné, Najamba jènjé
   mèné
             'roll up, fold'
                                 Nanga mùndó, Bankan Tey mìndé
             'rebalance'
                                 Tommo So pénné, Nanga pínjí
   ρέηέ
```

```
'spur'
                                     Ben Tey néngí, Mombo nóngé
    nèŋé
                                     Najamba jènjé, Tommo So jènné,
    zèné
               'pick up'
                                      Mombo géngyé
  original *CaCa
    s \acute{\varepsilon} r^n \acute{\varepsilon}
               'dredge out'
                                     Bey Tey sání, Pergue sáná, Najamba
                                      sáy, Nanga and Tommo So sá:
b. CoNo
  good evidence for original *CoCCo
               'lengthen (thread)' Nanga tóndí
    tớnớ
    zàηś
               'treat (medically)'
                                    Pergue jòngó
  possible mediopassive *CoC-Co
    ၁၈၁
               'be tired'
                                     Yorno So śpś, Tommo So śpí-yé
  historically problematic cases
    5r^n 5
               '(well) be eroded'
                                     Tommo So 5d5, Yorno So 5r^n5,
                                      Nanga wòró, Jamsay and Bankan
                                      Tey wà:r<sup>n</sup>∕⁄
    5r<sup>n</sup>5
               'give enema to'
                                     Nanga, Bey Tey, and Pergue \delta r^n \delta,
                                      Najamba óné
```

Some further comments on the more difficult cases. First, $s \acute{\epsilon} r^n \acute{\epsilon}$ 'dredge out' (22a) does not derive from *CvCCv, but this verb probably shifted from *CaCa to $C \epsilon C \epsilon$, arriving at the latter vocalism via a quite different route than in the other examples.

Second, 505 'be tired' (22b), which has few known cognates, may be the result of Syncope of *5ni-y5 (with mediopassive suffix as in Tommo So), via *5n-n5 or *5n-j5 depending on how the post-syncope consonant cluster was handled. If the verb had this *CoN-No shape at the time when *CoNo verbs shifted to *CoCo, it would have escaped the shift.

To complement this historical analysis it is necessary to show that the mixed-ATR *CeNe* and *CoNo* verbs with final *a* in the A/O-stem derive from *CvCv rather than *CvCCv. In practice this means finding cognates in Dogon languages and dialects that, in other stems, do preserve medial clusters (Pergue, Nanga, Tommo So, Ben Tey, Bankan Tey, Najamba, but not Jamsay and Togo Kan). As can be seen by comparing the Yanda Dom forms with cognates (23), the verbs in question generally reconstruct as *CvCv. Where the evidence is mixed, we give priority to Najamba on grounds of genetic subgrouping with Yanda Dom.

(23) Mixed-ATR $CeN\varepsilon$ and $CoN\varepsilon$ verbs with final a in A/O-stem

stem gloss cognates

a. CeNe with A/O-stem CeNagood evidence for original *CECE cémé 'pinch' Tommo So kémé 'cut throat of; saw' Najamba and Nanga sémé sémέ 'hit (target)' Nanga némé, Pergue néwⁿé nèmέ 'hone (blade)' Nanga *nèr*ⁿí, Najamba *năr* nèrⁿé dèrⁿ€ 'spend day' Ben Tey dèrⁿé, Najamba dèné bèrⁿ€ 'become giddy' Ben Tey and Nanga bèrⁿé 'sift' Najamba nèné, Ben Tey and Pergue yèηέ yìgé, but Tommo So yèŋgé reconstruction uncertain cérⁿé '(moon) appear' no known cognates pérⁿέ 'trim (beard)' no known cognates possible cognates are Bankan Tey dèmέ 'hit' dèmé and Nanga dùmó 'butt with head' a. CoNo with A/O-stem CoNagood evidence for original *CoCo Najamba gòmé, Bankan Tey gòmó gòmó 'rot' tómó 'wrap up' Tommo So tómó, Pergue tó:ⁿ mixed: Najamba *tέηέ*, Tommo So tóηź 'hobble (animal)' $t\acute{e}\acute{e}^n$, Nanga $t\acute{e}\eta\acute{i}$, Bey Tey $t\acute{e}y^n\acute{i}$, but Pergue tóngó, Bankan Tey tóngí gòή́ 'carry on side' Tommo So gàná tórⁿ5 'turn on (flashlight)' Pergue, Nanga, and Bey Tey t5rⁿ5 kórⁿ5 'pick (fruit)' Nanga kórⁿó, Toro Tegu kóró, Tommo So k5έ dòrⁿ5 'sell' Pergue dòrnó, Tommo So dònó gòrⁿ5 'be stronger' Nanga, Bey Tey, and Pergue gòrⁿ5 evidence mixed but closely related Najamba supports *CoCo 'write' Najamba tóηέ, Tommo So tóηό, tóŋś Nanga tóní, Bankan Tey tówⁿ, but Bey Tey tóngú, Pergue tóngó '(fire) be lit' Najamba tógé, Tommo So téné, tóŋś Nanga tání, but Bey Tey tángí, Pergue tángá

~ gàngú

Najamba gồŋé, Tommo So gồŋó, Nanga gồŋí, but Pergue gồŋgó, Bankan Tey gồŋgírí, Bey Tey gồŋú

gòŋś

'go around'

reconstruction uncertain				
bòmź	'peek at'	no cognates		
kónś	'turn around'	no cognates		
denominal				
tóŋś	'do (business)'	probably denominal from noun <i>tòŋ</i> , cf. Nanga <i>tòŋgî</i>		
problematic (with medial cluster in some cognates)				
kóŋó	'collect last food'	(Pergue kóŋgó, Nanga kóŋjí, Bey Tey céŋgé, Tommo So kóŋóló)		
nòmź	'sag'	Najamba nónjé, Nanga nómbí,		
		Bankan Tey lómbí, Ben Tey nómjí,		
		Pergue lómdó, Tommo So nómmó		
		(set may include suffixal		
		derivatives)		
gònś	'turn (head)'	Tommo So gònnó, Mombo góndé,		
		but Ben Tey gòlí, Yorno So gònó,		
		Pergue gòló		

I have focused on verb stems, where the vocalic patterns are clearest and most significant. A fuller study would also look at nouns and other substantives. There are two important nouns with e- ε sequences: $z \grave{e}m \acute{\varepsilon}$ 'blacksmith' and $j \grave{e}m \acute{\varepsilon}$ 'black'. Cognates point to reconstructions like * $z \acute{\varepsilon}mb \grave{\varepsilon}$ 'blacksmith' and * $j \acute{\varepsilon}m \acute{\varepsilon}$ 'black'. My guess is that 'black' shows the regular vocalic treatment, and that 'black' influenced 'blacksmith'. Another problematic noun is $\acute{\varepsilon}m\acute{\varepsilon}$ 'milk'. Some cognates point to ungeminated medial *m (Nanga $\acute{\varepsilon}m\acute{\varepsilon}$, Ben Tey $\acute{\varepsilon}m\grave{\varepsilon}y^n$), while others point to a geminate or even nongeminate cluster (Tebul Ure $\acute{\varepsilon}mn\acute{\varepsilon}$, Bankan Tey $\acute{\varepsilon}mm\grave{\varepsilon}y^n$).

The vocalic distinctions described in this section are phonetically subtle, but since they make sense historically I currently consider them to be valid. My second informant, however, does not distinguish *CeNe* and *CoNo* stems from *CeNe* and *CoNo* stems, respectively, so for him there is no ATR disharmony. I suspect that this is typical at least for younger speakers.

3.5.1.5 Stem of shape $C\varepsilon$: with A/O-stem $C\varepsilon ya$ -

The set of verbs of the form $C\varepsilon$: is in (24). The E-stem is regular. Their peculiarity is an A/O-stem $C\varepsilon ya$ -, with what functions synchronically as an epenthetic y separating ε from a. Compare the y in E-stem Caye- from Ca: stems (16a). Historically, the verbs in (24) reflect the merger of old * $C\varepsilon y\varepsilon$ and * $C\varepsilon$: stems into a single paradigm with features of both original paradigms; see §10.2.1.11 for details.

```
(24)
          bare
                    Perf
                               Imprt
                                            PerfNeg
                                                           ImpfNeg
                                                                             gloss
                    E-stem A/O-stem A/O-stem
                                                           bare stem
          stem
          C\varepsilon: from *C\varepsilony\varepsilon and *C\varepsilon:
          tέ:
                    tέ:-
                                            téyá-lì-
                                                            tè:-nán-
                                                                             'sprout'
                               téyá
          sέ:
                    sέ:-
                               séyá
                                            séyá-lì-
                                                            sè:-nán-
                                                                             'trim (hair)'
```

3.5.1.6 *u*-final stems with stem-final alternation $a \sim u$

Finally, there is a set of verbs (25) with a in the first syllable and a stem-final alternation between u, a, and (in the E-stem) e or e (lexical choice). This is the only stem-vocalism class for non-borrowed CvCv and CvCCv verbs with nonfinal a, and the only type of stem that ever ends in u. I will refer to it loosely as the e-final class. It does not extend to stem shapes involving a long vowel or more than two syllables. Instead, we get final e (or e) in suffixal derivatives like e-final stem e-final stem e-final stem e-final stems like e-final stems e-final s

The u is deleted by Stem-Final u-Deletion (§3.6.3.2) after most unclustered sonorants. This deletion may result in alternations between syllable-final n and intervocalic r^n , as in 'do, make'. In the bare stem, no other productive class has C-final stems. All stems with final C in the bare stem, except for u 'go' and z in 'take, convey', have a nonfinal-syllable with u and belong to the u-final class.

(25) *u*-final verbs

```
bare
        Perf
                  Imprt
                               PerfNeg
                                            ImpfNeg
                                                           gloss
stem
        E-stem
                  A/O-stem A/O-stem
                                            bare stem
támbú
        támbé-
                  támbà
                               támbá-lì-
                                            tàmbù-nán-
                                                           'kick'
mànú
        màné-
                  màná
                               mànà-lí-
                                            mànù-nán-
                                                           'cook (meal)'
kán
        kár<sup>n</sup>é-
                  kár<sup>n</sup>à
                               kár<sup>n</sup>á-lì
                                            kàn-nán-
                                                           'do, make'
```

Of course the final e is limited to the E-stem. The fact that we get e rather than e is another indication that e-vocalism tilts to the [+ATR] side of the vowel-harmonic divide. On the other hand, harmonically sensitive derivatives like reversive $p\acute{a}g\acute{u}-l\acute{e}$ 'untie' consistently have suffixal [-ATR] vowels with u-final verbs, so it seems that these stems (i.e. those with lexical e-vocalism) can shift between plus and minus values of ATR depending on context.

An informant at one point claimed a phonetic distinction between the perfectives nàmé 'stepped on' (bare stem nàmú, {LH}/{LH} tone class) and

nàmé 'ground up (millet)' (bare stem năm, {LH}/{L} tone class). However, no distinction could be heard in spite of many repetitions. The fact that the bare stems and some inflected forms of these two verbs are clearly distinct may have influenced the informant's judgement.

The most striking detail in (25) is the stem-final u in the bare stem, contrasting with stem-final a in the A/O-stem. The apparent "shift" from a to u is phonologically more drastic than the simple feature shifts seen across the stem-vocalism classes in the A/O-stem; it has more the flavor of the E-stem, which imposes a specific stem-final vowel (subject, however, to ATR-harmony).

One could posit lexical representations of the type /támbá/ with nothing but a vowels, combined with a morphophonological rule replacing stem-final a by u in the bare stem. The latter could be called the **U-stem**, though functionally it corresponds to the bare stem (or chaining stem). Historically, the U-stem is likely a vestige of an older system where a final high vowel was typical of the "bare stem" (i.e. the form of the verb used in chains).

3.6 Segmental phonological rules

3.6.1 Transsyllabic consonantal processes

There is not much in the way of productive processes modifying consonants. Some Dogon languages have complex interactions of suffix-initial consonants with the consonant of the stem-final syllable, especially when the final vowel syncopates. Nasalization-Spreading, e.g. from stem to suffixal consonants, is also common in Dogon languages.

What little Yanda Dom has is confined to verbal derivational suffixation. The reversive derivative is fairly regular, so it provides few alternations, but see 'be affixed' (26a). Most of the alternations involve the transitive suffix -dv (26b-e). Usually the stem consonant changes (or disappears), but in (26b) the suffixal consonant is what changes. For most of the alternations listed I can cite only one or a handful of examples. If there is a general theme, it is that some coronal sequences are favored (II, rd), others are problematic. (26f) is a fortition process.

```
a. d(v) to 1 before 1 (assimilation)
tádú 'be affixed' tál-lé '(sth affixed) be removed' (§9.1)
b. suffixal d (in transitive -dv) to r after d (dissimilation)
kóndí-yé 'be bent' kóndí-ró 'bend (e.g. stick)' (§9.3.1.1)
```

```
c. dv or lv or y(v) to r before d (dissimilation?)
          kódí-yó 'be hung up'
                                        kór-dó 'hang (sth) up' (§9.3.1.1)
          bùlú-yó 'put on pants'
                                        bùr\dot{u}-d\dot{\epsilon} 'put pants on (sb)' (§9.3.1.1)
                                        gár-dé 'lay (sb) on his/her back'
          gáy-yé 'lie on back'
d. dv or lv to zero before d (truncation, Cv-dv output)
          tédí-yé '(mat) be laid'
                                        t \dot{\epsilon} - d \dot{\epsilon} 'lay out (mat)' (§9.3.1.1)
          dὲlí-yέ 'be set'
                                        d\hat{\epsilon}-d\epsilon 'set, put down' (§9.3.1.1)
e. j(v) or (gv) to zero before d (lenition, Cv:-dv output)
          gój-jó 'be inserted'
                                        gó:-dó 'insert' (§9.3.1.3)
          t\acute{a}j-j\acute{\epsilon} 'put on shoes'
                                        t\acute{a}:-d\acute{\epsilon} 'put shoes on (sb)' (§9.3.1.1)
                                        (cf. tàgí-lé 'take off [shoes])
f. y to j after nasal or stop (fortition)
          nùnú-15 'get undressed' nún-j5 'put on (clothes)' (§9.1)
          t \grave{a} g \acute{l} = t \acute{a} \acute{b} 'take off shoes' (§9.3.1.1)
```

Some even more opaque alternations are seen with transitive allomorph -ndv, e.g. $n\acute{u}n-j\acute{o}$ 'get dressed' versus $n\acute{u}:-nd\acute{o}$ 'dress (sb)'. It is hard to tell whether the n of the suffix is consubstantial with the medial nasal; many but not all examples involve stems with a medial nasal. For the data see §9.3.1.2-3.

3.6.1.1 r^n and n

There are alternations of syllable-final n with intervocalic r^n . In these cases I take r^n as lexically basic, and posit that r^n becomes n syllable-finally (a position that does not allow r^n). The best examples are from Car^nv verbs that have a bare stem with no final vowel (after apocope), versus presuffixal forms with a final vowel, as before the perfective negative suffix (27a). The verb 'burn' shows that true Canv verbs keep n presuffixally (27b). Historically, 'burn' reflects *dàndý with medial cluster (Nanga dàndi, Tommo So dànna)

```
(27)
                bare stem
                                 perfective negative
                                                               gloss
                                  wàr<sup>n</sup>à-lí
                                                               '(vine) spread'
          a. wăn
                                 kár<sup>n</sup>á-lì
                                                               'do'
                kán
                băn
                                 bàr<sup>n</sup>à-lí
                                                               'become red'; 'be hot season'
                                 bàr<sup>n</sup>à-lí
                                                               'beat (tomtom)'
                băn
                dăn
                                 dàr<sup>n</sup>à-lí
                                                               '(syrup) thicken'
                                 pár<sup>n</sup>á-lì
                                                               'boil up'
                pán
```

b. dăn dànà-lí 'burn'

Two consecutive rhotic syllables with r^n appear to be avoided. Thus $war^n in \epsilon$ 'stretch (animal hide)'.

3.6.1.2 Nasalization-Spreading

I did not observe systematic Nasalization-Spreading. If it were present we should expect mediopassive -yv and (deadjectival) inchoative -yv to appear regularly as $-y^nv$ after nasal syllables. I hear plain y. Mediopassive examples: $p\acute{a}m\acute{t}-y\acute{e}$ 'come up beside', $m\grave{u}n\acute{t}-y\acute{o}$ 'coil self up', $n\grave{i}n\acute{t}-y\acute{e}$ 'trip (be tripped)'. Mediopassive data are sparse since Cvn-jv with syncope then fortition of y to j is more usual (§9.3.1.2). Inchoative example: $n\acute{a}:n\acute{t}-y\acute{e}$ 'become easy'.

As a consequence, nasalized $\{r^n\ y^n\ w^n\}$ are treated here as independent phonemes. One might consider recognizing Nasalization-Spreading, or an effectively equivalent constraint, inside $Nvy^n(v)$ and $Nvr^n(v)$ stems like $niy^n \epsilon$ 'drink', $miy^n \epsilon$ 'grind into powder', $miy^n \delta$ 'be patient', may^n 'dry', $nar^n \delta$ 'truth', However, I also recorded a few counterexamples like tamoro 'date (fruit)' (<*tamboro:).

Note the minimal pair $m \grave{a} y^n \acute{\epsilon}$ 'become dry' versus $m \grave{a} y \acute{\epsilon}$ 'those (distant)'.

3.6.2 Vocalism of suffixally derived verbs

Some derivational verbal suffixes do show phonological integration with the input stem. Reversive suffix -lv- (§9.1) has surface forms $\{-l\acute{e} - l\acute{e} - l\acute{o} - l\acute{o}\}$ depending on the front/back and ATR vocalism of the stem. The variant $-l\acute{e}$ is also used after u-final stems (whose lexical vocalism is based on a), as in $n\grave{a}m\acute{u}-l\acute{e}$ 'take foot off' from $n\grave{a}m\acute{u}$ 'step on'. The same suffixal vocalism is observed with mediopassive -yv- and transitive -dv- (§9.3.11). We can think of the stemsuffix combination as subject to the constraints applicable to unsegmentable CvCvCv and similar stem shapes.

Transitive allomorph $-nd\acute{\epsilon}$ is more stable, since the stem shape is $Cv:-nd\acute{\epsilon}$ with long vowel (§9.3.1.2).

The main causative suffix (§9.2) appears as $-m\acute{\epsilon} \sim -m\acute{\delta}$, with $-m\acute{\epsilon}$ as unmarked allomorph and $-m\acute{\delta}$ used inconsistently after back rounded stem vowels. Unlike other suffixes, the causative follows the bare stem of the verb, suggesting a verb chain rather than the derivation of a typical verb stem.

3.6.2.1 Presuffixal V₂-Raising

Bisyllabic stems raise their final vowel to high $\{i \ u\}$ before reversive -Iv-, and (subject to some disfiguring consonantal changes) before mediopassive -yv- and transitive -dv-. In some cases the high vowel is then syncopated, and the raising can be thought of as the first stage of lenition of short vowels in the weak metrical position.

Reversive examples are $m \in n \in n$ (fold', $m \in n \in n$) (unfold', and $s \in n \in n$) (loop', $s \in n \in n$). We get $i \in n \in n$ and $u \in n$). There are no examples with stem-final a, since in bisyllabic verb stems the final a is shifted to u even word-finally ($n \in n \in n$).

3.6.3 Vocalic rules sensitive to syllabic or metrical structure

3.6.3.1 Epenthesis

I know of no epenthesis processes

3.6.3.2 Stem-Final *u*-Deletion (*u*-final verbs)

As a productive process producing synchronic alternations, deletion of vowels is confined to loss of short high vowels in verb stems. There is no difference between the way this applies word-internally (syncope) and word-finally (apocope).

Stem-Final u-Deletion applies in stem-final position in verbs. There is a large class of u-final verbs, which have final u in the bare stem (and related forms). The allowable stem shapes are CvCv and CvCCv. Whether this final u is lexical, or reflects a morphophonological shift of stem-final /a/ to u in these particular stems, is discussed briefly in §3.5.1.6 and §3.6.3.2.

The deletion applies to /u/ in a noninitial syllable following an unclustered sonorant (e.g. *Calu*-). The attested cases involve $\{Im\ n\ r\ r^n\}$, with the further provision that $/r^n/$ shifts to n in syllable-final position after the /u/ is deleted. All examples known to me are in (28a). However, some verbs with unclustered medial m, and all known cases with unclustered medial n, retain the n (28d). Deletion does not occur after an unclustered obstruent (28c) or a cluster (28d). I know of no n-final stem with a medial semivowel n or back nasal.

(28) Inventory of *u*-final Verb Stems

bare stem gloss

```
a. final u deleted after unclustered \{l m \eta r r^n\}, then /r^n/\rightarrow n
with m
                           'grind'
    năm (/nàmú/)
    kám (/kámú/)
                           'squeeze'
with /rn/ becoming syllable-final n
    băn (/bàr<sup>n</sup>ú/)
                           'beat (tomtoms)'
    kán (/kár<sup>n</sup>ú/)
                           'do'
     wăn (/wàr<sup>n</sup>ú/)
                           'ramify'
with other sonorants
    sál (/sálú/)
                           'grind coarsely'
                           'bear (child)'
    lăl (/làlú/)
                           'irrigate'
    zăl (/zàlú/)
    zăl (/zàlú/)
                           'rake up'
                           'harvest (peanuts)'
    gŭl (/gùlú/)
     wăl (/wàlú/)
                           'scoop (water, in hand)'
                           'pound (fruit pits)'
    zăŋ (/zàŋú/)
                           'do spot sowing'
    dăn (/dànú/)
    năŋ (/nàŋú/)
                           'pass by'
    pár (/párú/)
                           'cook (soft millet cakes)'
b. exceptions to (a), u not deleted after unclustered \{n \ m\}
with n
    mànú
                           'cook (meal)'
    dànú
                           'hunt'
    ánú
                           'fry lightly'
with m
    ámú
                           '(millet spike) grow flowers (red fuzz)'
                           'tie on (second wrap, to carry child)'
    ámú
    nàmú
                           'step on'
b. no deletion of u after obstruents
with sibilant
                           'press out (oil)'
    pású
     wàzú
                           'be left over'
with stop
    ábú
                           'accept, receive'
    ádú
                           '(healer) suck (blood)'
                           'build (courtyard wall)'
    gàbú
                           'become tall'
    gàbú
                           'touch'
    tábú
                           'slap on (wet earth, on wall)'
    zàbú
```

```
bàdú 'help'
tádú 'replaster (wall, roof)'
màdú 'become lost'
kágú 'be charred'
gàgú 'rub (sb) into the ground'
```

c. no deletion of /u/ after clusters

dàmbú 'push'
mànbú 'laugh'
támbú 'kick'
gànzú 'scratch'

Note the minimal pair $n \check{a} m$ 'grind' (28a) versus $n \grave{a} m \check{u}$ 'step on' (28b). $n \grave{a} m \check{u}$ 'step on' had a cluster *mb at an earlier point, cf. cognates Nanga $n \grave{a} m b \check{\iota}$ and Pergue $n \check{a} m b \check{\iota}$ with the same sense. Whether the other cases in (28b) also originally had clusters is not clear at this time.

3.6.3.3 Syncope CvC(C)v- to CvC- before verbal derivational suffix

Syncope from CvC(C)v-Cv to CvC-Cv occurs under limited conditions in connection with the suffixation of mediopassive -yv, transitive -dv, reversive -lv, or causative $-m\varepsilon$. In each case the flanking consonants must be favorable to consonant-cluster formation. Therefore the phonologically defined set of stems that undergoes Syncope is different from one derivational suffix to another.

Mediopassive suffix -yv, which is productive with verb stems (§9.3.1), combines with most CvC(C)v stems unproblematically as CvC(C)v-yv. In this case the only phonological issues are those due to vowel-sequence and tone-contour constraints.

However, expected #*Cvŋv-yv* appears as *Cvn-jv*, and expected #*Cvgv-yv* or #*Cvjv-yv* as *Cvj-jv*. Only underlying trisyllabic sequences (including the suffix) are affected. The derivation is somewhat tricky; I suggest (29).

(29) Derivation of syncopated *CvC-jv-*

- a. vocalic and tonal constraints for trisyllabic stems apply so that the derived CvCv-yv has a medial high vowel $\{i\ u\}$
- b. short high vowel is syncopated in second syllable of CvCv-yv, with flanking consonants C_2 and y playing a conditioning role
- c. /y/ hardens to *j* after a nasal or stop
- d. C_2 (if velar) assimilates in position to the following i

The known examples involving *Cvŋv* are in (30a). There is one example with a *Cvŋgv* stem (30b).

(30) Cvn(g)v- to mediopassive Cvn-jv-

Mediop	gloss	related form(s)
a. <i>Cvn-jv</i> < <i>C</i> v	⁄ŋv-	
zín-jé	'ride double'	zìŋέ 'have (sb) ride double'
bán-jé	'hide (self)'	adjective <i>băŋ</i> 'secret', <i>bá:-ndé</i> 'hide (sth)'
dín-j€	'become firm'	adjective dìnú 'firm (ground)'
jén-jé	'be tilted, bent'	adverb <i>jèŋ</i> 'tilted', <i>jé:-ndé</i> 'tilt, bend (sth)'
nún-jó	'get dressed'	reversive <i>nùŋú-ló</i> 'get undressed'
b. <i>Cvn-jv</i> < <i>C</i>	vŋgv-	
pán-jé	'choke on food'	<i>pángí-lí-yé</i> 'dislodge food that one is choking on' (reversive)

I know of no *Cvŋv* or *Cvŋgv* stems that fail to syncopate before the mediopassive suffix. On the other hand, syncope does not apply when the medial vowel is a non-velar nasal: $gìni-y\acute{e}$ 'slip out of position', $p\acute{a}mi-y\acute{e}$ 'be up against', $k\acute{a}r^ni-y\acute{e}$ 'be done, be possible'.

The known examples of *Cvjv*- or *Cvgv*- combining with the mediopassive suffix are in (31).

(31) *Cvjv*- or *Cvgv*- to mediopassive *Cvj-jv*-

Mediop	gloss	related form(s)
ój-jέ	'become hot'	òjú 'hot; fast', ó:-dí-yέ 'be fast'
táj-jé	'put on shoes'	tágí-lé 'take off shoes', noun tàjù 'shoes'
gój-jé	'carry over shoulder'	gór-dó 'sling (sth) over the shoulder of (sb else)'

'Become hot' is synchronically best derived from $/5j\acute{u}-y\acute{e}/$, though Dogon cognates have g rather than j in the adjective 'hot' and its related inchoative verb. 'Put on shoes' is more closely related morphophonologically to the reversive verb than to the related noun, so I favor $/t\acute{a}g\acute{u}-y\acute{e}/$ as underlying form.

This suggests that both *Cvjv* and *Cvgv* are subject to syncope before the mediopassive suffix. I know of no counterexamples.

As noted above, syncope only applies to the second syllable (from the left) in a *CvCv-Cv...* sequence. Therefore it does not apply in such examples as *wèzú-gí-yé* 'become crazy' where the relevant segmental lineup is in the third syllable from the left.

Transitive suffix -dv, which is often paired with mediopassive -yv to form doublets (§9.3.1.1), also frequently syncopates a preceding CvC(C)v stem. However, this time the favored preceding C(C) is labial. Specifically, Cvbv becomes Cvb-dv, and Cvmv become Cvm-dv. The known examples are in (32). The conversion of Cvmbv to Cvm-dv could be analysed as a special case of syncope, with intermediate Cvmb-dv/ then simplifying Cvm-dv to Cvm-dv could be produced directly by truncating the Cvm-dv of no cases where an input verb of these three shapes fails to syncopate before -dv.

(32) Cvbv and Cvmbv to transitive Cvb-dv and Cvm-dv

```
transitive
                                      related form(s)
                gloss
a. Cvb-dv < Cvbv-
    ób-dó
                'have (sb) sit'
                                      óbí-yó 'sit'
    zíb-dó
                'gird (sb)'
                                      zìbí-yó 'gird self (with wrap)'
    tób-dó
                'wrap turban on (sb)' tóbí-yó 'wrap turban on oneself'
                'frighten (sb)'
                                      ibi-yε 'be afraid'
    íb-dέ
b. Cvm-dv < Cvmv-
    pám-dé
                'put beside'
                                      pámí-yέ 'come up beside'
c. Cvm-dv < Cvmbv-
    bám-dέ
                'have (sb) carry'
                                      bàmbí-yέ 'carry on back'
                'cover (sb)'
                                      yàmbí-yε 'cover (self)'
    yám-dé
```

Clearly the conditions for syncope before transitive -dv differ from those before mediopassive -yv. In particular, the forms in the rightmost column in (32) above show resoundingly that medial labials do not allow syncope before mediopassive -yv.

A medial r allows Syncope, apparently optionally, before -dv (33). Because r is a tap, it is difficult to determine whether the burst of air on its release counts as a vowel.

(33) *Cvrv* to transitive *Cvr-dv*

```
transitive gloss related form(s)

gár-dé 'lay (sb) on back' gáy-yé 'lie on back'

wér-dé 'teach; accustom (sb)' wé:-dí-yé 'be taught; become accustomed'

gór-dó 'put hat on (sb)'
```

Note also transitive $g\acute{o}r$ - $d\acute{o}$ 'put hat on (sb)', though this is best interpreted synchronically as a dissimilation from /gòdú-dó/, see §3.6.4.5, below.

Reversive suffix -Iv (§9.1) does not syncopate stems with either a medial velar or a medial labial: $k\acute{u}m\acute{u}$ - $l\acute{s}$ 'untie', $t\acute{s}b\acute{u}$ - $l\acute{s}$ 'unroll turban', $p\acute{a}g\acute{u}$ - $l\acute{e}$ 'untie', $din\acute{l}$ - $l\acute{e}$ 'untie (knot)'. Instead, it syncopates stems with a medial {d l} to produce an ll cluster (34). For /dl/ to ll, see Stop-to-Lateral Assimilation (§3.6.4.2).

(34) *Cvdv* and *Cvlv* to reversive *Cvl-lv*

```
reversive
                 gloss
                                         related form(s)
a. Cvl-lv < Cvdv
    gól-ló
                 'take off (hat)'
                                         gòdí-yó 'put on (hat)', noun
                                         gòdú 'hat', but transitive gór-dó
                                         'put hat on (sb)'
    píl-lé
                 'open (door)'
                                         pídé 'shut (door)'
    tál-lá
                 'be unglued'
                                         tádú 'become affixed (e.g.
                                         glued)'
    gíl-lέ
                 'un-immobilize'
                                         gid\epsilon 'immobilize (e.g. car)
b. Cvl-lv < Cvlv
```

```
míl-lé 'unbraid (rope)' mílé 'braid (rope)'
```

Cvnv- stems do not syncopate: *kónú-ló* 'unroll (mat)', *mùnú-ló* 'untangle'. I know of no *Cvrv* or *Cvrⁿv* stems with reversives. However, cognates in several other Dogon languages for the 'put on hat' stem (34a) have *r*.

Syncope is not normal before causative $-m\acute{e}$. There are some $CvC-m\acute{e}$ causatives that derive from *CvCv-mv, but since the underived stems are now CvC even without a suffix there is no synchronic evidence for Syncope. However, I can cite $s\acute{i}n-m\acute{e}$ 'cause to be sated' from $s\acute{i}r^n\acute{e}$ 'be sated (full after eating)'.

3.6.3.4 *v*-Shortening

A sequence of the type Cv:CCv may be created in a suffixally derived verb stem, either by Medial C-Deletion from Cv:Cv-Ccv, by Syncope from Cv:Cv-Ccv, or by Lateral Doubling from Cv:clv If the medial Cc cluster is a homorganic stop-nasal cluster, i.e. a cluster that allows a preceding long vowel, nothing more happens. This is the case when Medial C-Deletion is involved, since the suffix in question is transitive allomorph -ndv. Thus $n\acute{a}:-nd\acute{e}$ 'cause to go past' from $n\breve{a}n$ 'go past'.

However, *II* does not allow a preceding long vowel. Consider the data in (35).

```
(35) a. d\acute{\epsilon}:d\acute{\epsilon} 'extend, hold out (e.g. arm)' 'retract, pull back (extended arm)'

b. k\acute{o}: 'cover (calabash) with (animal) hide' 'remove animal hide from (calabash)'
```

The phonological derivations are not completely transparent. However, a reasonable derivation of the reversive form in (35a) is from /dé:dé-lé/ (or /dé:dú-lé/ with the medial vowel raised) via Syncope of the medial vowel (§3.6.3.3, above) followed by Stop-to-Lateral Assimilation (§3.6.4.3, below). This would get us to /dé:l-lé/, whose long vowel must still be shortened to produce *dél-lé*.

In (35b), the conversion from /Cv:-lv/ to *Cvl-lv* might be done in a single step, if we focus on output constraints (i.e. on allowable shapes for reversive verb stems). Alternatively, we can do it in two steps, with Lateral Doubling getting us to /ko:l-lo/ (one might also segment this as /ko:-llo/), requiring us to then shorten the long vowel before *II*.

(36) *v*-Shortening

A long vowel is shortened before a *CC* cluster (within the word) other than a homorganic nasal-stop cluster

3.6.4 Local consonant cluster rules

The following sections describe adjustments to consonants depending on their position (intervocalic, syllable-final, in clusters). There are some interactions with the vocalic rules discussed above, and some interactions among the consonantal rules themselves.

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

In (37a), we see an alternation between syllable-final (including word-final) n produced by Stem-Final u-Deletion (§3.6.3.3, above) and intervocalic r^n , which I take to be lexically basic. The shift from $/r^n$ / to n is easily motivated since rhotics do not occur in syllable-final position. The intervocalic n in (37b) and many other examples shows that no general rule of the type /n/ to r^n could be justified synchronically, whatever the historical situation may have been.

- (37) a. $b\check{a}n$ 'beat (tomtoms)' 'he/she will beat (tomtoms)'
 - b. mànú 'cook (meal)'
 màná-m-ù 'he/she will cook (meal)'
- (38) Derhoticization

 $/r^n/ > n$ in syllable-final position

3.6.4.2 Lateral-Doubling (/Cv:-lv-/ to *Cv1-lv*-)

Consider what happens when a *Cv*: verb is combined with reversive *-lv*. The two examples in (39) are the only ones known to me.

(39) a. *kó:* 'cover (calabash) with hide (to make a tomtom)' (cf. Nanga *kówró*)

*kól-ló 'remove animal hide from (calabash)

```
b. dă: 'cover the opening of (jar) with a cloth'

(cf. Nanga dèwí)

dál-lé 'remove cover from (jar)'
```

Historically, these reversives were *Cvw-lv- or some transformation thereof. Current speakers of course have no evidence for the *w. The most reasonable synchronic analysis is that *Cv:-lv- reversives are disallowed and must be converted into an acceptable shape, with *Cvl-lv*- being the phonologically closest acceptable shape.

(40) Lateral-Doubling

A Cv: stem combines with reversive -lv as Cvl-lv.

There are no known counterexamples.

The formulation in (40) is a one-step process aimed at an output target. Another approach would be to separate Lateral Doubling (§3.6.4.2) from *v*-Shortening (§3.6.3.4, above). The derivation would then be of the form /Cv:-lv/becoming /Cv:l-lv/ or (with a different segmentation) /Cv:-llv/ by Lateral Doubling, then *CvI-Iv* by *v*-Shortening. The *v*-Shortening rule is also needed (though rarely) in derivations involving Syncope.

3.6.4.3 Stop-to-Lateral Assimilation ($\frac{dl}{> 11}$)

There is evidence from suffixal verb derivation, especially reversives (regular suffix -*Iv*), for an assimilation /dl/ to *II*. In (41), the reversive is shown under the corresponding non-reversive form.

```
(41)
        a. gòdí-yó
                           'put on (hat)' (mediopassive)
                           'take off (hat)'
            gól-ló
        b. pídé
                           'shut (door)'
            píl-lé
                           'open (door)'
        c. tádú
                           'become affixed (e.g. glued on)'
            tál-lá
                           'be unglued, (something affixed) be taken off'
        d. gid\epsilon
                           'immobilize (e.g. car, with a stone under a wheel)'
            gíl-lé
                           'un-immobilize, remove object immobilizing (sth)'
```

This is the Yanda Dom counterpart to what I have called "Rhotic Assimilation" in some other Dogon languages, where /rl/ appears as //. For the prior Syncope reducing /Cvdv-lv/ to /Cvd-lv/, creating the conditions for the assimilation, see §3.6.3.3, above.

(42) Stop-to-Lateral Assimilation

/d1/ > 11

3.6.4.4 *I*-to-*r* Shift

This shift is attested in one alternation (43).

(43) transitive gloss related forms

 $bùr\dot{u}-d\dot{\epsilon}$ 'put pants on (sb)' bùl 'pants', mediopassive $bùl\dot{u}-y\dot{o}$ 'put pants on (self)',

I know of no other *Cvlv* stem with a transitive suffixal derivative. The shift to *r* therefore might be considered regular, though only one example is known.

(44) *1*-to-*r* Shift

Stem *CvIv* combines with transitive -dv as *Cvrv*-dv

This alternation suggests that Cvru-dv is a favored shape for transitive derivatives, while #Cvlu-dv is not. Cvru-dv also arises by dvd-Dissimilation (§3.6.4.5). These two processes are closely related and might be combined into one, in which case the role of dissimilation as such would be demoted.

There is an alternative treatment of /Cvlu-dv/, namely Medial *Cv*-Truncation to just *Cv-dv* (§3.6.4.7). It is possible that the initial consonant of the stem plays a role in choosing between *I-*to-*r* Shift and Medial *Cv*-Truncation, with an initial alveolar favoring the latter.

3.6.4.5 *dvd*-Dissimilation (/dv-d/ $\rightarrow rv$ -d)

There are two alternations where it appears that a Cvdv- stem has shifted to Cvrv- by dissimilation to a following d in the transitive suffix -dv.

(45) transitive gloss related forms

```
gór-dó 'put hat on (sb)' mediopassive gòdí-yó 'put hat on (self)'
kór-dó 'hang (sth) up' mediopassive kódí-yó 'be hung up'
```

There is no reason for r to shift to d before the mediopassive suffix -yv, and so no reason to posit underlying r. By contrast, there is a reason (dissimilation) for d to shift to r in this morphological context. The noun $g \partial d u$ 'hat' has d, further supporting lexical (underlying) d. Therefore the (synchronic) directionality seems clear. Cvru-dv is a favored shape for transitive derivatives; this is also the output of l-to-r Shift (§3.6.4.4).

There is also one case where the suffixal d shifts to r. This is transitive $k \acute{o}nd\acute{i}-r\acute{o}$ 'bend (e.g. stick)', cf. mediopassive $k \acute{o}nd\acute{i}-y\acute{e}$. Here the d in the stem could not shift to r, since it is clustered with a preceding nasal (r occurs only between vowels). So the next best thing is to dissimilate the suffixal d to r.

(46) *dvd*-Dissimilation

- a) Cvdv stem combines with transitive -dv as Cvru-dv
- b) Cvndv stem combines with transitive -dv as Cvndv-rv

In one case neither of these dissimilations is applied; instead, the stem-final dv is deleted, leaving just one d. For $t\acute{e}-d\acute{e}$ 'lay out (mat)' versus $t\acute{e}d\acute{i}-y\acute{e}$ '(mat) be laid out', see Medial Cv-Truncation (§3.6.4.7), below.

3.6.4.6 Medial *C*-Deletion

In some verbal derivatives with transitive suffix -dv (-ndv), an expected #CvCu-dv (with raised medial vowel) appears instead as Cv:-dv or Cv:-ndv. The most straightforward account is that the medial C is deleted and the flanking vowels contract into a long vowel. It is convenient (but not crucial) to have the C-Deletion and vv-Contraction precede (and block) the raising of the medial vowel to u (or i).

The relevant examples are in (47).

```
(47) transitive gloss related forms

a. -dv suffix with deletion of medial {g j}

tá:-dé 'put shoes on (sb)' mediopassive táj-jé 'put shoes on (self)', reversive tágí-lé
```

```
'take off (shoes)', noun t \grave{a} j \grave{u} 'shoe'

p \acute{o} : -d \acute{o} 'lay (cross-poles)' mediopassive p \acute{o} j - j \acute{o} '(cross-poles) be laid'; noun p \grave{o} j \grave{u} 'cross-poles (in roof)'

l \acute{e} : -d \acute{e} 'insert (as mark)' l \grave{e} g \acute{e} 'insert', mediopassive l \acute{e} j - j \acute{e} 'slip oneself in'
```

b. -ndv suffix with deletion of medial nasal

```
bá:-ndέ
              'hide (sth)'
                                          reversive bàní-lé 'uncover,
                                          reveal'
í:-ndέ
              'stop (sth)'
                                          mediopassive <sup>γ</sup>βρί-yέ ~
                                          ?i:ni-y\varepsilon '(sth) stop'
                                          mediopassive nún-jó 'get
nú:-ndɔ́
              'dress (sb)'
                                          dressed', reversive nùnú-ló 'get
                                          undressed'
              'tilt (sth)'
                                          mediopassive j \not\in n - j \not\in 'be tilted'
jέ:-ndέ
tú:-ndέ
                                          mediopassive tún-jé 'kneel'
              'cause to kneel'
ná:-ndέ
                                          năŋ 'go past'
              'cause to go past'
```

```
c. -ndv suffix with deletion of medial non-nasal {g w}
dá:-ndé 'do (sth) well' dàgú 'turn out well'
sú:-ndó 'take down' súwó 'go down'
```

A similar process is observed in one deadjectival inchoative: δ :-di-yé 'be fast', cf. adjective ∂j ú 'fast; hot' (contrast inchoative δj -jé 'become hot', in mediopassive form).

bá:-ndέ 'hide (sth)' (47b) has a homonym, not directly relevant here, meaning 'fill (sth)', from *bă:* 'become full'.

The most straightforward interpretation of the data in (47) is that the medial *C* is deleted and the resulting *vv* cluster contracts to a long vowel.

(48) Medial *C*-Deletion

Stem CvCv with medial nasal or $\{g \ j \ w\}$ loses its medial consonant before transitive -dv(-ndv)

This is always followed by vv-Contraction.

y can be added to the list of deletable consonants if we analyse $d\hat{u}:-d\hat{\epsilon}$ 'have (sb) carry (sth) on head' as derived from mediopassive $d\hat{i}-y\hat{\epsilon}$ 'carry (sth) on head'. However, this derivation is not transparent because of the vowel-quality alternation. Conceivably $d\hat{i}-y\hat{\epsilon}$ could be derived from $/d\hat{u}-y\hat{\epsilon}/$, but there is no

other evidence for /u/ > i before y, and one might have expected $/d\hat{u}-y\hat{\varepsilon}/$ to surface as $\#d\hat{u}-y\hat{\delta}$.

There is a possible alternative analysis of the phenomena in (47). Notice that the majority of cases involving suffix allomorph -ndv as opposed to -dv) are those where the deleted medial C is a nasal (47b). We should therefore consider the possibility that the suffix-allomorphic n is a trace of the deleted nasal. However, aside from the difficulty in formulating such a rule, the counterexamples in (47c), reinforced by $b\acute{a}:-nd\acute{e}$ in the sense 'fill' from $b\check{a}$: 'become full', show that no simple phonological rule can account for all cases of -ndv allomorph.

This is the synchronic situation, but comparative evidence suggests that the counterexamples in (47c) once actually did have stem-medial nasals in the transitive form. Compare the Yanda Dom transitive forms there with Jamsay súnú-ŋó 'take down' (irregularly from súgó 'go down'), and with Jamsay dànàná, Pergue dàngá, and Ben Tey dàngá 'get ready' (especially: 'arrange one's baggage for traveling'). The semantic gap between 'turn out well' and 'get ready' is only apparent. Yanda Dom dàgú has a broad set of contextual senses 'turn out well', 'be well-made', '(garment) fit well', 'be acceptable', and 'come to an agreement'. Nanga dàgá 'be acceptable' and its derivative dàgi-ri 'get ready' show the suggested semantic connection. Jamsay dàya 'turn out well' (not very common) is etymologically, but no longer synchronically, connected with dànàná 'get ready'.

3.6.4.7 Medial Cv-Truncation

In the preceding section we saw cases where CvCv-(n)dv becomes Cv:-(n)dv, by deletion of the medial C followed by vv-Contraction, resulting in a long vowel. There are also some cases where the medial Cv syllable appears to disappear completely. To avoid confusion of the two processes, I will call this Medial Cv-Truncation.

The known examples are in (49).

```
(49) transitive gloss related mediopassive

a. Cv-dv from Cvdv

té-dé 'lay out (mat)' tédí-yé '(mat) be laid'

b. Cv-dv from Cvlv

dè-dé 'set, put down' dèlí-yé 'be set'

ubó kó-dó 'pour liquid on (sth)' kólí-yé 'pour water on self', cf.

úbó 'pour'
```

```
c. Cv:-dv from Cv:lv

y\acute{u}:-nd\acute{e} 'wake (sb) up' y\acute{u}:l\acute{l}-y\acute{e} '(sb) wake up'
```

The phonology of these forms is problematic. The three CvCv stems that undergo truncation (49a-b) have medial $\{d\ l\}$. There are no examples in the preceding section of these specific consonants undergoing Medial C-Deletion, which does apply to stems with medial $\{g\ j\ w\}$ or a nasal.

However, both Cvdv and Cvlv have an alternative phonological treatment before transitive -dv that does not involve loss of segments, namely shifting to Cvrv-dv with medial r, by the closely related processes l-to-r Shift (§3.6.4.4) or dvd-Dissimilation (§3.6.4.4). Given the small number of verb stems involved, it is difficult to determine which treatment is productive and which exceptional. One can partially motivate the choice by noting that two of the three cases in (49a-b) involve stem-initial alveolar $\{t\ d\}$, while all of the cases of l-to-r Shift and dvd-Dissimilation involve stem-initial labial or velar C. However, 'pour liquid' in (49b) also begins with a velar.

The example in (49c) is also difficult, this time because the first-syllable vowel is already long in the input. This means that either Medial *C*-Deletion or Medial *Cv*-Truncation would give us the required *Cv:-ndv* output. I opt for Medial *Cv*-Truncation since the medial consonant is *I*, as in (49b), and since the heavy syllabic shape makes an analysis with the medial syllable truncated reasonable.

3.6.5 Vowel-vowel and vowel-semivowel sequences

3.6.5.1 Hiatus between adjacent vowels in reduplications

In compounds whose first element ends in a vowel and whose second element is -é: 'child' (with various semantic extensions), my assistant strongly prefers a careful pronunciation with the vowels separately articulated, as in sèmbè-é: 'distaff' and ànzù-é: 'roselle seed(s)'. Similar careful pronunciations occur in other compounds such as kùdà-ăn 'wild-grape seed mash', and in iterated (fully reduplicated) forms like intensifier òró-òrò '(head) completely shaven'. Of course in rapid speech the careful pronunciation is not always respected.

I know of no cases where a vowel-initial stem is preceded by a *(C)v*-reduplicative segment, which would likely also lead to separate pronunciation of the vowels (as in several other Dogon languages).

In verbal morphology no such inter-vowel breaks occur. In the few examples where a *CvCv* stem loses its medial consonant before a derivational

suffix, by Medial *C*-Deletion (§3.6.4.6), the resulting vowel sequence contracts to a long vowel.

The E-stem of verbs (as in the perfective) involves a stem-final vowel change. It could be analysed as suffixation of an e-like vowel that fuses with the stem-final vowel. The same-subject subordinating suffix $-\dot{e}$: $\sim -\dot{e}$: has a similar phonology; indeed, it could be taken as a lengthened form of the E-stem (§15.2.3). The A/O-stem involves more minor stem-final vocalic feature changes and is not readily analysable as the addition of a vocalic suffix.

Derivational and inflectional verbal suffixes begin with consonants.

3.6.5.2 vv-Contraction $(v_1v_2 > v_1)$

If the analysis of Medial-*C* Deletion (§3.6.4.6, above) is accepted, we have a number of cases where *CvCv*- contracts to *Cv:*- before the transitive suffix by deletion of the medial *C* and subsequent contraction of the two flanking vowels. In all cases, the quality of the first of the two vowels survives.

(50) vv-Contraction

 v_1v_2 contracts to v_1 :

If formulated in this way, it does not matter whether vv-Contraction precedes or follows the raising of the second vowel in a trisyllabic derivative. The raised vowel will always be the v_2 in the contraction. However, it might be preferable to have vv-Contraction precede this raising. Because of the constraints on vowel sequences in verb stems, the two vowels in CvCv stems are either identical or differ only in height (high plus mid-height vowel). Deriving contracted ε : from ε is more natural phonetically than deriving it from ε . However, the latter choice would be technically possible.

3.6.6 Local vowel-consonant interactions

3.6.6.1 /i-m/> u-m or /u-y/> i-y

There are few combinations that would tell us whether the assimilations /i-m/ > u-m or /u-y/ > i-y occur at morpheme boundaries. Although there is a 1Sg suffix -m and a 1Pl/2Pl suffix -y on verbs, they are normally preceded by non-high vowels (E-stem or A/O-stem). Imperfective -m- likewise does not follow any stems ending in i, and verbal noun allomorph -y does not follow u.

However, perfective negative suffix -li- does occur in 1Sg -lu- $m \sim -li$ -m, so /i-m/ > u-m is at least optional. (A different allomorph is used before the 1Pl/2Pl suffix.).

3.6.6.2 Monophthongization (/iy/ to i:, /uw/ to u:)

It is hard to find morphological contexts where an /iy/ or /uw/ would arise in syllable-final position, requiring Monophthongization to i: or u:, respectively. There are no inflectable verb stems ending in a high vowel that would create such sequences when combined with a pronominal-subject suffix -w (2Sg) or -y (1Pl, 2Pl).

However, the verbal noun type with final -u (§4.2.2) is relevant, since the suffixal vowel is deleted after an unclustered sonorant, including y and w. We therefore have verbal nouns like $diy-\mathcal{O}$ 'carrying (on the head)' from /diy-u/, and $suw-\mathcal{O}$ 'defecating' from /suw-u/. I prefer the transcriptions just given, since they bring out the morphological structure. However, they are pronounced [di:] and [su:].

The same verbal noun morpheme has allomorph -y after a monosyllabic stem, a in $n \hat{\partial} - y$ 'going in'. When we combine this with $y \hat{\varepsilon}$ 'weep' we get an irregular $y \hat{\imath} - \emptyset$ 'weeping', presumably via $/y \hat{\imath} - y/$ with irregular assimilation of ε to the flanking semivowels (contrast $j \hat{\varepsilon} - y$ 'killing'). I would have expected a long i: in 'weeping', but the vowel in $y \hat{\imath} - \emptyset$ is short.

3.7 Cliticization

There are no clause-level second-position clitics.

There is no sharp phonological distinction between suffixation and encliticization. This is because of the limited set of phonological processes applying to suffixes that might be used as a criterion.

For nouns and adjectives, animate plural -mu is here written as a suffix while definite morphemes like $g\varepsilon$ and wo are written as separate particles. All of these could, however, be reanalysed as clitics. Both the animate plural suffix and the definite morphemes acquire high tone after a $\{L\}$ toned noun or adjective, but this does not tell us whether the forms are suffixes, clitics, or particles.

I use the clitic symbol = for the 'it is' clitic ($\S11.2.1$) and for combinations of past morpheme = $b\varepsilon$ - with preceding verb forms ($\S10.6$).

The best case for proclitics is preverbal subject pronominals (§4.3.1), used in relative clauses and some other subordinated clauses. There is no phonological interaction between the pronominals and the verb, but the

pronominals directly precede the verb, following even object pronouns. The only form that can intervene between subject pronoun is a second verb chained to the relative verb in a compound-like relationship; see §14.1.6 and §14.1.8. So the positioning of subject pronouns makes a case for proclitic status.

3.8 Tones

3.8.1 Lexical tone patterns

3.8.1.1 At least one H-tone in each stem...not!

YD diverges from the usual Dogon pattern whereby each noun, adjective, numeral, and (true) verb stem has at least one lexical high tone. In Yanda Dom this is true of verbs, but there are numerous noun, adjective, and numeral stems have appear with all-low tones.

These stems do, however, co-occur with high-toned variants of following morphemes (definite morphemes $g\hat{e}$ and $w\hat{o}$). These morphemes have low-toned variants after nouns (or NPs) that do have at least one high tone. For example, $n\hat{a}$: 'foot' has a definite form $n\hat{a}$: ' $w\hat{o}$, while {H} toned $s\hat{u}n$ 'ear' has definite $s\hat{u}n$ $w\hat{o}$.

This can be analysed in either of two ways. One is to formulate a tone-dissimilation rule that directly accounts for the tone of the contextually variable morpheme (here, the definite morpheme). The other is to analyse the stem as containing a final high tone that is realized on a following morpheme (if there is one). For the noun 'foot', we could assume a lexical /nǎ:/ with an underlying rising tone that later detaches, resulting in /nà: + H/. Or we could take /nà: + H/ as the lexical form from the beginning. In either variant of this analysis, we could salvage (a version of) the usual generalization for Dogon languages that all-low toned stems are disallowed lexically.

Direct evidence for a representation like /nă:/ is slight, but 'it is a cow' with the 'it is clitic' = \therefore (i.e. dying-quail intonation at the end) is $n = \cdot$, heard as [nàáāà] with an initial rising tone followed by the usual slow pitch decline associated with this intonational feature (§11.2.1). Similarly, {L}-toned nouns shift the final syllable to H-tone as initials in bahuvrihi compounds (§5.2.1.1),

3.8.1.2 Lexical tones of verbs

Lexical tones for verb stems must be abstracted from the complex tonal patterns associated with various unsuffixed and suffixed verb forms. The tones of a given stem can be adequated characterized by citing two "principal parts,"

namely the bare stem and the perfective negative (suffix -li- or -lì-). The perfective negative by itself is often, but not always, diagnostic. Since it is based on the A/O-stem (which alters the vocalism of some verbs), it is not ideal as an all-purpose citation form. The suffix is L-toned -lì- except after a fully {H}-toned stem.

The classes are labeled after the combination of stem tones in the bare stem and the perfective negative. Thus $\{X\}\{Y\}$ -class verbs have tone contour X in the bare stem (and the perfective), and tone contour Y in the perfective negative. The basic types are illustrated in (51). We will see that phonological features of the stem partially predict class membership. There were, however, some discrepancies between my two informants that require discussion.

(51)		bare	perfective	PerfNeg	gloss	class
	a.	kún-dó	kún-dé-	kún-dó-lì-	'put'	$\{H\}/\{H\}$
	b.	bèlé	bèlé-	bèlà-lí-	'get'	$\{LH\}/\{L\}$
	c.	lìgé	lìgé	lìgé- í-	'mix by stirring'	$\{LH\}/\{LH\}$
	d.	dómdó	dómdé-	dòmdà-lí-	'console'	$\{H\}/\{L\}$

Since the perfective has the same tones as the bare stem, I will omit the perfective in the following.

The $\{H\}/\{H\}$ class has stem-wide $\{H\}$ melody in both forms. The perfective negative suffix is therefore L-toned. A sample of this verb class is in (52). All verb stems with an **initial voiceless consonant** belong to this class, regardless of syllabic shape (52a). The class also includes a subset (in fact, the majority) of stems with **initial glottal** or with **no initial consonant** (52b-c).

(52) $\{H\}/\{H\}$ class: $\{H\}$ in bare stem, $\{H\}$ in perfective negative

bare stem	PerfNeg	gloss
a. initial voiceless co	onsonant {p t k c s l	(includes all such verbs)
kớ	kọá-lì-	'raise (child)'
ká:	ká:-lì-	'shave'
tóló	tóló-lì-	'pound (in mortar)'
té:dé	té:dé-lì-	'drain off (water)'
sál	sálá-lì-	'grind coarsely'
kún-dó	kún-dó-lì-	'put'
támbú	támbá-lì-	'kick'

```
kégélé
                          kégélá-lì-
                                                  'make incision'
b. no initial consonant
         ún
                          ún-lì-
                                                  'go'
         έbέ
                          έbá-lì-
                                                  'buy'
         óbí-yó
                          óbí-yó-lì-
                                                  'sit'
c. glottal plus schwa
         ?án€
                          ?áná-lì-
                                                  'eat (meal)'
```

For my second informant, the two phonological subtypes in (52a-b) above exhaust the $\{H\}/\{H\}$ class. For my first informant, certain prosodically heavy stems beginning in n also belong to this class. We will see below that initial- $\{In\}$ verbs have other distinctive tonal properties. These stems are either trisyllabic with medial NC cluster, or bisyllabic with a long vowel. The known cases are listed in (53), showing the variant perfective negative tones for informants 1 and 2. For the second informant, these stems belong to the $\{H\}/\{L\}$ -class, see below.

(53) Variably $\{H\}/\{H\}$ or $\{H\}/\{L\}$

bare stem	PerfNeg	gloss
initial $\{n\}$, prosodically	heavy with long initia	ıl syllable
ná:-ndέ	<i>ná:-ndá-lì-</i> (1)	'cause to go past'
	nà:-ndà-lí- (2)	
ná:-r ⁿ €	<i>ná:-rⁿá-lì-</i> (1)	'straighten'
	<i>nà:-rⁿà-lí-</i> (2)	
nímdí-yé	nímdí-yé-lì-(1)	'become dirty'
	nìmdì-yè-lí- (2)	
nám-dí-yέ	námdí-yá-lì- (1)	'become difficult'
	nàmdì-yà-lí- (2)	

The second major tone-class of verbs has a rising melody in the bare stem, and $\{L\}$ -toned stem before H-toned suffix in the perfective negative. A representative list is in (54). This set includes all **prosodically light** stems (up to two moras) with **initial voiced obstruent** $\{b\ d\ g\ j\ z\}$ (54a). Stems of CvCCv shape with NC clusters can be treated as light; see §10.2.2.5 for details. This tone-class also includes a subset of prosodically light stems with **initial voiced sonorant** (54b), though $\{l\ n\}$ are poorly represented (see below).

(54) $\{LH\}/\{L\}$ class: $\{LH\}$ in bare stem, $\{L\}$ in perfective negative

```
PerfNeg
         bare stem
                                                     gloss
a. initial voiced obstruent \{b \ d \ g \ j \ z\}
      prosodically light
         bă:
                            bà:-lí-
                                                     'suffice'; 'equal'
         bὲlέ
                            bèlà-lí-
                                                     'get'
         gùló
                            gùlò-lí-
                                                     'dig'
b. initial (voiced) sonorant \{m \ n \ n \ l \ w \ v\}
      prosodically light
                                                     'pull up (sleeve)'
         wă:
                            wà:-lí-
         yὲmbέ
                           yèmbà-lí-
                                                     'pick out'
```

This class also contains some prosodically heavy stems (trisyllabic, or bisyllabic with long first syllable). However, a partial shift toward from $\{LH\}/\{L\}$ toward the $\{H\}/\{L\}$ class, which is discussed below, appears to be in progress. Tonal transcriptions for the bare stem and perfective for my first informant were inconsistent, with either $\{LH\}$ or $\{H\}$ -tones. My second informant clearly has $\{H\}$ -toned perfective for all verbs in (55). As for the bare stem (and several other paradigmatic forms with similar tones), the second informant pronounced $\{LH\}$ -toned forms of stems with initial-syllable short vowels, but $\{H\}$ -toned forms of stems with initial-syllable long vowels.

(55) $\{LH\}/\{L\}$ with variably-toned perfective

```
perfective
                                               PerfNeg
          bare stem
                                                                      gloss
a. initial voiced obstruent {b d g j z}
       trisyllabic, initial short V
          bàmbí-yé
                              bámbí-yé (2) bàmbì-yà-lí-
                                                                      'carry on
                                                                      back'
       trisyllabic, initial long V
          ba:liy\epsilon(1)
                              b\acute{a}:l\acute{i}y\acute{\epsilon} (2)
                                                bà:lìyà-lí-
                                                                      'go around'
          b\acute{a}:l\acute{i}y\acute{\epsilon}(2)
b. initial (voiced) sonorant \{m \ n \ n \ l \ w \ y\}
       trisyllabic, initial short V
          yòdí-yó (1)
                              yòdí-yé (1)
                                               yòdì-yò-lí-(1)
                                                                      'borrow'
          nìndí-yó
                              níndí-yé (2) nìndì-yò-lí-
                                                                      'listen'
       trisyllabic, initial long V
```

```
yó:dí-yó (2) yó:dí-yé (2) yò:dì-yò-lí- (2) 'borrow'
```

Initial voiced obstruents have a phonetic depressing effect on the pitch of immediately following vowels, and such obstruents have famously created tone oppositions in East Asian and other languages. In Dogon languages, the depressing effect has been morphologized (in verbs, though generally not in other stem-classes), and is not a regular phonological process. The {LH}/{L} verbs have other paradigmatic forms with initial H-tones, and often correspond to cognate nominals with initial H-tone.

The third class has {LH} melody in both the bare stem and perfective negative. The majority of verbs with initial {1 n}, excluding nonmonosyllabic stems with long first syllable, belong to this class; a sample is in (56).

(56) $\{LH\}/\{LH\}$ class: $\{LH\}$ in bare stem, $\{LH\}$ in perfective negative

```
bare stem
                         PerfNeg
                                                 gloss
initial sonorant \{n \mid l\}, among other examples
     prosodically light
                         nă:-lí-
                                                 'spend night'
        nă:
                                                 'slip (sth) under'
        lègé
                         lègá-lí-
        lìgé
                         lìgé-lí-
                                                 'mix by stirring'
        nùzś
                         nùzá-lí-
                                                 'push with butt of hand'
        nòmbó
                         nòmbó-lí-
                                                 'pound (fruit pits)'
     prosodically heavy (causative)
        làgó-mé
                         làgó-má-lí-
                                                 'make sad, disappoint'
```

For my first informant, a large number of non-causative trisyllabic verbs are of this type, but they are $\{LH\}/\{L\}$ for my second informant. For a list, see (358b) in $\{10.2.3.1.$

Two m-initial stems belong to this class for my first informant, but not for the second (57).

(57) Variably $\{LH\}/\{LH\}$ or $\{LH\}/\{L\}$ stems

```
bare stem PerfNeg gloss

initial sonorant {m}, only examples known

mòndó mòndá-lì-(1) 'seal up'

mòndà-lí-(2)

mìné mìné-lì-(1) 'roll (ginned cotton')

mìnè-lí-(2)
```

The $\{LH\}/\{LH\}$ class has affinities to both the $\{LH\}/\{L\}$ and the $\{H\}/\{H\}$ and classes. The connection to $\{LH\}/\{L\}$ is obvious—the consistent initial L-tone. The bare stem is $\{LH\}$ in both classes. However, there is no obvious phonological reason why an initial $\{In\}$ should induce second-mora H-tone in the perfective negative, whereas other initial voiced sonorants (and voiced obstruents) allow the initial L-tone to extend to the end of the stem.

In this light, consider the possibility that the real affinity of the $\{LH\}/\{LH\}$ class is instead to the $\{H\}/\{H\}$ class. What unites them is the following: a) the stem tones do not change going from the bare stem (and the perfective) to the perfective negative; and b) the stem is H-toned after the first mora in these categories. In other words, we could consider the $\{LH\}/\{LH\}$ class to be a variant on $\{H\}/\{H\}$ where the initial $\{In\}$ depresses the tone of just the immediately adjacent vowel. This is not a regular phonological process, and indeed these same verbs with initial $\{In\}$ have other inflected forms with initial-syllable H-tones.

The fourth and last major class has {H}-toned bare stem and {L}-toned stem in the perfective negative (which therefore has a H-toned suffix). This class is a historical melting pot, consisting of the following: a) Cv and nCv stems, which are too short to carry rising tones; b) the remaining glottal- and vowel-initial bisyllabic stems that do not belong to the {H}/{H}-class; c) Fulfulde loanwords ending in ε ; d) a subset of nonmonosyllabic stems beginning in CvCCv; and e) all nonmonosyllabic stems beginning in a long vowel, i.e. in Cv:C(C)v. Notably, the extremely common shape CvCv (with nonnull initial consonant) is almost completely absent from this class. I can cite only $w\acute{e}j\acute{e}$ 'give change' (cf. noun $w\acute{e}j\grave{u}$ 'change, money back'), a Fulfulde loan whose medial j has likely simplified from an earlier geminate (cf. Jamsay noun $w\acute{e}cc\grave{e}$). Since all verbs beginning with voiceless obstruents belong to the {H}/{H}-class described above, the {H}/{L} class contains stems with any other initial consonant.

A representative sample is in (58).

(58) $\{H\}/\{L\}$ class: $\{H\}$ in bare stem, $\{L\}$ -H in perfective negative

bare stem	PerfNeg	gloss
a. initial voiced ob	ostruent $\{b \ d \ g \ j \ z\}$	
lighter than Cv(Cv	
gó	gò-lí-	'go out'
heavier than Cv	Cv	
gáj-jé	gðj-jà-lí-	'carry on shoulder'
búl-ló	bùl-là-lí-	'disinter'

```
jέn-jέ
                         jèn-jà-lí-
                                                 'be bent'
        bán-mέ
                         bàn-mà-lí
                                                 'make (sth) red'
        dómdó
                         dòmdà-lí-
                                                 'console'
        dím-dέ
                                                 'cause to follow'
                         dìm-dà-lí-
        zĭ:-yé
                         zì:yè-lí-
                                                 'be flipped'
        bú:mbɔ́
                         bù:mbà-lí-
                                                 'drag'
        bé:líyé
                         bè:lìyè-lí-
                                                 'belch'
b. initial sonorant \{m \ n \ \eta \ l \ w \ v\}
  lighter than CvCv
        пэ́
                         noà-lí-
                                                 'hear'
                         ndà-lí-
                                                 'give'
        ńdέ
  exactly CvCv (rare, see comments above)
                                                 'give change'
                         wèjà-lí-
        wéjé
  heavier than CvCv
                                                 'insert (calabash)'
        gó:dó
                         gò:dò-lí-
                         yò:dò-lí-
                                                 'guard'
        yó:dó
                                                 'think'
                         mà:nà-lí-
        má:nέ
                                                 'cover (sb)'
        yám-dέ
                         yàm-dà-lí-
        yám-nέ
                         vàm-nà-lí-
                                                 'ruin'
        mú:mbɔ́
                         mù:mbà-lí-
                                                 'assemble [tr]'
c. initial vowel (or glottal plus vowel)
  CvCv
        ?έΙέ
                         ?àlà-lí-
                                                 'go up'
        úb3
                         ùbà-lí-
                                                 'pour'
        íbó (íbé)
                         ìbè-lí-
                                                 'catch'
```

The $\{H\}/\{L\}$ class has strong affinities to the $\{LH\}/\{L\}$ class, and the two can be merged into a superclass. Both have a $\{L\}$ -toned stem before the perfective negative suffix. Within the superclass, the choice between the two is predictable, as indicated in (59), with the single exception of $w\acute{e}j\acute{e}$ 'give change'.

(59) Choice between $\{LH\}/\{L\}$ and $\{H\}/\{L\}$ classes

```
\begin{array}{lll} ... short \ Cv \ syllable & \rightarrow & \{H\}/\{L\}\mbox{-class} \\ ... long \ syllable & \rightarrow & \{H\}/\{L\}\mbox{-class} \\ \end{array}
```

Suffixal derivation affects the prosodic weight of a stem. This may or may not affect the tone-class assignment of the derivative. In (60a), the transitive derivative is too heavy to remain in the $\{LH\}/\{LH\}$ class and shifts to $\{H\}/\{L\}$. In (60b), the mediopassive is $\{LH\}/\{L\}$ but its transitive counterpart $n\acute{u}:-nd\acute{\sigma}$ is $\{H\}/\{L\}$; the reversive is tonally variable.

(60) Verbal derivation

```
bare stem
                      PerfNeg
                                         gloss
                                                            class
a. underived and transitive (§9.3.1.3)
    năη
                      nàná-lí-
                                         'go past'
                                                            \{LH\}/\{LH\}
    ná:-ndέ
                      nà:-ndà-lí-
                                         'cause to go past' {H}/{L}
b. mediopassive, reversive, and transitive
    nún-jó
                      nùn-jà-lí-
                                         'get dressed'
                                                            \{LH\}/\{L\}
    nùŋú-lớ
                      nùηú-lá-lí-(1)
                                         'get undressed'
                                                            \{LH\}/\{LH\}
                      nùnù-là-lí-(2)
                                                            \{LH\}/\{L\}
    nú:-ndɔ́
                      nù:ndà-lí-
                                         'dress (sb)
                                                            {H}/{L}
```

Finally, there are two irregular verbs that are closely related to each other in form and sense, 'bring' and 'take away' (61). For these verbs it is appropriate to show the imperfective negative as well as the bare stem and perfective negative, because these are the only two verbs in the language that have $\{H\}$ - rather than $\{L\}$ -toned stem in the imperfective negative (the suffix therefore being L- rather than H-toned). $z\delta$ 'bring' could be treated as forming a fourth, slightly irregular subdivision of the $\{H\}/\{H\}$ class just described.

(61) Irregular verbs of conveyance

	bare stem	PerfNeg	ImpfNeg	gloss
initial	voiced obstru	ient { z }		
a.	zĭn	zín-lì-	zín-nàn-	'take away'
b.	zó	zó-lì-	zó-nàn-	'bring'

3.8.1.3 Lexical tone patterns for unsegmentable noun stems

Uncompounded noun stems also have a wide range of tone-contour choices. These include {H}, {HL}, {LH}, and for stems of at least three moras also {LHL}. There is one apparent example of {HLH}.

Of interest for Dogon linguistics is the presence of two kinds of $\{L\}$ -toned stem, which are distinguishable only for animate nouns. In the minority subtype, animate plural -mu is high-toned (62).

(62) {L}-toned animate nouns with H-toned plural $-m\dot{u}$ (all known exx.)

singular	plural	gloss		
a. animals				
<i>èdè</i>	èdè-mú	'chicken'		
pὲ:	pὲ:-mú	'sheep'		
àpàn	àpàn-mú	'bird'		
nòmzù	nòmzù-mú	'snake'		
àzègè	àzègè-mú	'animal'		
ວ່gວ່-ກວ້ກວ້	ວ <u>່</u> ວ່ <u>ງ</u> ວ່-ກວ່໗ວ່-mú	'camel'		
dùŋyàrà	dùηyàrà-mú	'lion'		
yùrùgù	yùrùgù-mú	'pale fox'		
nà:-nì:	nà:-nì:-mú	'cow that has calved'		
òy-nàmà	òy-nàmà-mú	'game animal'		
b. compound final				
pê:-gànù	pè:-gànù-mú	'uncastrated (animal)'		

In all other {L}-toned animate nouns (including, for example, many agentive compounds), animate plural -mu is low-toned like the stem. Thus $n\grave{a}:-m\grave{u}$ 'cows', $y\grave{e}-m\grave{u}$ 'woman', and so forth.

A clever analysis of these would be to posit a floating H-tone at the end of the stems in the minority subclass (62), but not in the majority subclass. For example, 'chicken' would be lexically $/\dot{c}d\dot{c} + H/$ while 'cow' would be $/n\dot{a}$:/. The floating H would be realized on a following $/-m\dot{u}/$ suffix, as $/-m\dot{u}/$.

However, both subtypes of $\{L\}$ -toned animate nouns, plus the undifferentiated class of $\{L\}$ -toned inanimate nouns, require H-toned forms of following definite morphemes. Thus $\grave{e}d\grave{e}^{\dagger}g\acute{e}$ 'the chicken' and $n\grave{a}$: ${}^{\dagger}g\acute{e}$ 'the cow' both have H-toned definite morpheme. By contrast, nouns with any lexical contour including a H-tone element ($\{H\}$, $\{HL\}$, $\{LH\}$, $\{LHL\}$) are followed by L-toned definite morphemes ($\{6.5.3, \{3.8.4.2\}$). This would suggest another clever analysis whereby all of these $\{L\}$ -toned noun stems, including the

For a handful of irregular nouns, see §4.1.2. 'Child' is tonally as well as affixally irregular: {L}-toned singular $\partial n\partial \partial v$ (with tonally irregular definite $\partial n\partial v$), plural $\partial n\partial v$ with tone shift but without $\partial n\partial v$ plural suffix (definite $\partial n\partial v$). 'Woman' is {L}-toned $\partial v\partial v$, but definite singular $\partial v\partial v$ of the woman'.

Excluding these few irregularities, (63) gives examples of the regular lexical tone contours for uncompounded and unpossessed nouns of various syllabic counts.

(63) Lexical tones of noun stems

```
plural
        stem
                                         gloss
a. monosyllabic
    {H}
                                         'thing'
        cí
        sún
                                         'ear'
        tól
                      tól-mù
                                         'pig'
    {HL}, uncommon
     probable loanwords
        dûn
                                         'hornless ram'
        wâw
                                         'quarter of carcass'
    {LH}
                                         'reins'
       ηĚm
                                         'ground'
        džv
    {L} with H-toned animate plural suffix
        pὲ:
                      pè:-mú
                                         'sheep'
        [fuller list in (62), above]
    {L} with L-toned animate plural suffix
        nà:
                      nà:-mù
                                         'cow'
        sòm
                      sòm-mù
                                         'horse'
```

```
gà:n
                        gà:<sup>n</sup>-mù
                                           'cat'
    {L} (inanimate)
         sùŋ
                                           'rope'
                                           'hip'
         dày
b. bisyllabic
    {H}
                        ?ánέ-mù
         ?∕an€
                                           'goat'
         \acute{\varepsilon} m \acute{\varepsilon}
                                           'milk'
                                           'water'
         ínjú
                                           'flour, powder'
        púr<sup>n</sup>á
         cébzé
                                           'scales (fish)'
                                           'knee'
        kúnzú
                                           'intestines'
        pídím
    {HL}
      native (or likely so)
         búlò
                                           'top and back of head'
         tánà
                                           'stick'
         énzèl
                                           'straw'
         cémzè
                                           'cooked colostrum'
      frozen reduplication
         tótô:
                                           '(empty) tin can'
      probable loanwords
         bέdὲ
                                           'highway'
         gábèl
                        gábèl-mù
                                           'herder's favorite animal'
         bú:dù
                                           'money'
                                           'woman's boubou'
         kámsèl
    {LH}
                                           'offshoot'
         zèŋé
         dùmó
                                           'rear end'
                                           'testicles'
         dàrá
                                           'saliva'
         sùmzú
         bàndúm
                                           'marrow'
    {LHL}, diminutives
        nă-yyè
                        nă-yyè-mù
                                           'calf' (diminutive)
         cě:nè
                                           'balls of pounded peanuts'
                                           'dry snot' (cìnzà 'nose')
         cìnzà-gŏmnò
         kèpî:
                                           'cap' (French képi)
         bàzâm
                                           'bassam (fabric)'
                                           'brick'
         tèmbên
    {L} with H-toned animate plural suffix
                                           'chicken'
         èdὲ
                        èdè-mú
```

```
[full list in (62), above]
    {L} with L-toned animate plural suffix
        ànàn
                      ànàn-mù
                                         'bird'
                      kìlè-mù
                                        'herder'
        kìlὲ
        ìnjè
                      ìnjè-mù
                                         'dog'
                      àgà-mù
                                        'chief, Hogon'
        ògò
    {L} (inanimate)
        òà
                                         'grass'
        sèrbà
                                         'spur'
        cìr<sup>n</sup>à
                                         'bone'
c. trisyllabic
    {H}
        tóndóló
                                         'star'
                                         'skull'
        tógóró
                                        'wood blocks on donkey'
        cégéré
                                        'life'
        dúníyá
                                         'gallbladder'
        gá:líyám
    {HL}, includes many Fulfulde borrowings
       jábèrè
                                         'donkey padding'
                                         'a breed of goats'
        dórà:jì
        árkàmà
                                         'wheat'
                                         'abomasum'
        wáynà:rè
        báràŋgàl
                                         'cart poles'
    {HLH}, only known example
        héyèndé
                                         'index finger'
    {LH}
     realized as LLH
        kàlàmbú
                                        'muzzle-guard'
                                         'ginger' (< Bambara)
        yàmàkú:
            (∼ yàmàkû:)
        bànàkúl
                                         'cassava'
     realized as LHH
        àlcέbέ
                                        'stirrup'
        bànkélé
                                        'temple (head)' (~ bày^nkélé)
        zàmdúrú
                                        'donkey' (~ zàmtúrú)
        gìnzélá
                                         'comb (of rooster)'
                                        'roll of fabric'
        bìnúgú
                                        'fruit pits'
        nì(n)zílú
        àpóndúl
                                        'baobab flower'
                                        'wattle (on chicken)'
        zèmbéré
    {LHL}
```

```
s \partial \eta \delta r^n \partial
                                            'spinal cord'
        kàgádà
                                            'armpit' (~ kà-kádà)
        tùgúzù
                                           'peanut balls with wild-date
                                           leaves'
                                           'baobab seed'
        kùmbúrù
    regional words (borrowings)
        làsá:zù
                                           'modern rifle'
        pàntàlô:<sup>n</sup>
                                            'modern pants'
    {L}+H (animate)
                        àzègè-mú
                                           'animal'
        àzègè
    {L} (animate)
    {L} (inanimate)
        kàràgà
                                           'circumcision cohort'
        tòmòlò
                                           'hole, pit'
                                           'sifting residue'
        àntòngò
                                            'peanut'
        ègèlè
d. quadrisyllabic
    {H}, unattested
    {HL}
                        kóràbàrà-mù
                                           'Songhay'
        kóràbàrà
        kóròbòrì
                        kóròbòrì-mù
                                           'young bull'
    {LH}
        sòŋòwàlú
                                           'stomach fat'
        àmbàdàr<sup>n</sup>á
                                           'treetop'
    {LHL}
                                           'long boubou (robe)'
        pòrùkíyà
        wògòtórò
                                           'cart' (regional word)
    {L}+H (animate)
    {L} (animate)
    {L} (inanimate)
```

The location of tone breaks for bitonal {HL} and {LH} stems, and for tritonal {LHL} stems, is discussed in sections below.

3.8.1.4 Lexical tone patterns for adjectives and numerals

There are no major differences between the tone contours of adjectives, numerals, and nouns.

Adjective stems can be {L}, {LH}, {LHL}, {H}, or {HL}. Of these, {LHL} is limited to a few trisyllabic stems. {HL} is the least common of the other melodies. There is only one type of {L}-toned adjective, unlike the case with nouns; this is because the animate plural suffix -mu is always L-toned after adjective stems (as for most, but not all, nouns). For inventories of adjectival stems, arranged by tone contours, see §4.5.1, below.

The tones of numerals are complicated by the tonal effects of classifying prefixes $y\dot{e}$, \acute{a} , and $b\acute{o}$, and by tonal interactions among the morphemes in composite numerals. There is a binary lexical tone-contour variation in the prefixed forms of the primary '2' to '10' numerals, namely between {H} and {HL}, as in $y\dot{e}$ - $piy\dot{e}l$ '10' versus $y\dot{e}$ - $t\acute{a}$: $nd\grave{u}$ 'three'. $t\grave{u}$: $m\acute{a}$ '1' is treated as a modifying adjective rather than like the nonsingular numerals.

3.8.1.5 Default final H, or autosegmental mapping?

If the floating H-tone at the end of apparently $\{L\}$ -toned nouns and adjectives (expressed on definite morphemes) is recognized, all noun and adjective stems have at least one lexical H-tone in a first-order analysis. Verb and numeral stems also have at least one lexical H-tone. As in any such system, one could imagine that this is an output constraint, and that some stems might be lexically $\{L\}$ -toned but acquire a H-tone somewhere to satisfy the constraint.

In other Dogon languages, the best candidate for secondary H-tone is the final H in {LH} nouns, adjectives, and verbs. In Yanda Dom, an immediate difficulty is that the set of {LH} nouns and adjectives with audible final H-tone on the stem is distinct from the set with {L}-toned stem and floating H that attaches to a definite morpheme. Moreover, we have seen that animate nouns distinguish two subtypes of the {L}-toned category, only one of which allows the floating H to be expressed on animate plural suffix $-m\hat{u}$ (as $-m\hat{u}$). Therefore it is not possible to eliminate all {LH} contours, at least for nouns and adjectives.

3.8.1.6 Location of tone breaks for bitonal noun stems ({HL}, {LH})

For fuller lists of the nouns in question, see §3.8.1.3, above). Recall that there are no monosyllabic {HL}-toned nouns, and that many longer nouns with {HL} contour are Fulfulde borrowings.

The tone break for {HL} is at the first syllable boundary: bédè 'highway', cémzè 'cooked colostrum', jábèrè 'donkey padding', kóròbòrì 'young bull'.

The tone break for {LH} is harder to pin down. For bisyllabics it is at the syllable boundary: dòró 'testicles', sùmzú 'saliva', bòndúm 'brain'. The number of tri- and quadrisyllabic {LH} nouns is small, and the attested ones have syllabic and tonal patterns that could suggest compound status (i.e. with a morpheme-like break in the middle). Segmental shapes like CvCCvCv and CvCvCvCv look very much like nominal compounds (CvC-CvCv, CvCv-CvCv), and the tones of the relevant examples specifically suggest the very common (n n) type of compound: alcébé 'stirrup' (< Arabic), bankélé 'temple (head)', zàmdúrú 'donkey', gìnzélá 'comb (of rooster)', pòrùkíyá 'long boubou', àmbàdàrná 'treetop', sòŋòwàlú 'stomach fat'. àpóndúl 'baobab flower' could be taken as beginning with a-prefix (§4.1.5) and should also be excluded. This leaves only trisyllabic CvCvCv and CvCvCCv stems as those unlikely to be interpreted prosodically as compounds. The evidence is mixed. For LHH realization of {LH} I can cite bìnúgú 'roll of fabric' and nìzílú 'fruit pits'. For LLH realization I have kàlàmbú 'muzzle-guard'. These data do not suffice to decide the question.

As noted elsewhere, $\{L\}$ -toned noun and adjective stems have a floating H that can be expressed on a following definite or other morpheme. If these are also treated as abstractly $\{LH\}$, the positioning of the tone break becomes much more complicated.

3.8.1.7 Location of tone breaks for tritonal noun stems ({LHL}, {HLH})

The only regularly occurring tritonal pattern for nouns is {LHL}. The tone breaks occurs toward the right edge. The bulkier stems that bring this out are regional words (likely from Bambara). Typical shapes are $C\check{v}:C\hat{v}$ ($c\check{e}:n\grave{e}$ 'ball of pounded peanuts'), $C\grave{v}(C)C\hat{v}C$ ($t\grave{e}mb\hat{e}n$ 'brick'), $C\grave{v}C\acute{v}(:)C\grave{v}$ ($s\grave{o}n\acute{o}r^n\grave{o}$ 'spinal cord', $l\grave{a}s\acute{a}:z\grave{u}$ 'modern rifle'), $C\grave{v}C\acute{v}C\acute{v}C$ ($b\grave{a}n\grave{a}k\hat{u}l$ 'cassava'), $C\grave{v}C\grave{v}C\acute{v}$: ($y\grave{a}m\grave{a}k\hat{u}:$ 'ginger'), and $C\grave{v}C\grave{v}C\acute{v}C\acute{v}$ ($w\grave{o}g\grave{o}t\acute{o}r\grave{o}$ 'cart'). However, there is some danger of the latter three being segmented by native speakers as nominal compounds, for prosodic purposes, i.e. with compound initial $C\grave{v}C\grave{v}-$.

For {HLH}, the only example is *héyèndé* 'index finger'. Nanga *héyyèndé* has the same {HLH} pattern.

3.8.2 Grammatical tone patterns

3.8.2.1 Grammatical tones for verb stems

The complex array of lexical tone-contour types for verbs is described in $\S 3.8.1.2$, above. That classification was based on the relationship between the bare stem and the perfective negative, thus $\{H\}/\{H\}$, $\{H\}/\{L\}$, $\{LH\}/\{L\}$, and $\{LH\}/\{LH\}$. The tone-contour class is partially predictable from the initial consonant (if any) and the syllabic shape of the stem.

The tone of an actual inflected verb form reflects the interface between these lexical tone-contour possibilities and the tonal requirements of particular AMN (aspect-mood-negation) categories. The AMN categories are expressed by combinations of a particular vocalic stem type (bare stem, E-stem, A/O-stem, U-stem) plus a suffix (the perfective and the imperative have no suffix). Pronominal-subject suffixes, which follow AMN suffixes, have no tonal effect. There are also some combinations involving the past clitic $=b\varepsilon$ - that must be considered.

In Chapter 10 I give extensive AMN paradigms for representative verbs. Some highlights from those data will be summarized here.

One category that stands apart tonally from all others is the **imperfective negative**, with suffix $-n\acute{a}n \sim -r\acute{a}n$. It is the only AMN category that controls {L}-tone contour on stems of all tone-contour classes, including {H}/{H} verbs. There are, however, two irregular verbs ('bring' and its antonym 'take away, convey') that irregularly have {H} tone before the suffix, which itself is then {L}-toned $-n\grave{a}n \sim -r\grave{a}n$.

Each of the remaining AMN categories systematically permits verbs to express at least a lexical distinction between H-initial and L-initial. However, H-initial has two variants (except in Cv stems), H... and HL... Likewise, L-initial has two variants (except in Cv stems), L... and LH... These formula refer only to the verb stem (which may include one or more derivational suffixes). The AMN suffix itself has its own tone, which is sometimes polarized to the final tone of the stem and is sometimes autonomous.

In (64), stem-vocalism classes (e.g. A/O-stem) are disregarded to focus squarely on tones. The groups of categories are ordered in decreasing order of prevalence of H-toned. In (64a-c), there is in effect a binary distinction between H-initial stems, i.e. $\{H\}/\{H\}$ and $\{H\}/\{L\}$, and L-initial stems, i.e. $\{LH\}/\{L\}$ and $\{LH\}/\{L\}$. The only differences between (64a) and (64b) is that the latter limits the H-tone of $\{H\}$ to the first syllable (or mora). (64c) is a variant of (64b) for a category that lengthens the stem-final vowel, with falling tone if not already L-toned.

In (64d-f), the news is that the $\{H\}/\{L\}$ class separates dramatically from the $\{H\}/\{H\}$ class, as the former drops all stem-tones, regardless of whether the $\{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ classes retain a noninitial H-tone in the stem. The difference between (64d), (64e), and (64f) is in the differential conditions for dropping all tones in the $\{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ classes. In (64d), neither class drops tones. In (64e), just the $\{LH\}/\{L\}$ class drops tones (this is the only context where the two tone-contour classes can be distinguished). In (64f), both classes drop all tones, joining with $\{H\}/\{L\}$ to constitute a binary opposition with $\{H\}/\{H\}$.

In (64g), all stems drop tones, so lexical tone contours are erased.

(64) Tonal effects of AMN categories (bisyllabic stems)

```
if the stem is of tone-contour class...
                           {H}/{H} = {LH}/{L} = {LH}/{LH} = {H}/{L}
    suffix
                  category
                              ...then the stem-tone in this category is...
                               Η
                                            LH
                                                        LH
                                                                      Η
no suffix
                  bare stem
    (none)
                  perfective (after và)
    (none)
suffix with invariant tone
                  imperfective before AUX
    -ḿ
    -\dot{m} = b\dot{\varepsilon}
                  past imperfective
                  recent perfect
    -Z€-
suffix with variable tone
b.
                               HL
                                            LH
                                                         LH
                                                                      HL
no suffix
    (none)
                  imperative
suffix with invariant tone
                  imperfective 3Sg
    -m-ù
                               HL
                                                                      HL
                                            LHL
                                                         LHL
suffix with invariant tone
                  past imperfective negative
    :=b\acute{a}-l\grave{i}-
    [note: (c) is a variant of (b) with an extra L-toned mora]
                               HL
                                            LH
                                                         LH
                                                                      L
suffix with variable tone
                  perfective-2
    -zo-
```

```
Η
                                              L
                                                                          L
initial suffixal syllable has opposite tone to stem-final tone
    -li-
                   perfective negative
    -la
                   prohibitive
                   hortative
    -ma
f.
                                Η
                                             L
                                                           L
                                                                          L
suffix with invariant tone
    -téré-bè-
                   experiential perfect
suffix with variable tone
     =b\varepsilon-
                   past perfect
    -z\varepsilon = b\dot{\varepsilon}
                   past recent perfect
    -za-lì-
                   recent perfect negative
                                L
                                             L
                                                           L
                                                                          L
g.
no suffix
                   perfective (defocalized)
    (none)
initial suffixal syllable has opposite tone to stem-final tone
    -nan ∼ -ran imperfective negative
    [exceptions: 'bring' and 'take away' with {H}-toned stem]
```

The formulae in (64) are correct for bisyllabic stems, based on the paradigms of CvCv stems, or $m\acute{a}:n\acute{e}$ 'think' in the case of {H}/{L}. Some details differ for the shorter {H}/{L} stems, namely those of shapes Cv, ?∂Cv, and vCv, plus $n\acute{d}\acute{e}$ 'give'. The discrepancies involve experiential perfect $-t\acute{e}r\acute{e}-b\acute{e}-$, past perfect $-b\acute{e}-$, recent perfect $-z\acute{e}-$ and its negation $-za-l\^{i}-$, and (for Cv stems) forms involving imperfective $-m\acute{n}$. See the relevant sections in Chapter 10 for details.

Verb forms used in relative clauses have their own tonal as well as suffixal complexities, see §14.1.7.

Verb stems become $\{L\}$ -toned nouns (with the usual floating H-tone) in the productive verbal noun formation with suffix $-u \sim -y$, and in agentive compounds with the same suffix allomorphs.

3.8.2.2 Grammatical tones for noun stems

Grammatically controlled tone contours for noun stems occur in compounds and in the syntax of NPs and relative clauses. The most common tone-contour change is tone-dropping, i.e. the overlay of $\{L\}$ as a stem-wide contour, erasing the lexical tones. Unlike lexically $\{L\}$ -toned nouns, syntactically tone-dropped nouns do not have a following floating H-tone element that can be expressed on a following morpheme (such as a definite morpheme). Lexical $\{L\}$ and tone-

dropped $\{L\}$ can also be distinguished in the 'it is' clitic construction. Therefore a $\{L\}$ -toned noun can be distinguished from its own tone-dropped form in these specific morphosyntactic contexts.

Tone-dropping occurs in the contexts listed in (65).

(65) Tone-dropping for noun stems

- a. within unpossessed NPs before a modifying adjective before a demonstrative ('this', 'that')
- b. in a relative clause as internal head NP of the relative
- c. in nominal compounds as compound initial, in the $(\hat{n} \ \bar{n})$ type of compound (§5.1.2)

Tone-dropping may be overdetermined, as in 'that red house of Seydou's that you see there', where any one of the adjective, the demonstrative, the (definite) possessor, or the relative clause would suffice to drop the tone of 'house'. Since there is no audible difference between the different kinds of tone-dropping, it is not possible to determine the fine points of tonal bracketing in such cases.

Nouns with a preposed possessor (i.e. all nonpronominals possessors, and inalienable pronominal possessors) have a possessor-controlled overlay. For alienables this is $\{H(L)\}$ if the possessor has no H-tone, and $\{L\}$ if it has a H-tone. The $\{H(L)\}$ contour is realized as $\{H\}$ on a simple possessed noun, so in effect an alienably possessed noun can only be $\{H\}$ or $\{L\}$. For examples see $\{6.2.1-2.$

Inalienably possessed nouns always have a pronominal possessor. The possessed noun has {H} or {LH} contour if nonmonosyllabic, the choice being lexical, see §6.2.3.

There is also a type of compound, showing some similarities to the possessor-possessed structures, with a $\{H\}$ or $\{HL\}$ final element when the initial is lexically $\{L\}$ -toned. Arguably this is really just a manifestation of the floating H-tone associated with the $\{L\}$ -toned compound initial, rather than a grammatically overlaid contour.

3.8.2.3 Grammatical tones for adjectives and numerals

An adjective is subject to tone-dropping controlled by a demonstrative to its right, or in a N-Adj internal head of a relative clause. The overlay in these cases is $\{L\}$.

In alienable Poss-N-Adj sequences (the possessor being necessarily nonpronominal), the possessor controls either $\{H(L)\}$ or $\{L\}$ on the N-Adj sequence ($\{6.2.4.1-2\}$). The adjective surfaces as $\{L\}$ -toned in either case.

By contrast, in inalienable Poss-N-Adj sequences (the possessor being necessarily pronominal), the possessor has no tonosyntactic effect on the N-Adj sequence. Instead, the adjective controls tones on the noun (and on the pronominal possessor), see §6.4.2.1.

Numerals are also subject to tone-dropping due to an external controller (possessor or demonstrative). The animacy prefix, however, is usually exempted from tone-dropping, so in some combinations we get numeral forms like \acute{a} - $t\grave{a}$: $nd\grave{u}$ 'three' (animate) with the prefix retaining its H-tone while the numeral drops tones (from $t\acute{a}$: $nd\grave{u}$). Furthermore, in the combination Poss-N-Num, possessor-controlled overlay affects the noun only (§6.2.4.2).

3.8.3 Tonal morphophonology

3.8.3.1 Autosegmental tone association (verbs)

As in other Dogon languages, verb stems in particular lend themselves to a decomposition into segmental and tonal tiers. One can therefore think of stems like *nìyé* 'sleep' and *sízílé* 'roll (dough) into rolls as constituted by a segmental string (*niye*, *sizile*), onto which is mapped a {LH} or {H} melody. Suffixal derivatives would inherit the melody, which would we mapped onto the stemsuffix combination.

YD is somewhat resistant to this analysis, partly because the tone break in verbs is near the left edge (so suffixes typically just continue the final H-tone), and partly because lexical tones have become somewhat opaque due to the tone-flattening processes described in §3.8.3.3-4 below.

3.8.3.2 Phonology of contoured tone melodies and overlays

For unsegmentable nouns, the break for lexical {HL} melody is after the leftmost syllable, while that for {LH} may be after the leftmost syllable or before the rightmost syllable; see §3.8.1.6.

For verbs, the break for lexical {LH} is after the leftmost syllable, or the first mora for *Cv*: stems. *Cv* stems flatten {LH} to H. Tones of verb forms are subject to modification in various inflected forms.

The only {LH} tonosyntactic overlay is limited to a subset of bimoraic kin terms following a possessor, so the tone break is necessarily at the mora boundary (§6.2.3.2, §6.2.3.5).

There is a $\{H(L)\}$ overlay on alienably possessed nouns after $\{L\}$ -toned possessors, but the full form including the L component is audible only on N-Adj sequences in the form HN LAdj , so neither targeted word is tonally contoured.

3.8.3.3 Initial-Heavy-Syllable <LH> to H Flattening

There are indications in verbal derivational alternations that a nonmonosyllabic lexical $\{LH\}$ stem flattens to $\{H\}$ when its first syllable is heavy. This does not apply to inflected forms where the stem is fully tone-dropped from $\{LH\}$ to $\{L\}$, as in the perfective negative. The result is that the affected stems, which would otherwise be of $\{LH\}/\{L\}$ type, constitute an aberrant $\{H\}/\{L\}$ tonal class. Our choices are either to follow the overt patterns and recognize $\{H\}/\{L\}$ as a tonal class, or to posit a tone-flattening rule that derives the $\{H\}$ part of the inflectional paradigm from $\{LH\}$. I flesh out the latter possibility here.

Since the tone break in $\{LH\}$ verb stems is near the left rather than right edge, for nonmonosyllabic stems with initial heavy syllable the tone break should be inside the first syllable, as in $C\check{v}:C\check{v}$ or $C\check{v}CC\check{v}$. This happens in other Dogon languages with left-edge tone breaks (e.g. Nanga). If we recognize this as a pre-surface tone pattern for YD, we need a tone-flattening rule.

(66) Initial-Heavy-Syllable <LH> to H Flattening

In a nonmonosyllabic verb stem, in inflections where stem-wide tone-dropping does not occur, an initial heavy syllable flattens <LH> to H

For purposes of this rule, a "heavy" syllable is *Cv:* or *CvC*. It is also understood that intervocalic {*mb nd nz ŋg*} are syllabified with the following vowel. Using "." as a syllable separator, the initial syllables in *Cv.mbv*, *Cv.ndv*, and *Cv.ŋgv* are light, while other intervocalic clusters require syllabification as *CvC.Cv* with initial heavy syllable.

A more or less equivalent alternative would be to take the lexical {LH} contour as occurring on a separate autosegmental tier, and to block the L-component from attaching under the circumstances described.

Alternations accounted for by this flattening rule, using the bare stem of each verb, are illustrated in (67). The suffixal derivatives in the right-hand column show the flattening, often in connection with reductions in form of the stem (syncope of final vowel, truncation of final *Cv* with subsequent compensatory lengthening).

```
(67)
             {LH}
                                            \{H\}
        a. underived stem is {LH}
           Cv: stem
             bă: 'be full'
                                            bá:-ndε 'fill (sth)'
             dă: 'cover (opening)'
                                            dál-lé 'uncover (opening)'
           CvCv stem (syncopated or truncated)
             băn 'become red'
                                            bán-mε 'make (sth) red'
                                            dá:-ndé 'do (sth) well'
             dàgú 'turn out well'
                                            búl-15 'disinter'
             bùdó 'bury'
             gìdé 'immobilize'
                                            gíl-lέ 'de-immobilize'
             lègé 'stick in between'
                                           lέj-jέ 'slip in between'
                                            lέ:-dέ 'stick in between'
             măn 'seal with mud'
                                            mál-lε 'unseal'
             mìlé 'braid'
                                            míl-lé 'unbraid'
             năŋ 'go past'
                                           ná:-ndé 'cause to go past'
             yăm 'malfunction'
                                           yám-nε 'ruin (sth)'
             zăŋ 'study'
                                           záη-mέ 'teach'
                                           zá:-ndε 'incite (to fight)'
             zăŋ 'fight'
             zìdé 'flip'
                                            zí:-yé 'be flipped'
             zìné 'have (sb) ride double' zín-jé 'ride double'
        b. another suffixal derivative is {LH}
          unsyncopated mediopassive is {LH}
             bàmbí-yé 'carry on back'
                                            bám-dé 'have (sb) carry on back'
             dìgí-yέ 'be joined (arch.)'
                                            dij-j\varepsilon 'be joined'
             dìmbí-yé 'follow'
                                            dim-d\epsilon 'cause to follow'
             dì-yε 'carry on head'
                                            d\acute{u}:-d\acute{\epsilon} 'have (sb) carry on head'
             gòdí-yó 'put on (hat)'
                                            gól-ló 'take off (hat)'
                                           gór-dó 'put hat on (sb)'
             yàmbí-yέ 'cover self'
                                           yám-dέ 'cover (sb)'
             zìbí-yó 'gird oneself'
                                            zíb-dó 'gird (sb) with a wrap'
          unsyncopated reversive is {LH}
             bàní-lé 'uncover, reveal'
                                            bá:-ndε 'hide (sth)'
            jὲηú-lέ 'straighten out'
                                           jέn-jέ 'be bent'
                                           jέ:-ndέ 'tilt (sth)'
```

```
n \frac{\partial n}{\partial t} = \frac{\partial n}{\partial t} = \frac{\partial n}{\partial t} 'be caught (e.g. in tree)' n \frac{\partial n}{\partial t} = \frac{\partial n}{\partial t}
```

This tone-flattening might also be attributed to underived stems of similar syllabic shapes. In such cases the evidence for lexical {LH} is indirect: if the stem drops to {L} tones in inflected forms such as the perfective negative, we could assume a lexical {LH} contour, even if it never surfaces as such. Examples: d5md5 'console', b6:líyé 'belch', má:né 'think', y6:d6 'guard'.

CvCCv verbs with medial {mb nd nz ng} do not undergo flattening, as mentioned above. Examples: nòmbó 'pound (fruit pits)', dùn-dó 'pile up, set down', dònzó 're-open (wound)', mèngíré 'shape into balls'.

3.8.3.4 *Cv* stem <LH> to H Flattening

A similar flattening of <LH> to H is arguably at work in those Cv verbs that are H-toned in the bare stem and some inflections, but drop to {L}-tone in the perfective negative. On the basis of this drop, they can be suspected of having a covert {LH} lexical contour. The stems in question are all Cv verbs beginning with a voiced obstruent, plus a subset of those beginning with a sonorant (wo 'come', wo 'see', no 'hear'); see §10.2 The idea is that the lexical {LH} contour cannot be realized on a single mora, so it is flattened to H.

3.8.4 Rhythms and tones

In cases where a stem can appear in both {L} and {H} toned forms, we must ask which tonal form is basic and which is derived. Either we posit lexical {L} and a tone-raising rule, or lexical {H} and a tone-dropping rule.

In most cases we posit $\{H\}$ and tone-dropping. This is clearly the case when lexical melodies other than $\{H\}$ are also tone-dropped, as in nouns before adjectives or demonstratives.

3.8.4.1 Tone-raising processes after proclitic pronouns

We will see in the following section that some combinations of {L}-toned words undergo a rhythmic dissimilation rule, with the first syllable of the second word raised to H-tone.

Among other first words in the relevant sequences are pronominal clitics. However, these elements pose analytic problems, since they can trigger not only this rhythmic dissimilation, but also a more highly grammaticalized {H}-tone overlay on certain following elements.

Words that undergo Rhythmic Tone-Raising after pronominals (among other elements) include *tùmà* 'only' (§19.4.1) and *kàndà* 'even' (§19.1.4).

Only {L}-toned first elements (1Sg, 'woman') trigger the rhythmic rule, whose effect is indicated by † . This symbol merely indexes the tone-raising, and it is not a phonetic diacritic. Only the first syllable of $t\hat{u}m\hat{a}$ or $k\hat{a}nd\hat{a}$ is tone-raised.

The more grammaticalized tonal effects are seen with inalienably possessed nouns (kin terms), which are always immediately preceded by a pronominal possessor (§6.2.3). Examples are in (69).

It is not possible to account for the tones in (69) simply by Rhythmic Tone-Raising, which would work only for 'my father'. First, bisyllabic kin terms have a lexical choice between $\{H\}$ and $\{LH\}$ possessed overlays. Second, the $\{H\}$ overlay extends to the end of a bisyllabic or longer stem, rather than being confined to the first syllable. Third, even some H-toned pronouns like 2Sg of control the $\{H\}$ overlay. Therefore I treat these tonal alternations under the rubric of tonosyntax, rather than as lower-level tonal phonology.

A few L-toned **particles** and primary **postpositions** behave tonally like inalienable nouns. They become $\{H\}$ -toned after pronominal clitics, including H-toned 2Sg δ . If bisyllabic, the H-tone extends to the end of the stem. For this purpose, the inanimate (and normally discourse-definite) pronoun $k\delta$ is treated like a noun rather than like regular pronominal proclitics.

```
w\grave{a} \rightarrow \qquad \text{quotative (§17.1.3)} \qquad m\grave{i} \ ^{\text{H}}w\acute{a} \rightarrow \acute{o} \
```

Interrogative and disjunctive $m\grave{a} \rightarrow$ 'or', Topic $k\grave{a}y$, and $s\grave{a}y$ 'only' are not included since they follow H-toned independent pronouns rather than proclitics.

For combinations where a L-toned pronominal proclitic induces (rhythmic) tone-raising of the first syllable of a following particle, see the following section.

It is difficult to compare the tonal behavior of the above particles with that of locative postpositions $n\hat{a}$ and $b\hat{a}$. The latter do not occur with pronominal complements, except that inanimate $k\delta$ does occur in the combination $k\delta$ $n\hat{a}$ 'in that, therein'. $\#k\delta$ $b\hat{a}$ was rejected by an informant, but the adverb $k\hat{u}$ - $b\hat{a}$ 'there (discourse-definite)' may represent this combination etymologically.

3.8.4.2 Rhythmic Tone-Raising after {L}-toned constituent

A more clearly rhythmic tone-raising process affects the first syllable of an eligible $\{L\}$ -toned "word" when it follows an $\{L\}$ -toned constituent. This is a kind of tonal dissimilation, resulting in up-and-down rhythms in sequences that would otherwise be tonally flat.

 $C\dot{v} \rightarrow$ (with intonation-like prolongation) and $C\dot{v}C$ particles divide into those that become fully H-toned and those that become <HL>-toned. One could argue that only the <HL>-toned outputs are ascribable to Rhythmic Tone-Raising, and that the H-toned outputs involve a word-level {H} overlay.

(71) Rhythmic Tone-Raising

The first syllable (for some monosyllabics, the first mora) of an eligible $\{L\}$ -toned word is raised to H-tone after an eligible $\{L\}$ -toned constituent.

(Notation: † preceding the raised syllable.)

For purposes of this rule, some morphemes transcribed here as suffixes (on verbs) are treated as separate words.

Rhythmic Tone-Raising occurs in the combinations listed in (72). X represents the preceding $\{L\}$ -toned constituent, and Y represents the $\{L\}$ -toned word that is raised from $\{L\}$ to $\{H\}$.

(72) Word or phrase combinations subject to Rhythmic Tone-Raising

	X	Y (input)	Y (output)
a.	noun or adjective	Definite $(g\hat{\epsilon}, w\hat{o})$	†gé, †wó
b.	NP	mà→ 'or'	[†] mâ→
	NP	tùmà 'only'	† <i>túmà</i>
	NP	kày Topic	<i>¹kây</i>
	NP	kàndà 'even'	† <i>kándà</i>
	NP	nà, bà locative	† <i>ná</i> , † <i>bá</i> (see §8.2.3)
	NP	dàn purposive-causal	†dán
	NP	complex postposition	(see §8.2.2)
c.	predicate or NP	<i>mà</i> → interrogative	^mâ→
	predicate	wà clause-final quotative	[↑] wá
d.	predicate	dè 'if'	
	predicate	dàn purposive	
	predicate	<i>nì</i> subjunctive	
e.	verb	verbal suffix	(various)

These groups will be illustrated sequentially. Examples involving **definite** morphemes are in (73). The two morphemes are $g\hat{e}$ (animate singular, inanimate plural) and $w\hat{o}$ (inanimate singular, animate plural). They are raised to ${}^{\dagger}g\hat{e}$ and ${}^{\dagger}w\hat{o}$, respectively, after a {L}-toned noun or noun-adjective combination (73a-c). Raising does not occur if there is a H-tone anywhere in the entire NP (73d-e). It is not sufficient that the final word of the NP be {L}-toned. In (73d), 'house' is {L}-toned (as a possessed noun) but the possessor contains a H-tone, so the definite morpheme remains L-toned. In a preceding noun-adjective string, the noun is tone-dropped to {L} by the adjective. In this case, any lexical H-tones in the noun are disregarded, so the suppressed lexical H-tones of ?516 'house' do not block tone-raising of the definite morpheme in (73b). Cliticization of $w\hat{o}$ to animate plural suffix $-m\hat{u}$ has no effect on tone-raising (73c,e).

(73) a. $n\dot{a}$: ${}^{\dagger}g\dot{\varepsilon}$

```
Def.AnSg
      cow
      'the cow'
b. ?àlò<sup>L</sup>
                      pèν
                                   ^{\dagger}g\dot{\varepsilon}
     house<sup>L</sup>
                      old
                                   Def.InanPl
      'the old houses' (?516 'house')
c. n\grave{a}:-m\grave{u}=^{\dagger}w\acute{o}
      cow-AnPl=Def.AnPl
      'the cows' (phonetic [nà:mɔ̃:])
                      <sup>L</sup>?àlò
d. săvdù
                                       wò
                      Lhouse
      S
                                       Def.InanSg
      'Seydou's house'
e. p \hat{\epsilon}:-m \hat{u} = w \hat{o}
      sheep-AnPl=Def.AnPl
      'the sheep-Pl'
```

All demonstratives, numerals, and non-numeral quantifiers contain a H-tone, so they are not affected tonally by a preceding {L}-toned word-string. In a definite NP, either the definite morpheme or some preceding word will contain a H-tone, as just shown. Combining these facts, we see that any NP containing any determiner or quantifier will contain at least one H-tone, so no such NP can then function as the conditioning element on the left that triggers Rhythmic Tone-Raising on the following element. The only NPs that are entirely {L}-toned are simple nouns and noun-adjective combinations that happen to contain no H-tone.

Examples of such NPs as conditioning elements are in (74), with various following particles and postpositions.

```
(74)
         a. pè:
                            <sup>†</sup>mâ→
                                        ?án€
              sheep
                                        goat
                            or
              'a sheep or a goat'
         b. pὲ:
                            †túmà
              sheep
                            only
              'just a sheep'
         c. p \hat{\epsilon}:
                            †kây
              sheep
                            Topic
              'as for a sheep'
```

```
d. pè: †kándà
sheep even
'even a sheep'
```

- e. *bàmbà* †*ná*B Loc
 'in Bamba (village)'
- f. *pè:* † *dán* sheep because 'because of a sheep'
- g. [gṣà: †bérʰà] nà
 [granary interior] Loc
 'inside a granary' (see §8.2.2 for discussion)

YD differs notably from languages like Jamsay that tend to spread the final tone of a constituent into following particles.

Versatile phrase- and clause-final particles are also subject to tone-raising (75).

(75) a.
$$p\hat{e}$$
: †wá
sheep say
'(... said:) a sheep'

b. $p\hat{e}$: †mâ→
sheep Q
'a sheep?'

 $w\grave{a}$ and $m\grave{a} \rightarrow$ are actually somewhat more complex tonally than this suggests. In (76a), $w\grave{a}$ remains L-toned although it follows a {L}-toned word ('go down'). This could be because 'go down' is the final element in a verb chain including a preceding verb with a H-tone ('fall'), so the verb chain as a whole is treated as the conditioning element. Or it could be that the perfective verb 'go down' in (76a) is ineligible as a conditioning element on the grounds that it has been tone-dropped (in their full forms, all perfective verbs contain a H-tone). Similar issues arise with $b\grave{o}$ - 'be', whose {L}-toned form is arguably tone-dropped from $b\acute{o}$ - and is always tightly phrased with a preceding locational (76b). I am unable to find any locational expressions that are entirely {L}-toned (cf. §4.4.3.1), to test whether the H-tone of $n\acute{g}\acute{g}\acute{t}$ 'here' is a factor in (76c).

```
(76) a. yà pílé Lsùyè-Ø wà
Real fall Lgo.down.Perf-3SgS say
'(... said:) he/she fell down' (yà súyé-Ø 'he/she went down')
```

In (77a), Quotative *wà* is raised to **wá* after a {L}-toned predicate ('not be'). However, in the absence of the Quotative particle this predicate appears as *ònú-* with final H-tone. So either this H-tone slides rightward into *wà*, or the final H-tone of a {LH}-toned predicate is dropped before the particle, which is then eligible for Rhythmic Tone-Raising. This is also the case with perfective negative verbs that are {LH}-toned with H-toned suffix -*lí-* in the absence of the particle (77b). It does not happen, however, with imperfective negatives, which convert their final H-toned suffix to <HL>-tone (77c).

- b. [nà Hwá→] wò-lì twá

 [3AnSg HQuotS] come-Perf.Neg say

 '(... said:) he/she didn't come' (wò-lí-Ø 'he/she didn't come')
- c. [nà Hwá→] wò-rⁿâŋ wà [3AnSg HQuotS] come-Impf.Neg say '(... said:) he/she won't come' (wò-rⁿáŋ-Ø 'he/she won't come')

Interrogative $m\grave{a} \rightarrow$ (arguably identical to the 'or' coordinator) behaves the same way. For example, (78a-c) are closely parallel to (74a-c) above, though the interrogative particle is subject to heavy intonational effects.

- b. síkòrò ònù-∅ †mâ→
 sugar not.be-3SgS Q

 'Isn't there any sugar?'
- c. $w \hat{o} l \hat{i} \emptyset$ $\uparrow m \hat{a} \rightarrow$

come-Perf.Neg 'Didn't he/she come?'

Clause-final subordinating particles should in theory also be subject to Rhythmic Tone-Raising. However, for reasons just given it is hard to find an eligible $\{L\}$ -toned conditioning element to the left, other than a $\{LH\}$ -toned perfective negative verb, where one can argue that the final H-tone jumps into the particle. Compare (79a-c) below, with conditional $d\hat{e}$ 'if', to (77a-c) above.

- - b. wò-lì †dé
 come-PerfNegH if
 'if he/she didn't come' (wò-lí-∅)
 - c. wò-rⁿâŋ dè
 come-Impf.Neg+L say
 'if he/she won't come' (wò-rⁿáŋ-∅)

The situation is similar with subjunctive ni.

(80) [síkòrò ònù-Ø †ní] Lùrnê-Ø [sugar not.be-3SgS Sbjnct] Lgo.Perf-3SgS 'He/She went (away), thinking that there was no sugar.'

I have not been able to find any relevant combinations with clause-final purposive *dan*, which normally follows a verb containing a H-tone.

Syntactic combinations that do not allow Rhythmic Tone-Raising are listed in (81).

(81) Word or phrase combinations not subject to Rhythmic Tone-Raising

X Y

- a. NP predicate (in some cases) tone-dropped word (any)
 NP (e.g. subject) NP (e.g. object)
- b. (any, except possessor) NP (any) realis *yà*

(any) pronoun

A few comments on (81) are needed. The fact that tone-dropped words do not raise tones on following words (81a) may be a consequence of other phenomena. Most tone-dropping processes apply within a NP. In the case of right-to-left control, the controlling word (C) is itself adjacent to the target (T), i.e. the tone-dropped word or word-string. It would be strange if C induced tone-dropping on T and then was itself tone-raised to dissimilate from T. Left-to-right control occurs in possessor-possessed sequences

In (81b), the fact that an NP cannot be tone-raised by an element external to its own maximal NP, and the fact that realis $y\hat{a}$ cannot be tone-raised, may reflect phrasal bracketing. Similarly, the pronouns that occur in linear positions where tone-raising might be possible generally behave as proclitic to the following element, so bracketing is again a possible explanation.

3.8.4.3 Tonal behavior of perfective negative verbs.

In (82), the verb 'listen' begins with a {L}-toned stem because of the perfective negative suffix -li-. It is therefore a potential target for Rhythmic Tone-Raising if preceded by a {L}-toned element. However, (82b-c) show that the verb stem fails to be affected by such a preceding element.

- (82) a. nùndìyò-lí-Ø listen-PerfNeg-3SgS 'He/She/It didn't listen.'
 - b. pè: nùndìyò-lí-Ø
 sheep listen-PerfNeg-3SgS
 'A sheep didn't listen.'
 - c. nà: nùndìyò-lí-\(\mathcal{D}\)
 cow listen-PerfNeg-3SgS
 'A cow didn't listen.'

Nevertheless, in relative clauses a L-toned proclitic subject pronoun does have a stem-wide raising effect on the perfective negative verb (83a), contrast (83b) with H-toned pronominal, where the only H-tone on the verb is in the suffix. If a noun is subject, as in (83c), there is no tone-raising on the verb, and even the perfective negative suffix is L-toned morpheme ($^{\dagger}wo$) becomes H-toned.

(83) a. ìzèn^L mì ^Hnúndívó-lì wò

- b. izèn^L ó nùndìyò-lí wò
 day^L 2SgS listen-PerfNeg.Rel Def.InanSg
 'the day (when) you-Sg didn't listen'
- c. $izen^L$ pe: / ?ene nundiyo-li two day sheep/goat listen-PerfNeg.Rel Def.InanSg 'the day (when) a sheep/goat didn't listen'
- d. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{\partial nindiy}{\partial l}$ $\frac{\partial f}{\partial l}$ $\frac{\partial f}{\partial l}$ $\frac{\partial f}{\partial l}$ Def.AnSg 'the man who didn't listen'

The unexpected H-tone on ${}^{\dagger}wo$ in (83c) and ${}^{\dagger}go$ in (83d) could be attributed to Rhythmic Tone-Raising. Better, we could argue that the expected suffixal H-tone on the verb has jumped across the boundary to dock on the definite morpheme. For a similar phonological problem, see discussion of (602b,d-e) in §15.1.

3.8.4.4 Tone-Raising of pronominal proclitic

While pronominal proclitics sometimes induce tonal changes on following words, in a few combinations the reverse appears to happen: a L-toned pronominal is seemingly raised to H while the following element is unaffected. This happens with the Topic particle and with a handful of inalienably possessed kin terms. The effect is that L-toned proclitic pronominals like 1Sg mi merge tonally with H-toned pronominals like 2Sg 6.

In the case of Topic *kày*, a plausible explanation is that the independent rather than proclitic form of the pronoun is used (84a). I therefore avoid the ^H superscript in this case. However, three kin terms with {LH} possessed tonal form also shift a preceding L-toned pronominal possessor to H, and here the case for shifting from proclitic to independent pronouns makes little sense grammatically (84b).

(84)
$$1 \operatorname{Sg} m i \qquad 2 \operatorname{Sg} \phi$$
a. $k \grave{a} y$ Topic $m i \quad k \grave{a} y \qquad \phi \quad k \grave{a} y$

b. composite kin terms (§6.2.3.5)

```
'maternal kinsman' mi^{H} LH ni-y\acute{e} \acute{o} LH ni-y\acute{e} 'paternal kinsman' mi^{H} LH d\acute{e}: \acute{o} LH d\acute{e}: \acute{o} LH d\acute{e}: \acute{o} LH s\grave{a}-y\acute{e} \acute{o} LH s\grave{a}-y\acute{e}
```

3.9 Intonation contours

3.9.1 Adverbs and particles with lexically specified prolongation (→)

As in other Dogon languages, there are a number of lexical items in YD that end in an intonational prolongation of the coda of the final syllable. These are expressive adverbials, clause-final particles, and similar elements external to or at the right edge of clauses and phrases. This prolongation cannot be reduced to vowel length, and it affects final sonorants as well as final vowels. The duration of the prolongation is variable but may be considerable.

Examples of adverbials are $d\acute{e}m \rightarrow$ 'straight' (§8.4.7.1) and $\grave{a}s\acute{u} \rightarrow$ 'always' (§8.4.7.3). Prolongation is also typical of phrase- and clause-final particles $m\grave{i} \rightarrow$ 'and' (§7.1.1), $m\grave{a} \rightarrow$ 'or' (§7.2), and quotative particle $w\grave{a}(\rightarrow)$ after subjects (§17.1.3). A subordinated clause type meaning 'as soon as...' is formed by prolongation of the coda of an imperfective verb; see (635a-b) in §15.3.2. The $-\acute{e}: \sim -\acute{e}:$ subordinator also lends itself to prolongation (§15.2.3).

3.9.2 Dying-quail intonation effect ∴

Something like the dying-quail intonation effect observed in Jamsay and some other Dogon languages (prolongation of final syllable coda plus gradual pitch drop if not already L-toned) is found in the YD 'it is' clitic under some conditions, but the prolongation is not consistent. See §11.2.1.1 for details.

4 Nominal, pronominal, and adjectival morphology

4.1 Nouns

4.1.1 Simple nouns

Noun stems may be as short as Cv, as in no 'person', ye 'woman', and co 'thing'. However, most noun stems have at least two moras: Cv:, CvCv, CvCCv, CvCCv, and various trisyllabic and longer patterns. Many of the longer nouns, if not borrowed, are likely to have originated as compounds or suffixal derivatives, and may reflect this origin by their tonal contours or (nonharmonizing) vocalism.

Animate nouns have an unmarked singular and take a **plural suffix** -mu. The singular/plural distinction is obligatory for animates. Examples involving nonhuman animals are in (85). The plural suffix is high-toned - $m\dot{u}$ for some stems that otherwise have all-low tones (85a), and low-toned - $m\dot{u}$ for other stems with the same all-low toned stem (85b). For all stems that contain a high-tone element (85c-f), the animate plural suffix is low-toned - $m\dot{u}$.

(85) also shows the combination with definite animate singular $g\varepsilon$. Note that both (85a) and (85b) have high-toned ${}^{\dagger}g\varepsilon$ though the two sets differ in the tone of animate plural -mu.

(85) Nonhuman animate nouns

stem	DefSg	Pl	gloss
a. {L} tone ste	em with -mú		
pὲ:	pὲ: ⁺gέ	pèè-mú	'sheep'
nòmzù	nòmzù ⁺g€	nòmzù-mú	'snake'
àɲàn	àɲàn ⁺g€	àɲàn-mú	'bird'
dùŋyàrà	dùŋyàrà ⁺g€	dùŋyàrà-mú	'lion'
yùrùgù	yùrùgù †gé	yùrùgù-mú	'pale fox'
b. {L} tone ste	em with <i>-mù</i>		
nà:	nà: ⁺g€	nà:-mù	'cow'
gòy ⁿ è	gòy ⁿ è ⁺gέ	gòy ⁿ è-mù	'elephant'

c. {LHL} toned stem with -mù

tètêw	tètêw gè	tètêw-mù	'sparrowhawk'
d. {LH} t	oned stem with -mù	!	
wĭl ∼	wìlú wĭl gè	wĭl-mù ~ wìlú-mù	'gazelle'
lòzú	lòzú gè	lòzú-mù	'bush duiker'
dìmna	á: dìmná: gè	dìmná:-mù	'ratel'
zàmd	úrù zàmdúrú gè	zàmdúrú-mù	'donkey'
e. {HL} to	oned stem with -mù		
díyèn	è díyènè gè	díyènè-mù	'hippo'
f. {H} ton	ned stem with -mù		
?źné	?áné gè	?ອ໌n∉-mù	'goat'
kóndo	ó kóndó gè	kóndó-mù	'rock hyrax'
ámpá	ámná gè	ámpá-mù	'aardvark'

The animate plural suffix is optionally reduced (apocopated) to -m after a vowel. In this case the tone of -mu is combined with the tone of the preceding syllable. Thus $l\partial z\hat{u}-m\hat{u}$ or variant $l\partial z\hat{u}-m$ 'bush duikers'.

Some human nouns are in (86). The tonal patterns are comparable to what we saw with animal terms above. For compounds (and other long, prosodically compound-like nouns like 'white person'), the tones of the final stem are our reference point here. A few high-frequency human nouns are presented in the following section. See also the kin and similar relationship terms in §6.2.3.1.

(86) Human nouns

stem	DefSg	P1	gloss
a. {L} tones			
gɔ̀lɔ̀-gɔ̀l	gàlà-gàl †gé	gòlò-gòl-mú	'farmer'
sòη-tì:	sòη-tì: †gέ	sòŋ-tì:-mú	'weaver'
gùnò	gùnò ⁺g€	gùnò-mú	'slave'
zàmè	zàmè ⁺g€	zàmè-mú	'leatherworker' (caste)
zònjù	zònjù †gé	zònjù-mú	'healer'
b. {LH} tones;	see also §6.2.3.2	2)	
zèmé	zèmé gè	zèmé-mù	'blacksmith' (caste)
dògó	dògó gè	dògó-mù	'Dogon (person)'
c. {H} tones			
púlá	púlá gè	púlá-mù	'Fulbe (Pullo)'

ànà-kázá ànà-kázá gè ànà-kázá-mù 'Hogon, oldest man' ànàsá:rá ànàsá:rá gè ànàsá:rá-mù 'white person'

Inanimate nouns do not take plural -mu, and therefore have only one morphological form. However, like other nouns they may be followed by determiners (definite morphemes, demonstratives) that distinguish inanimate singular from inanimate plural, e.g. definite wo (singular) versus $g\varepsilon$ (plural). Some inanimate nouns are in (87). The combination with definite inanimate plural $g\varepsilon$ is also shown. Definite inanimate singular wo has the same tonal patterns.

(87) Inanimate nouns

stem	DefPl	gloss
a. {L} tones		
nà:	nà: ⁺g€	'foot'
gọà:	goà: †gέ	'granary'
cìn	cìn ⁺g€	'stone'
òy	òy †g€	'field; brousse'
tìmè	tìmè ⁺g€	'tree'
kùlà	kùlà †gÉ	'leaf'; 'hair'; 'feather'
nùmà	nùmà ⁺g€	'hand'
jìdè	jìdè †g€	'eye' (variant gìd-íyè)
pàndà	pòndò ⁺gέ	'earth'
b. {HL} tones		
tánà	tánà gè	'stick'
c. {LH} tones		
dàmá	dàmá gè	'village'
d. {H} tones		
sún	sún gè	'ear'
séw	séw gè	'ax'
kó:	kó: gè	'head'
έmέ	émé gè	'milk (n)'
ínjú	ínjú gè	'water'
<i>?ؤ\6</i>	?áló gè	'house'
tógú	tógú gè	'shed, shelter'
kóŋó	kóŋò gè	'mountain'
<i>έ</i> nέŋ, έnέŋú	énéŋ(ú) gè	'wind'

Kin terms have a number of morphological irregularities. These are covered in §6.2.3 since the morphology of kin terms cannot be separated from the expression of possession.

Yanda Dom does not normally preserve frozen singular suffixes. I can cite $iz\dot{u}g\dot{e} \sim iz\dot{i}g\dot{e}$ 'sun', compare suffixed Tebul Ure $\dot{u}d\dot{u}$ - $g\acute{o}$ and Najamba $\dot{u}j\acute{u}$ - $\eta g\acute{o}$, and unsuffixed e.g. Ben Tey and Bankan Tey $\dot{u}s\acute{u}$ and Nanga $\dot{u}s\acute{\iota}$. $\dot{b}ang\grave{e}$ 'friendship between a man and his friend's son' suggests an original segmentation *ban-gè cf. $bar^n\acute{\iota}$ - $y^n\grave{e}$ 'father's friend'. Deverbal nominalizer - η (§4.2.4) might be a vestige of *- η go. Suffix - η in unpossessed forms of a few kin terms (§6.2.3.4-5) is another possible archaism.

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

The most common human nouns are in (88). All but 'man' have irregularities when compared to the productive nominal morphology described in the immediately preceding section.

(88)	Sg	DefSg	P1	gloss
	irregular			
	nò	nó gè	nò-mó	'person'
	ènè	èné gè	èné	'child'
	yὲ	yé gè	yê-mù	'woman'
	regular			
	án	án gè	án-mù	'man'

All three of the stems with L-toned simple (i.e. indefinite) form have an irregular form with H-tone (for 'child' only in the second syllable) before definite singular $g\hat{\epsilon}$ (which therefore remains L-toned). The other irregularities are the plurals of 'person' and 'child'. 'Man' has no irregularities.

For 'child' see also the human and nonhuman compounds in §5.1.8.

'Thing' is ci (definite singular ci wo, definite plural ci $g\dot{e}$). The forms are regular, but Cv is an unusually short shape for a noun.

4.1.3 'So-and-so' (*à-mâ:n*)

The noun \hat{a} - $m\hat{a}$: $n \sim \hat{a}$ - $m\hat{a}$: $n\hat{u}$ 'So-and-so' (Fr un tel) denotes a variable personal name. It occurs in contexts like this: "If I encounter someone from another village, I will say: Hey So-and-so, has it rained in your village?"

4.1.4 Reduplicated noun stems

4.1.4.1 Initial *Cv*-reduplication in nouns

Possible *Cv*- reduplications in nouns mostly in natural-species terms. The examples in (89) are organized by tonal contour and syllabic shape. Usually the unreduplicated form is unattested; however, $t\hat{e}$ - $t\hat{e}w$ 'sparrowhawk' becomes $t\hat{e}w$ as compound initial in other hawk terms ($t\hat{e}w$ - $s\hat{e}$: $r^n\hat{e}$ 'falcon', $t\hat{e}w$ - $d\hat{u}b\hat{a}$ 'eagle'). The formulae in the headings show the tone of the reduplicant (L- or H-) followed by the contour of the base in $\{...\}$.

```
(89)
        a. L-{HL}
            tè-têw
                             'sparrowhawk'
                            'butterfly'
            pì-pírù
            kò-kódù
                             'gum-arabic tree (Acacia senegal)'
            kà-kádà
                             'armpit' (variant kàgádà)
            wè-wélè
                            'swift (bird)'
                            'tree sp. (Grewia bicolor)',
            òbó-[kà-kázà]
                            [cf. 3b5-ză:là 'vine sp. (Cissus quadrangularis)']
        b. L-{H}
            mè-mén
                            'ant(s)'
        c. H-\{LH(L)\}
                            'tree sp. (Stereospermum)'
            pó-pòdólò
            tú-tùmúlò
                            'shrub sp. (Kleinia)'
            sé-sènzé
                             'small herb sp. (Spermacoce)'
        d. L-\{L\}
                             'giant pouched rat (Cricetomys)'
            gù-gùzù
                            'tree sp. (Pterocarpus lucens)'
            bè-bèlè
            kò-kòzù
                            'viper (Echis)'
        e. H-{H}
            kó-kól
                            'tree sp. (Maerua angolensis)'
```

```
[totem for Tabasimbe family]
gá-gábú 'wall' (cf. verb gàbú 'build wall')
kó-kónó 'season of hardship before harvest'
```

```
f. {L}-toned as compound initial [z\hat{a}^n-z\hat{a}^n]-k\acute{a}l\grave{e} 'double grain spike (millet)'
```

Some terms whose cognates in e,g. Jamsay have the reduplication appear without it in Yanda: tà: 'hyena', kà: 'grasshopper', cègè 'beetle/bug'.

4.1.4.2 Final reduplications in nouns

Final reduplication is not a productive derivational device, but one can cite the grasshopper terms in (90a), which belong to a widespread but minor pattern in Dogon languages (e.g. Jamsay). The hyena term (90b) is more doubtful. The nouns (or compound initials) are $k\hat{a}$: 'grasshopper (all spp.)' and $t\hat{a}$: 'hyena (2 spp.)'

```
    (90) a. kà: sèŋèr<sup>n</sup>è-sêy<sup>n</sup> 'grasshopper sp. (Kraussella)'
    b. tà: kóŋór<sup>n</sup>ó-kòy<sup>n</sup> 'spotted hyena (Crocuta)'
```

Two onomatopoeic terms denoting noisy bird spp. have an apparent initial Cv^n -reduplication (91). The first of these has a variant $k \frac{\partial u}{\partial x^n} \partial w^n$ that is less transparently reduplicative.

```
(91) k \grave{a}^n - k \grave{a} r^n \hat{a} w 'white-bellied (Senegal) bustard' c \grave{\epsilon}^n - c \grave{\epsilon} r^n \hat{\epsilon} w 'black-headed lapwing'
```

4.1.4.3 Nouns with full-stem iteration

The attested types are classified in (92) by prosodic type and subclassified by whether vocalic shifts take place. In most cases the base is not attested in unreduplicated form. Native speakers may still discern the connection between $dig\dot{u}-dig\dot{u}$ 'joint' and the word-family including $dij-j\acute{e}$ or $digi-y\acute{e}$ 'be connected (joined)'.

(92) a. *CvCv-CvCv* (disregarding compound initial) *no vocalic change*

```
'joint'
    dìgù-dígù
  mid-height vowel to a
    gòr<sup>n</sup>òmà-[dìŋè-dáŋà]
                                'evil dwarf'
    kà:-[tòŋò-táŋà]
                                'mantis'
b. CvCv-CvCv (disregarding compound initial)
                                'stilt dancers'
    tènè-táná
c. CýC-CỳC
  no vocalic change
                                'bush sp. (Scoparia)'
    tím-tìm
d. CvC-CvC
  mid-height vowel to a
    c \check{\varepsilon} y^n-c \check{a} y^n
                                'tree sp. (Cassia sieberiana)'
```

Such iterations are more common with expressive adverbials (§8.4.7.1) and onomatopoeic words.

4.1.5 Frozen initial *a*- or *aN*- in nouns

Candidates for a more or less segmentable initial formative *a*- or *aN*- (with nasal consonant) are in (93).

Etymologically spurious cases may also be put in this category synchronically. The main examples are borrowings from Arabic nouns with *al-* (and assimilated variants), e.g. *ànàsá:rá* 'white person, European'.

4.2 Derived nominals

4.2.1 Characteristic derivative $(-j\hat{\imath} \sim -j\hat{\imath})$

The suffix $-j\hat{\imath} \sim -j\hat{\imath}$ is added to a noun X to generate a noun (or adjective) meaning 'characterized by having X'. The noun denoting X takes the form of a simple (i.e. unquantified) stem, and drops tones. The plural is $-j\hat{\imath}-m\acute{u} \sim -j\grave{u}-m\acute{u}$. Two examples are in (94).

(94)		noun	gloss	Characteristic	gloss
	a.	pàŋà	'strength'	pàŋà-jì	'strong, powerful'
	b.	tớm	'hump'	tòm-jì	'hunchback'

4.2.2 Verbal nouns $(-l\acute{e}, -y \sim -\grave{u})$

Verbal nouns are used when the eventuality denoted by the conjugatable verb is referred to abstractly, and as complements of various higher-level verbs such as dògó 'leave' in the sense 'cease (doing)' (§17.3.2). Representative forms of the two productive verbal noun forms are in (95).

One productive verbal noun form is with suffix -*lé*. It is added to the bare stem form.

The second verbal noun ends in -y after a monosyllabic Cv(:) verb, and in - \hat{u} after most nonmonosyllabic stems. Cv: verbs shorten the vowel before -y, merging with Cv verbs (95a-b). The three weakly bisyllabic verbs of the shapes nCv ('give') and PoCv ('go up', 'eat meal') have a final i-vowel (95d). 'Weep' has a similar form $y\hat{i}$ (95c). These i-final forms are difficult to segment morphologically; perhaps we could posit a -y suffix that contracts irregularly with a stem-final vowel to i. The verbs in (95f) apocopate the final /u/ after an unclustered sonorant other than a rhotic or p.

	bare stem	VblN <i>-lé</i>	VblN $-y \sim -u$	gloss
a.	wó	wó-lé	wò-y	'come'
	wź	wó-lé	w∂-y	'see'
	jέ	j <i>é-lé</i>	jè-y	'kill'
	jé	jé-lé	jè-y	'dance'
	gó	gó-lé	gò-y	'go out'
	nố	nó-lé	n∂-y	'go in'
	zó	zó-lé	zò-y	'bring'
	a.	a. wó wó jế jé gó nó	a. wó wó-lé wó wó-lé jé jé-lé jé jé-lé gó gó-lé nó nó-lé	a. wó wó-lé wò-y wó wó-lé wò-y jé jé-lé jè-y jé jé-lé jè-y gó gó-lé gò-y nó nó-lé nò-y

b.	tó: ká:	tó:-lé ká:-lé	tò-y kà-y	'spit' 'shave'
	mă:	mă:-lé	mà-y	'make (bricks)'
	nă:	nă:-lé	nà-y	'spend night'
c.	yέ	yé-lé	yì-Ø	'weep'
d.	ńdέ	ńdέ-lé	'ndì-Ø	'give'
	<i>່ ໃຈຸ່ກຮ໌</i>	?áɲέ−lé	<i>?∂ɲì-∅</i>	'eat (meal)'
	<i>?ઇદ</i>	<i>?ઇક-16</i>	?àIì-∅	'go up'
e.	úbś	úbó-lé	ùb-ù	'pour'
	tábú	tábú-lé	tàb-ù	'touch'
	cémné	cémné-lé	cèmn-ù	'have fun'
	sémbé	sémbé-lé	sèmb-ù	'sweep'
f.	ún	ún-lé	ùn-Ø	'go'
	tóló	tóló-lé	tòl-Ø	'pound (in mortar)'
	dèr ⁿ €	dèr ⁿ έ−lé	dèn-∅	'spend day'
	dìyέ	dìyέ-lé	dìy-∅	'carry on head'
	gàlá	gòló-lé	gòl-Ø	'do farm work'
	<i>băn</i>	băn-lé	bàn-∅	'beat (tomtom)'
	óbí-yó	óbí-yó-lé	óbí-y, óbù	'sit'
	gànú	gànú-lé	gàŋ-ù	'obstruct'
	nìndíyó	nìndíyó-lé	nìndìy-∅	'listen'

In examples like $diy-\emptyset$, the word-final /iy/ is not distinguishable audibly from long *i*:. Likewise for word-final /uw/ versus long *u*:, as in $suw-\emptyset$ 'defecating' from stem $suw\delta$. See Monophthongization §3.6.6.2.

Verbal nouns often incorporate a direct-object nominal. On the syntax of verbal-noun complements, see §17.3.

Agentive compounds end in an agentive form that is identical to the $-y \sim -u$ verbal noun type (§5.1.7).

4.2.3 Deverbal nouns with -n suffix ('dues', 'curse')

I know of the following deverbal nouns with -n suffix.

(96) noun gloss related verb a. $C\hat{v}C\hat{v}$ -n

```
zèbú-n (a) curse' zèbé 'curse (sb)'
gàmú-n 'thunder' gàm-í: '(storm) thunder'

b. CòCì-n
sègì-n 'dues, contribution' ségé 'pay dues'
```

Compare Tebul Ure $z \hat{\epsilon} b \hat{\imath} - n \hat{\epsilon}$ '(a) curse'.

4.2.4 Deverbal nouns with -n suffix ('sunrise', 'sunset', 'satiety')

From noun *ìzùgè* (or *ìzìgè*) 'sun' we get two complementary compounds whose finals consist of a verb stem plus a nominalizing suffix -ŋ.

(97)		compound	gloss	related verb
	a.	ìzìgè-[túmó-ŋ]	'sunrise'	túmó '(sun) rise'
	b.	ìzìgè-[píló-ŋ]	'sunset'	<i>pílé</i> 'fall; (sun) set'

The $-\eta$ may reflect an animate class marker *- (η) go. Compare e.g. Tebul Ure $[\dot{u}\dot{d}\dot{u}-g\dot{o}]$ - $[t\acute{u}mb\acute{u}-\eta g\acute{o}]$ and (with a different 'sun' stem as initial) Jamsay [ni-ni:]- $[t\acute{o}g\acute{u}-g\acute{u}]$ 'sunrise'. For deadjectival nouns with suffix $-\eta$ see §4.2.6 below.

By themselves, *túmó-ŋ* 'east' and *píló-ŋ* 'west' are cardinal direction terms (§8.4.6.3).

 $sir^n \dot{u} - \eta$ 'being full (of food), satiety' is an isolated nominal from verb $sir^n \dot{\varepsilon}$ 'be full (after eating), be sated'.

4.2.5 Apparent derived noun *CvC-i*:

The nouns in (98) are sufficiently similar to each other in form and meaning to constitute a minor pattern $C\hat{v}C-\hat{i}$. The morphological markup is tricky since these stems are associated with $CvCi-y\acute{e}$ verbs including the mediopassive suffix.

```
(98) noun gloss related verb
a. gàm-í: 'thunder' gàmí-yé '(thunder) sound'
b. àr nùŋ-[cèr n-í:] '(flash of) lightning' cé(:)r ní-yé '(lightning) flash' (~àr nùŋ-[cè:r n-ì:)
```

4.2.6 Reduplicated deadjectival nouns of measurable extent (-n)

Adjectives denoting axes of measurement have an all $\{L\}$ -toned reduplicated abstractive nominal. Most of them end in a suffix -y, which is not always audible after I. For some speakers, the -y appears to have fused with a lexical stem-final y as y^n , and in one other case ('length') $-y^n$ now appears to be the suffix. For deverbal nominals with -y, see §4.2.4 above.

```
(99)
                nominal
                                                                            related adjective
                                                          gloss
          a. no suffix
                tù-tùjù
                                                           'weight'
                                                                            tùjù 'heavy'
          b. suffix -n
                zà-zàlè-ŋ
                                 \sim z \dot{a} - z \dot{a} l \dot{a} - y^n
                                                           'length'
                                                                            zàlà 'long'
                bi-bir^ni-\eta
                                                           'size'
                                                                            bin 'big, fat'
                                                                            wày" 'wide'
                                                           'width'
                wà-wày-ŋ
                                 \sim w \dot{a} - w a y^n
                                 \sim t \grave{o} - t \grave{o} y^n
                                                           'depth'
                                                                            tòy<sup>n</sup> 'deep'
                tò-tòy-ŋ
                dè-dèmbùl(-ŋ)
                                                           'thickness'
                                                                            dèmbùl 'thick'
                                                           'stupidity'
                                                                            yàmà 'stupid'
                yàmà-ŋ
```

4.2.7 Instrument nominals

There are no productive formations. dì:zù 'file (tool)' is related to verb dí:zé 'file, smooth with a file'.

4.2.8 Agentive nominal

There is an agentive nominal form, derived from verbs. It appears to occur exclusively as a $\{L\}$ -toned compound final. The initial, also $\{L\}$ -toned, represents a typical object, or a cognate nominal is used.

In such compounds, the final agentive nominal ends in -y if the stem is Cvor Cv:-. Heavier stems have an agentive in -u, which is subject to apocope after
an unclustered sonorant (other than a rhotic or p). The segmental form (but not
tone) of the agentive nominal is the same as that of the verbal noun in -u and -y.

For examples of the compounds see §5.1.5, below.

4.3 Pronouns

4.3.1 Personal pronouns

4.3.1.1 Regular personal pronouns (independent, proclitic, suffixed)

Independent, subject, and object pronominals are given in (100). The independent forms are **high-toned**, and are used in isolated occurrences ('me!'), as topics, and as focalized elements. The accusative forms are preverbal clitic-like elements in transitive clauses. They are based on low-toned forms of the monosyllabic pronominal stems, followed by accusative $-\hat{y}$. The logophoric plural has a more nounlike accusative form since the animate plural suffix -mu is included.

Pronominal subjects are expressed by suffixes in main clauses, but in relative clauses this suffixal slot is not available for this purpose, and a set of proclitics is used instead. These proclitics are also used as inalienable possessors, and before postpositions. Several of the proclitics (those except 2Sg and logophoric) are **low-toned** and therefore differ audibly from the corresponding high-toned independent forms. By contrast, the 2Sg and logophoric categories have high tones in both the independent and the preverbal subject series, so there is no audible distinction. Preverbal subject clitics do not co-occur in the same clause with pronominal-subject suffixes.

(100) Personal Pronouns

	indep.	accusative	proclitic	subject suffix
1Sg	mí	mì-ý	mì	-m
2Sg	ó	ó-ý	ó	-W
1Pl	yé	yè-ý	yè	- <i>y</i>
2Pl	wó	wò-ý	wò	- <i>y</i>
3Sg	ná	nà-ý	nà	-∅
3Pl	bó	bò-ý	bò	[variable]
InanSg [<i>kó</i> esp InanPl	•	<i>kó</i> ourse-definite] for InanSg, or a	(=3Sg) as for 3Pl]	(=3Sg)
LogoSg	á	á-ý	á	=1Sg (§18.2.1.2)
LogoPl	á-(yè-)mù	á-(yè-)mù-y	á	=1Sg

In parsing texts, a difficulty worth mentioning is distinguishing 3Sg $n\acute{a}$ and $n\grave{a}$ from the homophonous locative postpositions ($n\grave{a}$ and variant ${}^{\dagger}n\acute{a}$, see §8.2.3.

The 3Pl category is mainly used for animates, but it can extend to inanimates. The 3Sg category can similarly extend to inanimate singular as an alternative to $k\acute{o}$, and even to inanimate plural. $k\acute{o}$ is usually translatable as 'that' (i.e. discourse-definite), either abstract as in 'that (situation)' or concrete, and can reasonably be considered to be a demonstrative rather than just a pronoun. In the preverbal subject series (used in relative clauses), $\#k\acute{o}$ was not accepted by my assistant (3Sg $n\grave{a}$ is required even for inanimates). $k\acute{o}$ also has different tonal effects on following particles than regular pronouns (§3.8.4.1).

The preverbal subject clitics are identical in form to the prenominal possessor clitics used with inalienable nouns (kin terms); see $\S6.2.3.1$. Alienable nouns have a distinct construction involving a postnominal complex consisting of a pronominal element and a nominal classifier; see $\S6.2.2$. The preverbal subject clitics are also identical to the forms of the pronouns before conjunctive particle $\vec{m} \rightarrow$ 'and' ($\S7.1.2$).

For the use of the inanimate singular forms of the pronominals as part of reflexives, as in 1P1 $k\acute{o}$ - $\gamma\grave{e}$ - η and 3rd person $k\acute{o}$ - \grave{a} - η , see §18.1.

4.3.1.2 'All/together' nonsingular pronouns (*yâ*:, *wâ*:, *â*:,)

This special set of nonsingular pronouns (101) combines a pronominal element, cf. 1Pl $y\acute{e}$, 2Pl $w\acute{o}$, and 3Logophoric/3Reflexive \acute{a} , with another morpheme that contracts with it to form a long $\^{a}$:

```
(101) category 'all/together' pronoun

1Pl  y-â:
2Pl  w-â:
3Logo/3Refl â:
```

Comparing these forms with the corresponding simple independent pronouns (yé, wó, á, respectively), one suspects an original *yé-Cà, *wó-Cà, *á-Cà with some consonant *C.

The sense is 'we/you/they all' and (in the absence of an 'all' quantifier) 'we/you/they together'. The morphologically Logo/3Refl form in (102a) is used generally as a 3Pl form, even in nonlogophoric, nonreflexive contexts. For combinations with 'all' quantifiers, see §6.6.1.2.

(102) category with
$$c\hat{e}m$$
 with $p\acute{u} \rightarrow$

a. 1Pl y - \hat{a} : $c\hat{e}m$ $y\hat{a}$: $p\acute{u} \rightarrow$

2Pl w - \hat{a} : $c\hat{e}m$ $w\hat{a}$: $p\acute{u} \rightarrow$

LogoPl \hat{a} : $c\hat{e}m$ \hat{a} : $p\acute{u} \rightarrow$

b. 3Pl $b\acute{o}$ $c\hat{e}m$ $b\acute{o}$ $p\acute{u} \rightarrow$

Examples are in (103).

- (103) a. (yé) y-â: bò-y (1Pl) 1Pl-all.together be-1PlS 'We are together.'
 - b. (wó) w-â: bò-y
 (2Pl) 2Pl-all.together be-2PlS
 'We are together.'
 - c. èn-ô: â: b-è: children-Def.AnPl 3.all.together be-3PlS 'The children are together.'

4.3.2 Personal pronouns as complements of postpositions

Examples of pronouns with postpositions are in (104). The dative postposition follows a form of the pronoun identical to the preverbal subject pronouns (in relative clauses). There are no irregular dative forms. Complex postpositions like 'behind', of the literal type 'at [X's rear]', are locative PPs with a pronominally possessed noun as complement.

(104)	category	dative	'behind'
	1Sg	mì ^H bér ⁿ á	[tùnù ?ə́mó] nà
	2Sg	ó ^H bér ⁿ á	[tùnù ó-ŋ́] nà
	1Pl	yè ^H bér ⁿ á	[tùnù yé-ŋ́] nà
	2Pl	wò ^H bér ⁿ á	[tùnù wó-ŋ́] nà
	3Sg	nà ^H bér ⁿ á	[tùnù ná-ŋ́] nà
	3Pl	bò ^H bér ⁿ á	[tùnù bó-ŋ́] nà

Inan	kó ^H bér ⁿ á	[tùnù kó] nà
LogoSg	á ^H bér ⁿ á	[tùnù á-ŋ́] nà
LogoPl	á-(yè-)mù bèr ⁿ à	[t ùnù á- $(y$ è-) m ù- η] nà

4.3.3 Pronominal possessors

With **alienably** possessed nouns (anything except kin terms), pronominal possessors follow the possessed noun, or more specifically the N-Adj-Num sequence (NumP). See §6.2.2 for the syntax. The forms used after L-toned nouns are in (105). Many of the forms are clearly bimorphemic. Inanimate possessor is merged with animate (as 3Sg, occasionally 3Pl). Animate singular and inanimate plural possessed NPs require identical possessor forms.

(105) Pronominal possessors (after low-toned alienable nouns)

possessor	AnSg/InanPl	AnPl	InanSg
1Sg	mí-y ⁿ έ	mí-y ⁿ è-mù	?э́то́ [!]
2Sg	ó-y ⁿ έ	ó-mù	о́-ŋ
1Pl 2Pl	y - $\acute{\varepsilon}$: ^{n} w - $\acute{\varepsilon}$: ^{n} $\sim w\acute{o}$ - y ^{n} $\acute{\varepsilon}$	yé-mù wó-ŋ	yé-ŋ
3Sg	$n-\hat{\varepsilon}$: $^{n} \sim n\acute{a}-y^{n}\acute{\varepsilon}$	ná-mù	ná-ŋ
3Pl	$bw-\hat{\varepsilon}$: $^{n} \sim b\acute{o}-y^{n}\acute{\varepsilon}$	bó-mù	bó-ŋ
Inan	[=3Sg throughout]		
3LogoSg	á-y ⁿ è	á-mù	á-ŋ
3LogoPl	á-y ⁿ è	á-mù	á-ŋ

After a possessed noun containing at least one high tone, the pronominal possessors are low-toned: $mi-y^n\hat{\epsilon}$, $y-\hat{\epsilon}$: , etc. These postnominal possessors follow any adjective or numeral that is attached to the possessed noun, see §6.1.1.

The inanimate plural and the animate forms are homophonous. In these series, the 1Sg, 2Sg, and logophoric forms show a clearly segmentable classifier morpheme $-y^n\hat{\epsilon}$, but the remaining forms seem to be contractions, e.g. 3Pl $bw-\hat{\epsilon}$: n perhaps < *bó-ynè. In the inanimate singular paradigm, the 1Sg is

irregular (suppletive), while the remaining combinations end in a morpheme $-\eta$ that might be compared to the beneficiary suffix $-\eta$ (§8.3.1).

With **inalienably** possessed nouns (chiefly kin terms, see §6.2.3), the pronominal possessor precedes the possessed noun. The pronominal possessor form is not bimorphemic as with postnominal possessors. Instead, the same forms as for preverbal subject pronominals are used: H-toned for 2Sg and logophoric, L-toned for the others.

(106) Pronominal possessors before inalienable kin terms

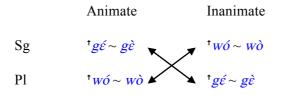
category	form	tone
1Sg	mì	L
2Sg	ó	H
1Pl	yè	L
2Pl	wò	L
3Sg	nà	L
3Pl	bò	L
3LogoSg/Pl	á	Н

4.4 Demonstratives and definites

4.4.1 Definite particles ($g\varepsilon$, wo)

The definite morphemes distinguish animacy and grammatical number. The same morphemes recur in animate and inanimate paradigms, but with the opposite grammatical number value (107).

(107) Definite morphemes



Definite morphemes do not induce tone-dropping on the preceding noun (or its expansion). If the preceding noun contains a high tone, the definite morpheme is

low-toned; if the preceding noun is entirely {L} toned, the definite morpheme is high-toned. Therefore the animate singular has low-toned $g\hat{e}$ in /2.a), but high-toned ${}^{\dagger}g\hat{e}$ in (108b-c). The animate plural has low-toned $w\hat{o}$ in (108a), and also in (108b) following a high-toned plural $-m\hat{u}$, but high-toned ${}^{\dagger}w\hat{o}$ in (108c).

(108)		Sg	Pl	gloss
	a.	?śné gè lòzú gè ámná gè zèmé gè	?śné-mù wò lòzú-mù wò ámná-mù wò zèmé-mù wò	'goat' 'bush duiker' 'aardvark' 'blacksmith'
	b.	pὲ: ⁺gέ	pè:-mú wò	'sheep'
	c.	gùnò †gé nà: †gé	gùnò-mù †wó nà:-mù †wó	'slave' 'cow'

The high-frequency human nouns (other than \acute{an} 'man', which is already high-toned) shift their final or only tone to high (i.e. $C\acute{v}$ or $C\grave{v}C\acute{v}$) in the singular before $g\grave{e}$ (109a-b). Plural wo takes tones as described above following the corresponding plurals.

(109)		Sg	Pl	gloss
	a.	nó gè yé gè	nò-mó wò yὲ-mù ⁺wó	'person' 'woman'
	b.	èné gè	èné wò	'child'

4.4.2 Demonstrative pronouns

4.4.2.1 'This/that' (deictic demonstrative pronouns)

The deictic categories are **Proximal** (prototypically associated with the space around the speaker), **Near-Distant** (prototypically associated with the addressee), and **Far-Distant**.

Near-Distant forms can also be used for **discourse deixis**, i.e. immediate discourse definiteness, e.g. 'that (same) X (that we were just talking about)'.

Far Distant forms like *màngó* can also be used in an **obviative** function, i.e. in the sense 'that other one', distinguishing one of two equally distant objects ("Should I bring this one?" "No, that other one.")

The demonstrative pronouns in (110) are used with inanimate reference, either absolutely ('give me that!') or as postnominal modifiers. In the latter case, they force tone-dropping on the modified noun.

(110) Inanimate demonstrative pronouns

singular	plural	gloss	label and abbreviation
ŋ̀gó kó màŋgó	ĕ: yĕ: màyέ	'this' 'that' (with you)' 'that (distant)'	Proximate (Prox) Near Distant (NearDist) Far Distant (FDist)

Segmentation is somewhat obscure. Inanimate singular $k\phi \sim g\phi$ can be identified in the singulars, inanimate plural $(y)\dot{\varepsilon}(:)$ in the plurals. $m\dot{a}$ - is identifiable as a Far Distant morpheme.

For human or other animate reference, the forms in (111) are used. The plural demonstrative pronoun, when used as a modifier, follows the singular (not plural) noun: $n\grave{a}$: \grave{a} : \grave{a} : \grave{m} : \hat{m}

(111) Animate demonstrative pronouns

singular	plural	gloss
òŋgέ nà †gέ	òmíy ⁿ ὲ(-mù) bô:, bógò-mù	'this' 'that' (with you)'
màŋgé	màmíy ⁿ è(-mù)	'that (distant)'

Segmentation is again somewhat difficult. We can recognize animate singular ${}^{\dagger}g\dot{\varepsilon}$ (from $g\dot{\varepsilon}$). In the plurals, two of the forms appear to contain animate plural $-y^n\dot{\varepsilon}$ (<*y\varepsilon) but the Near Distant form $b\hat{o}$: is related to (animate) 3Pl pronoun $b\acute{o}$.

Ordinarily, demonstratives retain their lexical tones but control $\{L\}$ on preceding words in the NP (excluding possessors). However, when they follow postnominal pronominal possessors, demonstratives drops their own tones to $\{L\}$ and control no tone contours on the preceding string. See $\S6.5.2$ for more on the syntax and tonosyntax.

4.4.2.2 Preposed discourse-definite marker 'that (same)' absent

Some Dogon languages have a prenominal discourse-definite marker, in the form of a perhaps frozen inanimate singular "possessor" pronoun (e.g. Jamsay

 $k\grave{\partial}$). This is not observed in Yanda Dom, which instead uses postnominal Near-Distant demonstratives for (immediate) discourse deixis; see §4.4.2.1 just above.

4.4.2.3 Anaphoric/logophoric demonstrative pronouns absent

No demonstrative pronouns related to anaphoric pronouns (reflexive, logophoric) have been observed.

4.4.3 Demonstrative adverbs

4.4.3.1 Locative adverbs

The basic deictic adverbs of spatial position are those in (112). Several are related in form and meaning to inanimate demonstrative pronouns. Like other spatial expressions they can occur in stative locative ('here'), pergressive ('this way'), allative ('hither'), and ablative ('hence') contexts, with directionality supplied by verbs.

```
(112) a. \eta gi \sim \eta ji
                                  'here', cf. (788), (856)
             kóy
                                  'just over here, just over this way' (not far from
                                  speaker, pinpointed), cf. (774), (778), (788),
                                  (806), (850)
             mbà
                                  'around over here' (approximate), cf. (791)
        b. mànjí ~ màgí
                                  'over there' (e.g. where the listener is)
             màmbá
                                  'there' (farther away)
                                  'there (discourse-definite)', cf. (836), (850)
        c. yá
                                  'there (discourse-definite)', cf. (697), (753a),
            yăy
                                  (807)
                                  'there (discourse-definite)', cf. (671b), (759),
             kú-bà
                                  (777)
```

Discourse-definite 'there' can also be expressed compositionally as $\partial m \partial^L k \delta$ 'that (same) place'.

These adverbs can also directly modify a preceding noun, in which case they function like adverbially case-marked forms of corresponding demonstratives (§4.4.2.1). In modifying function, the adverbs (like the demonstratives and like modifying adjectives) control tone-dropping on the

noun. See, for example, $g \grave{o} m \grave{u}^L k \acute{o} y$ '(in) the courtyard over there' in (808) in Text 2. Some of the adverbs likely originated as case-marked demonstratives, though the morphology is now rather obscure: compare the apparent endings -y and -ba with accusative - \grave{y} (§6.7) and locative $b\grave{a}$ (§8.2.3).

4.4.3.2 Emphatic and approximinative modifiers of adverbs

The expressive adverbial $t \in \rightarrow$ or its iterated form $t \in -t \in$ 'precisely, exactly' can be combined with any locative adverb: $\hat{\eta}g\hat{t}$ $\hat{t} \in -t \in$ 'right here'.

For vaguely defined deixis, an inanimate plural demonstrative of the appropriate spatial category can be followed by locative postposition $n\hat{a}$. Thus $\hat{\epsilon}$: $n\hat{a}$ '(somewhere) around here', $y\hat{\epsilon}$: $n\hat{a}$ '(somewhere) around there (e.g. near the listener)', $m\hat{a}y\hat{\epsilon}$ $n\hat{a}$ '(somewhere) around there (distant)'. With place names and other place descriptions, $b\hat{a}$ replaces $n\hat{a}$, as in $b\hat{a}m\hat{a}k\hat{o}$ $b\hat{a}$ '(somewhere) around Bamako'. For $b\hat{a}$ (displaced) and $n\hat{a}$ as locative postpositions, see §8.2.3.

4.4.4 Presentatives ('here's...!') (ăn-nà- ~ ɔ̃m-nò- ~ ɔ̃m-nà-, măn-nà-)

There is a distinction between Proximate (which can extend to near-distant) and Far-Distant presentatives with $-n\hat{a}$. This element, which may appear as $-n\hat{o}$ - by assimilation, is preceded by an element resembling the Proximate or Far-Distant demonstrative, see §4.4.2.1 above. However, there is no animacy split. The $-n\hat{a}$ - morpheme may be historically related to the locative postposition $n\hat{a}$, but presentatives (unlike locative PPs) can be conjugated for pronominal subject.

Proximate $\check{a}n-n\grave{a}$ - (preferred by younger speakers) or $\check{s}m-n\grave{o}$ - $\sim \check{s}n-n\grave{a}$ (older speakers) corresponds to French *voici* X (and sometimes to *voilà* X), and to English *here is/are* X.

- (113) a. *ínjú* **\dotsn-n\hat{a}-\tilde{\Omega}\$ water Prox-Presentat-3SgS 'Here's (the) water!'
 - b. săydù 5n-nà-∅ S Prox-Presentat-3SgS 'Here's Seydou!'
 - c. *ŏn-nà-m*Prox-Presentat-1SgS
 'Here I am!'

For objects outside the scope of 'here', we get Nonproximate Presentative $m \check{a} n - n \check{a}$, corresponding to French *voilà* X and English *there is/are* X.

The pronominal-subject paradigms are in (114). The first person forms are not used with the Nonproximate.

(114)	category	'here's'	
		Proximate	Nonproximate
	1Sg	ăn-nà-m	—
	2Sg	ăn-nà-w	măn-nà-w
	1Pl	ăn-nà-y	—
	2Pl	ăn-nà-y	măn-nà-y
	3Sg	ăn-nà-∅	măn-nà-∅
	3Pl	ăn-nà-yὲ	măn-nà-yê

The initial rising tone in $\check{a}n-n\grave{a}-$ and variants is heard in isolation pronunciations, but the tones may be dropped in the presence of a preceding constituent.

An informant rejected combinations of these presentatives with other verbs, in the fashion of French *le voilà qui arrive*.

Realis-existential proclitic $y\hat{a}$ can have presentative force when combined with an imperfective verb, see (457) in §11.2.2.1. Clause-final $g\hat{a}$ seems to be presentative in (791) in Text 1.

4.5 Adjectives

The sections below consider NP-internal modifying adjectives. For adjectival predicates ('X is red', etc.) see §11.4. Most adjectives also have related inchoative and factitive verbs (§9.5).

4.5.1 Types of adjectives

Adjectives are used as modifiers of nouns within NPs, and have various predicative forms (usually including an inchoative and a factitive verb). Within a NP, the order is noun-adjective, and additional adjectives may be added. Only the final word in the noun-adjective sequence (core NP) retains its tones; nonfinal words are tone-dropped (§6.1.6, §6.3.3.1).

The morphology of modifying adjectives is simple and is generally consistent with nominal morphology. As with nouns, there is no suffix for animate singular or for (singular or plural) inanimate categories. For animate plural NPs, the plural suffix -mu is added only to the final adjective: $n\hat{a}$: L $\hat{b}\hat{a}$ L \hat{b} \hat{a} \hat{b} \hat{a} \hat{b} \hat{a} \hat{b} \hat{b} \hat{a} \hat{b} \hat{b}

For all adjectives tested, animate plural $-m\dot{u}$ is L-toned. This is worth mentioning only in the case of $\{L\}$ -toned adjectives. Recall that a minority of $\{L\}$ -toned noun stems have H-toned animate plural $-m\dot{u}$. There are no such adjectival examples.

A generous sample of adjectives is presented in (115). The divisions are by tone contour, and within each group by vocalism and syllable shape. Many of the adjectives are used exclusively or primarily with inanimate referents and are not readily elicited with the (animate) plural suffix. I therefore include a column with the readily elicitable definite $g\varepsilon$, which is animate singular or inanimate plural depending on the animacy of the noun.

(115) Modifying Adjectives

AnSg/Inan	with ge	AnP1	gloss

a. {L} tone with high-toned definite

CvC(u)			
èn	èn ⁺g€	_	'thin (wall)'
àm	àm ⁺g€	àm-mù	'in good condition
			(animal)'
<i>tòy</i> ⁿ	tòy ^{n †} g€	_	'deep (hole, well)'
pèy	pèy †g€	pèy-mù	'old, elderly'
mày ⁿ	mày ^{n †} g€́	_	'dry'
wày ⁿ	wày ^{n †} gέ	_	'spacious, wide (space)';
			'wide (passage)'
<i>èmù</i>	èmù gè	_	'cramped (space)'; 'narrow
			(passage)'; 'thin (wall)'
tèl, tèlù	tèl †gέ	tèl-mù	'fast, speedy (person,
			animal)'
òl, òlù	òl ⁺gέ	_	'wet'; 'fresh (vegetation)'
gàl, gàlù	gàl †gé	_	'bitter (taste)'
mònù	m∂nù †g€	mɔ̀ɲù-mù	'ugly'
kònù	k∂nù †g€	_	'curved'
dònù	dònù ⁺g€	_	'blunt (blade)'
dènù	dènù ⁺g€	dènù-mù	'short (rope, person)'
tùjù	tùjù ⁺g€	tùjù-mù	'heavy'

```
kùdù
                  kùdù ⁺g€
                                  kùdù-mù
                                                   'undiluted'
  CvCCu
    kùnzù
                  kùnzù †g€
                                                   'coarse, rough'
    mènzù
                  mènzù †gé
                                  mènzù-mù
                                                   'slender (person, stick)'
  Cv:C(u)
                  dà:l ⁺gέ
                                  dà:1-mù
    dà:1
                                                   'nasty'
                                                   'cool, cold'; 'slow
    kè:zù
                  kè:zù ⁺g€
                                  kè:zù-mù
                                                  (vehicle, person)'
  ?әСε
                                                   'curdled (milk)'; 'cooked
    ?àlè
                  ?èlè ⁺gé
                                                  (meat)'; 'ripe (grain etc.)'
  CiC\varepsilon
    ìzὲ
                  ìzè ⁺g€
                                                  'empty (container), empty-
                                                  handed'
  CvCv, CvCCv, and Cv:Cv, two identical non-high vowels
    sèrè
                  sèrè ⁺g€
                                                   'diluted (e.g. milk)'
                                                   'bad, nasty'
    gàmà
                  gàmà ⁺g€
                                  gòmò-mù
                                                   'fresh (milk)'; 'raw
    kòlò
                  kòlò ⁺g€
                                                  (meat)'; 'unripe'
    zàlà
                  zàlà †g€
                                                  'long (rope)'
                                                   'new'
                  kàndà ⁺g€
    kàndà
                                  kàndà-mù
    nà:r<sup>n</sup>à
                  nà:r<sup>n</sup>à †g€
                                                   'easy (work)'; 'cheap'
  CvCvCv with three identical non-high vowels
    àzàlà
                  àzàlà ⁺g€
                                                   'half-ripe (mango)'
  other
    ? \partial v^n \partial v^n
                  ? \partial y^n \partial y^n \uparrow g \varepsilon
                                                  'tight'; 'hard (e.g. stone)'
    dèmbùl
                  dèmbùl ⁺gέ
                                                  'thick, massive (wall)'
b. {LH} tone
    [note: the final H-tone may shift onto the definite: bin^{\dagger}g\dot{\varepsilon} etc.]
  Cv:
    bă:
                  bă: gè
                                                  'full (container)'
    s\check{\imath}:
                  si:^n g\grave{\varepsilon}
                                                   'sharp (blade)'
  CvC(u)
                  băn gè
                                  băn-mù
                                                  'red (brown, orange)';
    băn
                                                   'ripe (mango)'
    bĭn
                  bĭn gè
                                                   'fat, stocky (tree, mango,
                                  bĭn-mù
                                                  person)'
    dăn
                  dăn gè
                                                   'sour (milk, lemon)'
                  g<u>ě</u>m gè
                                                  'rotten (mango, meat)'
    gžm
                                                  'difficult'; 'expensive'
    năm
                  năm gè
    ěl, èlú
                  ěl gè
                                  ěl-mù
                                                  'sweet; good-tasting';
```

```
[L-toned variants èl etc.]
                                                'funny (person)'
    òjú
                                                'hot'; 'fast (vehicle)'
                 àjú gè
    bèdú
                 bèdú gè
                                                'near'
                                                'far, distant'
    wàjú
                 wàjú gè
    gàbú
                                                'tall'
                 gàbú gè
                                gàbú-mù
                                                'soft'
    yòdú
                 yòdú gè
  CvCvC
                 pèlěl gè
                                                'tasty (fried food)'
    pèlěl
  CvCvCC(u)
    àr<sup>n</sup>àndú
                 òr<sup>n</sup>òndú gè
                                òr<sup>n</sup>òndú-mù
                                                'smooth, sleek'
 CiC\varepsilon \sim CeC\varepsilon
                                                'black (dark)'
    jìmέ
                 jìmé gè
                                jìmé-mù
    ∼ jèmé
                 ~ jèmé gè
                                ~ jèmé-mù
  CvCa
                 dìyá gè
                                dìyá-mù
                                                'big'
    dìyá
                 dàgá gè
                                dàgá-mù
                                                'small'
    dàgá
c. {LHL} tone
  CèCéCè
    bè-bélè
                 bè-bélè gè
                                bè-bélè-mù
                                                'small'
                 dènélè gè
                                                'round, circular'
    dènélè
d. {H} tone
  CvCv with two identical non-high vowels
    kómó
                                kómó-mù
                                                'lean, not plump'
                 kómó gè
    sálá
                 sálá gè
                                sálá-mù
                                               'bad'
  CvCvC with two identical non-high vowels
    nánáy<sup>n</sup>
                 nánáy<sup>n</sup> gè
                                nánáy<sup>n</sup>-mù
                                                'important'
  CvCvCv with three identical non-high vowels
    sátárá
                 sátárá gè
                                sátárá-mù
                                                'young, able-bodied'
    sémélé
                 sémélé gè
                                sémélé-mù
                                                'worn-out'
  CiC\varepsilon
                                pílέ-mù
                                                'white (light, bright)'
    pílέ
                 pílé gè
                                                'good'
    síyέ
                 síyé gè
                                síyé-mù
e. {HL} tone
  CvC(u)
    únù
                 únù gè
                                                'dense'
 other
    kóndà
                 kóndà gè
                                kóndà-mù
                                                'crooked'
```

The tone-contour possibilities are similar to those for nouns. Segmentally, note the frequency of CvCu and of CvC with final sonorant (sometimes alternating with CvCu), along with a few heavier u-final stems. Other recurrent patterns include CvCv(Cv) with a repeated non-high vowel, and $CiC\varepsilon$.

4.6 Relative form of verbs

The form of verbs used in relative clauses has limited substantival (nominal or adjectival) morphology, though it is substantival in the sense that it can be followed by determiners and quantifiers. In the imperfective positive, there is some marking of animacy/number in the verb itself, so it has a semi-participial nature. For more on the forms, see §14.1.7.

4.7 Numerals

4.7.1 Cardinal numerals

```
4.7.1.1 'One' = 'same (one)' (t \hat{u} m \hat{a} \rightarrow) and 'other' (w \hat{a} n \hat{a})
```

The numeral '1', $t \tilde{u} m \tilde{a} \rightarrow$, is a modifying adjective and therefore requires a tone-dropped noun: $\tilde{a}n$ 'man' (high-toned), $\tilde{a}n$ $t \tilde{u} m \tilde{a} \rightarrow$ 'one man'.

This numeral is also used to indicate sameness, as in the common phrase in (116) that specifies full siblinghood.

```
(116) [yé nù] [[dè: tùm\acute{a}\rightarrow ] [nì: tùm\acute{a}\rightarrow ] [1Pl two] [[father one] [mother one]] 'The two of us are (of) one father (and) one mother.'
```

Likewise $[y \acute{e} n \grave{u}] [d\grave{a} m \grave{a}^L t \grave{u} m \acute{a} \rightarrow]$ 'the two of us are (of) one (=the same) village'.

 $t um \acute{a} \rightarrow can$ also be used to introduce a temporal setting in combination with a noun like 'day' or 'year' (117).

```
(117) [izen^L tùma\rightarrow J wo-m-ù [day^L one] come-Impf-3SgS 'One (=some) day he/she will come (back).'
```

However, *tùmá*→ is not regularly used to introduce a discourse referent, in the fashion of European indefinite articles, so it is absent in (118a-b).

- (118) a. [zònjù^L síyé] zùwá-m-ùw má [healer^L good] know-Impf-2SgS Q 'Do you-Sg know a good healer?'
 - b. [[ôy^L ná] yè bó-ḿ] púlá ^Lwè-Ø [[field^L Loc] 1PIS be-Impf] Fulbe ^Lcome.Perf-3SgS 'When we were in the fields, a Fulbe person came.'

The modifying adjective wànà 'other' is used to specify distinctness of reference (or kind): dàmá 'village', dàmà 'wànà 'another (=a different) village'. wànà can also be used as a kind of obviative adverb in the sense 'meanwhile' or 'over at the other place', i.e. to indicate a shift from the currently focal situation to a secondary situation that has been previously mentioned. See (838) and (839) in Text 4. For adverb wànà in a negated clause in the sense '(not) again' or '(no) longer', see (753b) in §19.3.1.

4.7.1.2 '2' to '10'

The numerals from '2' to '10' in are shown in (119). The forms used in counting from 2 to 10 are in the central column in (119). The same forms are used with inanimate reference (as when quantifying over villages or pots). These forms begin with a classifier $y\hat{e}$, followed by a numeral stem beginning with a high tone (the tone contours are {H} or {HL} depending on the numeral). The corresponding numerals with animate reference begin with a classifier \acute{a} - or $\acute{b}\acute{o}$ - followed by a low-toned version of the numeral. These animate classifiers have a suspicious resemblance to logophoric pronoun \acute{a} and to 3Pl pronoun $\acute{b}\acute{o}$, respectively.

(119)	gloss	inanimate/counting	animate	unprefixed
	' 2'	yè-nó:	á-nó:, bó-nó:	nớ:
	or:	yè-nó:	á-nó:, bó-nó:	nó:
		[for -nù with a prono	minal see (226) in §7.1	1.2]
	'3'	yè-tá:ndù	á-tá:ndù, bó-tá:ndù	tá:ndù
	'4'	yè-cézó	á-cézó, bó-cézó	cézó
	' 5'	yè-nûm	á-nûm, bó-nûm	nûm
	'6'	yè-kúlé	á-kúlé, bó-kúlé	kúlé
	'7'	yè-sɔ̞έ:	á-szé:, bó-szé:	są́é:
	'8'	yè-sá:gè	á-sá:gè, bó-sá:gè	sá:gè
	' 9'	yè-tọâ:	á-tọà:, bó-tọà:	tọâ:

'10' yè-píyél á-píyél, bó-píyél píyél

After the H-toned prefixes \acute{a} - and $\acute{b}\acute{o}$ -, the initial H-tone of the numeral may be phonetically downstepped, but it does not become L-toned. The downstep is most conspicuous with monosyllabic numeral stems, as in \acute{a} - $n\acute{o}$: '2', phonetic $[\acute{a}$ ¹ $n\acute{o}$:]. I do not mark the downstep in ordinary transcriptions.

While several of the numerals ('2-3', '5-7', '10') belong to pan-Dogon cognate sets, those for '4', '8', and '9' have cognates in Najamba-Kindige but not in other northern Dogon languages.

 $n\delta$: ~ $n\delta$: '2' has an irregular allomorph $-n\dot{u}$ in pronominal combinations such as $y\dot{e}-n\dot{u}$ 'we 2', see (226) in §7.1.2, and in $p\dot{o}$:- $n\dot{u}$ - $n\dot{o}$ 'twentieth' from cardinal $p\dot{o}$:- $n\dot{o}$: '20' (§4.7.2.2). It also has a strange augmented form in the ordinal $n\dot{o}z\dot{u}$ - $n\dot{o}$ 'second' (§4.7.2.2). Its n changes to l in $l\dot{o}$:- $s\hat{i}$: '(and) two' (added to a decimal term, §4.7.1.3), cf. cognates such as Jamsay $l \not{e} y$ '2'.

In full NPs with a noun and a numeral, an inanimate noun takes its regular unaffixed form including its lexical tone, and is followed by the numeral including its classifier $y\hat{e}$.

(120) Numerals with inanimate nouns

gloss	X	'three X's'
'village'	dàmá	dàmá yè-tá:ndù
'stone'	cìn	cìn yè-tá:ndù
'granary'	gọà:	gọà: yè-tá:ndù
'stick'	tánà	tánà yè-tá:ndù

Animate nouns take their regular plural, which for the great majority of such nouns is by suffixation of -mu. The animate classifying prefix on the numeral is then redundant, and is optionally omitted. The full forms are shown in (121), but e.g. nà:-mù tá:ndù 'three cows' with unprefixed numeral is also possible.

(121) Numerals with regular animate nouns

gloss	X (plural)	'three X's'
'cow' 'sheep' 'Fulbe'	nà:-mù pè:-mú púlá-mù	nà:-mù á-tá:ndù ~ nà:-mù bó-tá:ndù pè:-mú á-tá:ndù ~ pè:-mú bó-tá:ndù púlá-mù á-tá:ndù ~ púlá-mù bó-tá:ndù

For the most common human nouns, the combinations in (122) were preferred. For 'man' and 'woman', the classifier \acute{a} - or $\acute{b}\acute{o}$ - is acceptable, but the preferred

construction is that without a classifier. For 'person', classifier-like prefix $n\hat{o}$ - is not based directly on (irregular) plural $n\hat{o}$ - $m\hat{o}$ as expected, rather on singular $n\hat{o}$ 'person'.

(122) Numerals with high-frequency human nouns

	gloss	X (plural)	'three X's'
a.	'man' 'woman'	án-mù yè-mù	án-mù tá:ndù yè-mù tá:ndù
b.	'person' 'child'	nò-mó èné	nò-tá:ndù èné nò-tá:ndù

Animate plural $-m\dot{u}$ on the noun is repeated on the numeral when it is followed by a determiner; see §6.4.

With plural personal pronouns, a numeral may be added directly, or the classifier $n\hat{o}$ - may be used. For example, 'you three' = 'the three of you' can be expressed as $w\acute{o}$ $t\acute{a}$: $nd\grave{u}$, or with the classifier as $w\acute{o}$ $n\grave{o}$ - $t\acute{a}$: $nd\grave{u}$.

4.7.1.3 Decimal multiples ('10', '20', ...) and combinations ('11', '59', ...)

The multiples of '10' are given in (123). From '20' to '70' they consist of a low-toned initial element vaguely similar to *-píyél* '10', followed by the relevant single-digit numeral, with initial high tone. '80' hss an alternative monomorphemic form *sìŋ*, the famous "Dogon hundred," alongside the regular derivative. Likewise, for '90', there is an alternative form literally meaning "80 and 10."

```
(123) gloss
                       form
        <sup>'20'</sup>
                       pà:-nó: ~ pà:-nó:
         '30'
                       pò-tá:ndù
         '40'
                       ρὸΙὸ-cέzό
        '50'
                       pòlò-nûm
         '60'
                       pòlò-kúlé
        '70'
                       pòlò-sọé:
        '80'
                       pòlò-sá:gè, sìŋ
         '90'
                       pòlò-toâ:, sìn mí→ yè-píyél
```

Like other cardinal numerals, these decimal terms follow the nouns they quantify over. Animate plural suffix -mu is present with animate nouns. The numeral undergoes tone changes after low-toned nouns: nà:-mù pó:-nò: '20 cows', compare án-mù pò:-nó: '20 men'.

Composite numerals of the type '11-19', '21-29', etc., consist of the decimal numeral as given above (with no further tonal change), the single-digit numeral in **low-toned form**, and a **final element** -sî:. Prefixal classifiers are absent. There are a few segmental irregularities in the single-digit element, especially with '2' and '3'. The final vowel of '1' is not prolonged. In allegro speech we find low-level vocalic harmonization before -sî: with '4' and'6'. There is also an archaic form of '1' with vocalism leveled. The combinations of the single-digit numeral and the final -sî: are shown in (124).

```
(124)
        gloss
                  simple forms
                                         with -sî:
         '1'
                  tùmá→
                                         tùmà-sî: (archaic tòmò-sî:)
         '2'
                  -nó: ∼ -nó:
                                         lò:-sî:
         '3'
                  -tá:ndù
                                         tà:n-sî:
         '4'
                  -cézò
                                         cèzè-sî:
         '5'
                  -nûm
                                         nùm-sî: (see below for '15')
         '6'
                                         kùlò-sî:
                  -kúlé
         '7'
                  -s⊋ê:
                                         səè:-sî:
         '8'
                  -sá:gé
                                         sà:gè-sî:
         '9'
                                         toà:-sî:
                  -tɔâ:
```

An example is $p \hat{\partial}:-n \hat{o}: t \hat{\partial} \hat{a}:-s \hat{i}: '29'$. There is no classifier before $t \hat{\partial} \hat{a}:- '9'$. The preceding noun, if present, has the same form as it has before a simple decimal numeral: $n \hat{a}:-m \hat{u}:p \hat{\partial}:-n \hat{o}: t \hat{\partial} \hat{a}:-s \hat{i}: '29 \text{ cows'}$.

For the specific combination '15', the expected *píyél nùm-sî*: is normally contracted to *píyé-m-sî*:.

4.7.1.4 Higher-order numerals ('100', '1000', ...) and their composites

The stems in (125) express higher-order numerals.

```
(125) gloss forma. 'hundred' témèdèrè (<Fulfulde)</li>b. 'thousand' mùzò
```

```
c. 'million' mily \partial^n (<French)
```

'Million' is rarely used except in connection with currency, on which see the following section.

These higher-order can be followed by a single-digit or other numeral to generate e.g. '200' and '2000'. 'Hundred' and 'million' are treated like inanimate nouns (regardless of the animacy of the referent). Observe the inanimate classifier $y\dot{e}$ - in $t\dot{e}m\dot{e}d\dot{e}r\dot{e}$ $y\dot{e}$ - $n\dot{o}$: '200' and $mily\dot{o}$:" $y\dot{e}$ - $n\dot{o}$: '2 million'. 'Thousand' does not use a classifier: $m\dot{u}z\dot{o}$ $n\dot{o}$: '2000'.

If an animate noun is present, it has its usual plural form: nà:-mù témèdèrè '100 cows'.

Any of these higher numerals may be followed by a smaller numeral to produce combinations like '325' and '3,215'. The conjunction $\overrightarrow{m} \rightarrow$ 'and' often separates the higher numeral from the lower numeral. In some cases the conjunction is redundant, as in (126a), where '25' could not possibly be misparsed as quantifying over '300'. In these cases the conjunction is optionally omitted. By contrast, if the conjunction in (126b) were omitted, the numeral would be misparsed as '300', so in this case the speaker will normally take pains to pronounce the conjunction.

```
(126) a. nà:-mù [témèdèrè yè-tá:ndù (mì→)] [pɔ:-nó: nùm-sî:]
cow-AnPl [hundred Inan-three (and)] [ten-two five-plus]
'325 cows'
```

```
b. nà:-mù [témèdèrè mì→] [bó-tá:ndù]
cow-AnPl [hundred and] [An-three]
'103 cows'
```

In combinations like those in (126), i.e. involving numerals of two or more different **orders** (1-99, hundreds, thousands, millions), the noun is optionally repeated at the beginning of each segment. For example, a second occurrence $n\grave{a}:-m\grave{u}$ 'cows' could be added before '25' in (126a) and before '3' in (126b). In any event, the lowest-order segment (1-99) shows animacy agreement with the noun, where morphologically possible. Therefore '103 cows' (126b) has Animae $b\acute{o}$ - in the final numeral '3', agreeing with 'cows'.

4.7.1.5 Currency

In all Malian languages, the basic currency unit (the 'riyal') is equivalent to 5 CFA francs. The word for 'riyal' in Yanda Dom is $b\dot{u}:d\dot{u}$, as in Fulfulde and other languages of the region. Therefore '100 CFA' is expressed as '20 riyals'

($b\dot{u}:d\dot{u}$ $p\dot{\partial}:-n\dot{o}:$), or just as '20' ($p\dot{\partial}:-n\dot{o}:$) if the discourse context involves money. This applies up to '1 million CFA', where the French expression $mily\dot{\partial}^n$ takes over.

4.7.1.6 Distributive numerals

Distributive numerals are reduplications of simple cardinal numerals. Distributives are often adverbial in nature, but they may alternatively quantify over a noun.

For $t \tilde{u} m \tilde{a} \rightarrow$ '1', the distributive $t \tilde{u} m \tilde{a} y - t \tilde{u} m \tilde{a} y$ or its shortened form $t \tilde{u} - t \tilde{u} m \tilde{a} y$ can mean 'one by one, singly', 'one each', or more generally it may indicate a scattered rather than dense distribution (hence pragmatically 'infrequent, rare, occasional, here and there').

For other numerals '2' to '10', the relevant classifier (animate, inanimate) is present on the first occurrence of the numeral. Inanimate $y\hat{e}$ - requires the lexical {H} or {HL} tone on the immediately following numeral, while animate \acute{a} - and $\acute{b}\acute{o}$ - require a low-toned numeral. The second occurrence of the numeral is low-toned in either event.

(127) gloss inanimate/counting anim	mate
'2' yè-nó:-nó: á-/b	oó-nó:-nó:
'3' yè-tá:ndù-tá:ndù á-/b	oó-tá:ndù-tá:ndù
'4' <u>yè-cézó-cézó</u> á-/b	ó-cézó-cézó
'5' yè-nûm-nûm á-/b	oó-nûm-nûm
'6' yè-kúlé-kúlé á-/b	ó-kúlé-kúlé
'7' yè-s₂é:-s₂é: á-/b	oó-szé:-szé:
'8' <u>yè-sá:gè-sá:gè</u> á-/b	ó-sá:gè-sá:gè
'9' <u>yè-tɔâ:-tɔâ:</u> á-/b	oó-t <u>ə</u> â:-t <u>ə</u> â:
'10' yè-píyél-píyél á-/b	oó-píyél-píyél

An example with a noun is (128). Note that 'cows' takes the same form (with low-toned animate plural $-m\ddot{u}$) as before other cardinal numerals.

```
(128) nà:-mù á-nó:-nó: Lw-ò cow-AnPl An-two-two Lcome.Perf-3PlS 'The cows came two by two.'
```

With plural pronouns, the classifier is optionally omitted. In this case the two occurrences of the numeral show lexical tones. For example, 'we two by two'

(= 'two of us at a time') is yé tá:ndù-tá:ndù, or with the classifier as yé nò-tá:ndù-tá:ndù

Especially after L-toned prefix yè- or without a prefix, the first occurrence of the numeral may have a higher pitch than the second (for distributives from '2' up). However, I do not mark this in transcriptions. After a H-toned prefix, the first occurrence is itself phonetically downstepped, as noted earlier, and in this case there is no noticeable pitch difference between the first and second occurrences.

4.7.2 Ordinal adjectives

See also $\frac{\partial n}{\partial x} - \frac{\partial n$

4.7.2.1 'First' (cèw) and 'last' (idà)

The modifying adjective 'first' is cèw, with animate plural cèw-mù. The context is usually definite so these forms are followed by a definite morpheme, as in $n\grave{a}$: $\stackrel{L}{c\grave{\epsilon}w}$ $\stackrel{\dagger}{g\acute{\epsilon}}$ 'the first cow' and $n\grave{a}$: $\stackrel{L}{c\grave{\epsilon}w}$ - $m\grave{u}$ $\stackrel{\dagger}{w}\acute{o}$ 'the first cows'. 'Last, final' is $\grave{i}d\grave{a}$. Examples: $n\grave{a}$: $\stackrel{L}{i}\grave{d}\grave{a}$ $\stackrel{\dagger}{g\acute{\epsilon}}$ 'the last cow' and $n\grave{a}$: $\stackrel{L}{i}\grave{d}\grave{a}$ - $m\grave{u}$

†wó 'the last cows'.

Other ordinals (suffix $-n\dot{o} \sim -n\dot{\epsilon}$) 4.7.2.2

Other ordinals are formed by adding $-n\hat{o} \sim -n\hat{\epsilon}$ to the numeral, whose tones are dropped. The stem for '2' takes an irregular form nòzù- before -nò, and a similar irregularity occurs in '20'.

The choice between $-n\dot{o}$ and $-n\dot{\varepsilon}$ is interesting. It can be viewed either in terms of a cardinal cut-off point, with -nò confined to '2nd' through '5th' and $-n\dot{\epsilon}$ used for higher values, or in terms of assimilation to the [\pm round] feature of the final vowel of the stem, so that $-n\dot{\delta}$ is associated with u and $-n\dot{\epsilon}$ is associated with $\{i \in \mathcal{E} a\}$. Rounding assimilation is likely the historical source of the split, but the difference in ATR values suggests that it is not a low-level phonetic phenomenon. mùzò-nè 'thousandth' is the one case where the two conditioning factors diverge, and suggests that the cardinality cut-off is now the determining factor. One of two assistants tended to fluctuate between -nò and $-n\dot{\epsilon}$ (and probably $-n\dot{\epsilon}$) in repetitions of some of the forms, while the other assistant was more consistent. A similar fluctuation is observed in stem-final vowels in verbs.

```
(129)
            form
                                                gloss
        a. single-digit numeral
                                                'second'
            nòzù-nò
            tà:ndù-nò
                                                'third'
            cèzù-nò
                                                'fourth'
                                                'fifth'
            nùm-nò
            kùlè-nè ~ kùlò-nè
                                                'sixth'
            sọè:-nè
                                                'seventh'
                                                'eighth'
            sà:gè-nè
                                                'ninth'
            toà:-nè
                                                'tenth'
            pìyèl-nè
        b. decimal
            pà:-nù-nò
                                                'twentieth'
            pò-tà:ndù-nò
                                                'thirtieth'
                                                'eightieth'
            sìŋ-nè
        c. decimal plus single-digit numeral
            pìyèl-tùmà-sì-nè
                                                'eleventh'
        d. hundred
                                                'hundredth'
            tèmèdèrè-nè
            mùzò-nè
                                                'thousandth'
        e. hundred plus '1-99' numeral (two levels)
                                                'hundred and twentieth'
            témèdèrè mì→ pò:-nù-nò
```

In (129c), the combination of the decimal term ('10') and the single-digit term is subject to tone-dropping as a unit. In (129e), however, the numeral contains elements from different orders (here, hundreds and 1-99), and the tone-dropping applies only to the latter numeral (and to the conjunction $mi \rightarrow$).

4.7.3 Fractions and portions

The noun *péjèrè* 'half, fraction' can be used to denote any representative fractional share of a larger quantity. Other than French loanwords (like *quart* 'quarter') there are no fractional expressions based on numerals.

5 Nominal and adjectival compounds

5.1 Nominal compounds

Noun-noun and similar compounds are classified into types based on tonal changes in the initial or the final, as in (130). In the symbols, \vec{n} means no tonal change (lexical tones appear), \hat{n} means tone-dropped, \hat{n} means {HL}-toned.

```
(130)
               pattern
                              comment
          a. no tonal change in initial or final
               (\bar{n} \; \bar{n})
                              rare
          b. only initial has a tonal change
               (\hat{n} \, \bar{n})
                              initial tone-dropped; common
          c. only final has a tonal change
               (\bar{n} \hat{n})
                              final raised to {H}
               (\bar{n} \ \hat{n})
                              final tone-dropped
          d. both initial and final have tonal changes
                              initial tone-dropped, final with {HL}
               (\hat{n} \hat{n})
```

5.1.1 Ambiguous tone-defined compound types

There are many lexically $\{L\}$ -toned nouns, and for these we cannot distinguish \bar{n} (lexical tone) from \hat{n} (tone-dropping). There are similar, though in practice less difficult, issues involving lexically $\{H\}$ -toned stems vis-à-vis \hat{n} , and lexically $\{HL\}$ -toned stems vis-à-vis \hat{n} .

Examples of ambiguity patterns are in (131). The most common source of problems is the type in (131a).

```
(131) a. (\bar{n} \hat{n}) or (\bar{n} \bar{n}) or (\bar{n} \bar{n}) with initial and final lexically \{L\}

jenj\hat{u}-b\delta r\delta \quad 'blood vessel' \quad jenj\hat{u} 'blood', b\delta r\delta \quad 'sack'

n\hat{u}m\hat{a}-k\delta l\delta \quad 'wrist' \quad n\hat{m}\hat{a} 'hand', k\delta l\delta 'neck'
```

```
b. (\bar{n} \hat{n}), (\hat{n} \bar{n}), or (\bar{n} \bar{n}) with initial lexically \{L\} and final lexically \{H\}

\[ n\hat{n}m\hat{n}-c\hat{n}d\hat{a} \quad 'palm of hand' \quad \quad n\hat{m}\hat{a} \quad 'hand', \cind\hat{a} \quad 'heart' \]

c. (\hat{n} \hat{n}) or (\hat{n} \bar{n}) with final lexically \{HL\}

\[ k\hat{n}\hat{n}-t\hat{e}mb\hat{e} \quad 'mountaintop' \quad k\hat{n}\hat{n}\hat{o} \quad 'mountain', \textit{e}mb\hat{e} \quad 'above' \quad 'above' \quad inj\hat{u}-\hat{u}\hat{o} \quad 'spring' \quad 'mater', \hat{u}\hat{o} \quad 'mater', \hat{u}\hat{o} \quad 'spring' \quad 'mater', \hat{u}\hat{o} \quad 'mater', \hat{u}\hat{o} \quad 'spring' \quad 'mater', \hat{u}\hat{o} \quad 'mater', \hat{u}\hat{o} \quad 'sprin
```

5.1.2 Compounds of type $(\bar{n} \ \bar{n})$

In this type, neither the initial nor the final undergoes a tonal change. A clear case would be one where both the initial and the final have at least one lexical H-tone element, and this element appears audibly in both parts of the compound.

This type is not clearly attested in Yanda Dom. A possible example is $s\acute{a}g\acute{u}$ - $s\acute{o}:r\grave{o}$ 'type of meal (with ground millet)', cf. $s\acute{a}g\acute{u}$ 'pounded millet grain (before sifting)'. Especially given the unusual tones of the final, this compound may be a borrowing from Jamsay.

5.1.3 Compounds of type (\hat{n} \bar{n})

In this pattern, the initial is a noun that drops its tones to $\{L\}$, while the final retains its tones. Typically the initial functions as a modifier, cf. English *brick house*. Because Yanda Dom has many $\{L\}$ -toned nouns, it can be difficult to distinguish this type from the possessive-type compound described below (§5.1.5-6). However, the $(\hat{n} \ \bar{n})$ type is indicated when the initial would otherwise have at least one H-tone but appears in all L-toned form (132a). There are many other possible examples, but those in (132b) could also be $(\hat{n} \ \hat{n})$ and those in (132c) could also be $(\bar{n} \ \hat{n})$.

(132) (\hat{n} \bar{n}) compounds

compound	gloss	components
sàmàl-bìdé	'day labor'	sámàl 'day labor', bìdé 'work(n)'
yù:-púr ⁿ á	'millet flour'	yú: 'millet', púr ⁿ á 'flour, powder'

```
bà-úr<sup>n</sup>á 'mist, fog' bá 'cloudy weather',

úr<sup>n</sup>á 'dust (in the air)'

sìrà-sùmzú 'wad of tobacco' sírà 'chewing tobacco',

sùmzú 'saliva'
```

The verbal-noun compounds in the following section, and the agentive compounds in §5.1.7, below, are special cases of this (\hat{n} \bar{n}) construction.

5.1.4 Compounds with final verbal noun, type (n VblN)

A verbal noun readily combines with a $\{L\}$ -toned form of a noun as initial. The noun denotes a generic object, or some other entity type associated with the action. The default initial is the corresponding cognate nominal. The verbal noun form used is normally that with suffix $-u \sim -y$ and other allomorphs (§4.2.2). The compound verbal noun may be homophonous with a corresponding agentive compound (§5.1.7, below).

(133) Compound verbal nouns

```
compound gloss components

?òlò-[ɔ̀nz-ù] 'house-building' ?óló 'house', ónzó 'build'
èzù-[mà-y] 'waterjar-making' èzù 'waterjar', mă: 'shape'
```

The initial may also be a simple PP including a common noun. In an independent PP, either the noun or the postposition has a H-tone, since $\{L\}$ -toned nouns require a H-toned postposition (134a). In the corresponding compoun, the overlaid $\{L\}$ compound-initial contour applies to the nounpostposition sequence (134b). There is accordingly always an audible tonal difference between the independent and compounded forms of the PP.

```
(134) a. [timè †ná] yà ?ólé-∅

[tree in] Real go.up.Perf-3SgS

'He/She went up into (a) tree.'
```

```
b. [tìmè-nà]-[ʔðlì-Ø]
[tree-in]-[go.up-VblN]
'(act of) going up into trees'
```

In other cases, the verbal-noun compound does not denote an action or other abstraction. Instead, the verbal noun functions like a modifying adjective. The

compound as a whole denotes a subset of the set denoted by the initial that has **undergone a process** denoted by the verb. Compare English *baked fish*, roast(ed) potatoes. For example, $\grave{e}g\grave{e}l\grave{e}$ 'peanut (or groundnut)' occurs with an ordinary adjective in $\grave{e}g\grave{e}l\grave{e}^L$ bǎn 'peanut' (bǎn 'red') or in $\grave{e}g\grave{e}l\grave{e}^L$ kòlò 'raw peanut', and with adjective-like verbal nouns in (135a-b). By contrast, compound final $p\grave{a}g-\grave{u}$ from $p\acute{a}g\acute{u}$ 'tie up' has abstractive sense in (135c), denoting an action type rather than a subtype of 'mouth'.

```
(135)
             N+Adi
                                gloss
                                                       verb
        a. ègèlè<sup>L</sup> àn-ù
ègèlè<sup>L</sup> kàbùl-ù
                                 'roasted peanut(s)' ánú 'cook lightly'
                                'shelled peanuts'
                                                       kábú-lé 'separate'
         b. èmà pàg-ù
                                 'sorghum bundle'
                                                       "sorghum tied"
             compound
                                gloss
                                                       literal sense
                                'fasting'
                                                       "mouth tying"
         c. mbo-[pag-u]
```

The other verbal noun form in suffix -lé is less common, in general and in these compounds. It was, however, possible to elicit examples such as ?òlò-[ónzó-lé] 'house-building'.

5.1.5 Possessive-like compounds of type $(\bar{n} \ \hat{n})$

This compound type has tones resembling those of alienable possessor-possessed combinations with $\{L\}$ -toned possessed noun. We clearly have a $(\bar{n}\ \hat{n})$ compound when the initial preserves a lexical H-tone, and when the final is $\{L\}$ -toned in the compound but appears elsewhere with a different tone melody, as in (136a). The $(\bar{n}\ \hat{n})$ type is also indicated when the initial preserves its lexical tones including a H-tone, while a lexically $\{L\}$ -toned final remains unchanged (136b). I can cite no example of this, however, so there may be a correlation between $(\bar{n}\ \hat{n})$ and underlying non- $\{L\}$ -toned finals.

(136) Compounds of type (\bar{n} \text{ n})

```
compound gloss final element

a. final audibly drops tones
s\grave{a}t\grave{a}r\grave{a}-\acute{e}:-m\grave{u}^{L}k\grave{o}-b\grave{a}d\grave{u} \text{ 'youth leader'} \qquad k\acute{o}-b\grave{a}d\grave{u} \text{ 'leader'}
(\text{older man who represents young men at meetings})
\acute{\epsilon}r^{n}\acute{\epsilon}^{L}z\grave{a} \qquad \text{'soda-ash meal'} \qquad z\acute{a} \text{ 'meal'}
```

```
pòrùbá Lbìdê 'collective work' bìdé 'work(n)' èdè-mú L?òlò 'chicken(s) coop' ?óló 'house' ínjú Lòmò 'source of water' òmó 'place'
```

b. final is already lexically {L}-toned, initial has an H-tone [no examples known]

The compounds in (136) take L-toned definite morphemes, since the compound as a whole always contains a H-tone: pòrùbá Lbìdè wò 'the collective work'.

When the initial element is $\{L\}$ -toned, there is an overt distinction between $(\bar{n}\ \hat{n})$ compounds and corresponding possessives. This is because a possessed noun takes $\{H\}$ overlay after a $\{L\}$ -toned possessor, as in (137b). No such process affects compound-finals (137a).

```
(137) a. p\hat{\epsilon}:-n\hat{a}: (†w\acute{o})
sheep-foot (Def.InanSg)
'(the) sheep's-foot'

b. p\hat{\epsilon}: ^{H}n\acute{a}: (w\acute{o})
sheep ^{H}foot (Def.InanSg)
'(the) foot of a sheep'
```

5.1.6 Possessive-type compounds of type $(\bar{n} \ \acute{n})$

In this type, the initial keeps its lexical tones, and the final shows {H} tones. This pattern is tonally like that of a possessor-possessed combination when the possessor is not determined or quantified (§6.2.1.1). Since compound initials are normally generic, the connection with possessives is meaningful here. I will therefore write these compounds with a space rather than a hyphen separating initial from final. In (138a) we can hear the tone change in the final. In (138b) the final is already {H}-toned, but the fact that the initial does not drop to {L} strongly suggests that the $(\bar{n} \ \hat{n})$ pattern is again at hand. The only other possibility, $(\bar{n} \ \bar{n})$, is not a well-established compound type.

(138) Possessive-type compounds (\bar{n} \u00e1)

```
compound gloss final element

a. final changes from \{L\} etc. to \{H\}
\begin{array}{ccc} s \grave{\partial} \eta - t \grave{i} \gamma & \text{floom'} & g \grave{\partial} n \text{ 'gear'} \\ g \grave{u} z \grave{u} & \text{'} t \acute{\eta} & \text{'skin disease'} & c \grave{i} \eta \text{ 'disease'} \end{array}
```

```
èmà <sup>H</sup>gọá:
                             'sorghum granary'
                                                     goà: 'granary'
    gàrù Hwél
                             'knee tendon'
                                                     wèl 'tendon'
    àŋgà <sup>H</sup>ín
                             'molar tooth'
                                                     in 'tooth'
     èmà <sup>H</sup>kónzó
                             'sorghum beer'
                                                     kònzò 'beer'
b. final already lexically {H}-toned, initial has a H-tone
    ínjú <sup>H</sup>ózú
                             'aesophagus'
                                                     ózú 'road'
c. final already lexically {H}-toned, initial is {L}-toned
     ìzìgè-[túmó-ŋ]
                             'sunrise'
                                                     túmó-n '(sun's) rising'
                                                     píló-n 'falling'
     ìzìgè-[píló-ŋ]
                             'sunset'
```

5.1.7 Agentive compounds of type (\hat{x} \hat{v})

In this type of compound, a noun-verb sequence is converted into a "deerslayer" type agentive with incorporated object. The initial appears in unaffixed form, and drops to all-low tones. The final agentive element is also L-toned. It takes an agentive form with final -y (monosyllabics), -i (the three marginally bisyllabic stems of shape nCv or 2pCv) or -u (other nonmonosyllabics). The final -u is subject to apocope after an unclustered sonorant other than a rhotic or n. The agentive has the same form as one of the regular verbal noun formations (§4.2.2). In both, the predominent -u suggests a comparison with the U-stem that occurs in a class of u-final verbs (§3.5.1).

For verb stems of two or more syllables, the vocalism is that of the U-stem. That is, the final vowel is replaced by /u/, not only in verbs that use the U-stem in place of the bare stem, but also for all other verbs. The stem-final /u/ on the verb is audible when preceded by a consonant cluster (139a) or by a consonant (such as an obstruent) that does not permit the /u/ to be deleted (139b). These examples also show that the incorporated noun may be a cognate nominal (139a) or another noun that denotes a prototypical object type (139b). The plural is with low-toned -mu, as in ko:-eullet constant of the U-stem.

(139) Agentive compounds

	N+V	gloss	compound	gloss
a.	cèmnà cémné zàmnà zámné			'one having fun' 'thief'
b.	sáŋ pídé zá mànú	'shut door' 'cook meal'	sàŋ-pìdù zà-mànù	'door-shutter' 'cook (chef)'

kó: έdέ 'braid head' kò:-èdù 'braiding lady'

The /u/ is deleted by regular phonological rule after an unclustered sonorant (for details see §3.6.3.2), as in (140a) with cognate nominals and (140b) with more descriptive incorporated nouns.

(140)		N+V	gloss	compound	gloss
	a.	gòlò gòlé nùŋà nùŋó	'do farm work' 'sing a song'	gòlò-gòl nùŋà-nùŋ	'farmer' 'singer'
	b.	yú: gòló kònzò nìy ⁿ é	'do farm work' 'drink millet beer'	yù:-gòl kònzò-nìy	'millet-farmer' 'beer-drinker'

Verbs of the shape *Cv*- or *Cv*:- take the form -*Cv*-*y* in agentive compounds (141). Arguably the -*y* represents underlying /-yu/ but this cannot be demonstrated.

(141)	N+V	gloss	compound	gloss
	jà: jé	'dance a dance'	5 5 5 5	'dancer'
	márbá tá:	'shoot rifle'	màrbà-[tà-y]	'rifle-shooter'
	tèmbên mă:	'make bricks'	tèmbèn-[mà-y]	'brickmaker'
	sùmzú tó:	'spit'	sùmzù-[tò-y]	'spitter'

For the noun-verb combination $y \grave{a} y \acute{\epsilon}$ 'weep', I recorded $y \grave{a} y - y \grave{i}$ 'weeper, crybaby'.

The lexicalized agentive *dàná* 'hunter' can be used by itself, and when it does have an incorporated nominal it does not change its shape: *wèl-dàná* 'gazelle-hunter' (*wél*).

5.1.8 Compounds with -é: or -(i)yè ('child, fruit, blade, ...')

The noun 'child' with human reference is ènè, irregular plural èné. For further tonal irregularities see §4.1.2, above. For 'juvenile, young (animal)' the form used without a compound initial is *íyè*.

As a compound final, there are two forms. Both are of type $(\hat{n} \ \bar{n})$, i.e. with $\{L\}$ -toned initial. In one variant, - \acute{e} : follows the initial, with no phonological interaction (in particular, no contraction with a stem-final vowel). This form is probably related to the noun $\grave{e}n\grave{e}$.

There is also a more contracted variant $-(i)y\dot{e}$. The i replaces a stem-final short vowel (if any), but is usually omitted after a consonant, though the H-tone is realized at the end of otherwise {L}-toned initial. Typical manifestations of this variant are $C\check{v}C-y\dot{e}$, $C\check{v}-y\dot{e}$, $C\check{v}-C\dot{v}C-y\dot{e}$, and $C\dot{v}C-iy\dot{e}$ (from $/C\dot{v}C-iy\dot{e}$). This type is probably related to the noun $iy\dot{e}$, and indeed it is especially common with animal names as initials.

'X-child' compounds have a wide range of senses, ranging from 'young (animal)', to 'fruit (or other useful part) of (plant)', to 'blade of (tool)', to a small object that is paired with a larger object (e.g. the small round grinding stone that one holds in one's hand to grind with, versus the large flat stone that one grinds on), to various other small items that are parts of or auxiliaries to a defining object, to a more or less pure diminutive. Examples are in (142). Note the homonyms $n\check{a}$ - $yv\grave{e}$ 'calf' and 'toe' (the latter can also appear as $n\grave{a}$:- \acute{e} :).

(142) 'X-child' compounds

C	ompound	gloss	initial
	nan èlà-é: èŋèr ⁿ è-é:	'bastard child' 'circumcised child'	sèlà 'concubine' céŋér ⁿ é 'circumcision'
b. ani	mal		
<i>p</i> :	ă-yyè ĕ-yyè òn-íyè d-íyè	'calf' 'lamb' 'goat kid' 'chick'	nà: 'cow' pè: 'sheep' ?óné 'goat' èdè 'chicken'
	ly part		
n	ùmà-é: ~ nùm	•	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	×	'finger'	nùmà 'hand' nà: 'foot'
	ă-yyè ∼ nà:-é: òmbíl và	'(finger-/toe-)nail'	<i>na.</i> 100t
	ìd-íyè	'eye'	gìdé 'eye, eyes'
d. pla	nt products		
_	ù:-é:	'millet grain spike'	yú: 'millet plant'
	zà-é:	'millet grain'	_
n	ıòlò-é:	'pit of wild date'	<i>mòlò</i> 'wild date tree (<i>Balanites</i>)'
<i>k</i>	òkò-é:	'coconut'	_
à	nzù-é:	'roselle seeds'	ànzù 'roselle'

```
gàw-é:
                     'onion bulb'
                                               găw 'onion plant'
    cèp-íyè
                     'cotton seed'
                                               cènè 'cotton plant'
e. other inanimate auxiliary
    sèmbè-é:
                     'spike for cotton'
                                               sémbé 'cotton-spinning
                                               stick'
    dàbà-é:
                     'daba (hoe) blade'
                                               dàbà 'daba (hoe)'
    ?ànà-é:
                     'pawn in board game'
                                               ?ànà 'native board game'
    màrbà-é:
                     'bullet'
                                               márbá 'rifle'
    bòn-íyè
                     'tapstick for tomtom'
                                               bòn 'tomtom'
    kŭn-vè
                     'pestle (for mortar)'
                                               kún 'mortar'
    nŏm-yè ~ nòm-íyè 'small grindstone'
                                               n\grave{u}m \sim n\grave{o}m 'flat stone on
                                               which one grinds'
f. diminutive
                                               cìn 'stone'
    cìn-íyè
                     'pebble'
                     'twig, small stick'
                                               tánà 'stick, staff'
    tàn-íyè
```

A semantically specialized case is $\partial g \partial - \epsilon$: 'wealth, riches' or 'rich person', cf. $\partial g \partial$ 'chief, Hogon'.

There are a few kin terms containing a more or less segmentable -ye, e.g. sà-yè 'sister's child' from sà: 'sister'. See §6.2.3.5 for a list and for fuller analysis.

In kinship terminology, $s\hat{a}-y\hat{e}$ 'sister's child' is a frozen derivative of $s\hat{a}$: 'sister', and likewise $s\hat{e}z\hat{i}-y\hat{e}$ 'grandchild' from $s\hat{e}z\hat{u}$ 'grandmother'. These frozen compounds do not show the usual H-tone element preceding the final.

In some cases the initial is not elicitable separately. Such forms are probably segmentable when they fit the semantic patterns seen in the clearly segmentable cases. Examples: *làl-íyè* 'kidney', *àlmèt-íyè* (French *allumettes*) 'matches', *péjíyè* 'insect gall (on tree)'.

Frozen diminutives in fauna terms are: ànà pùl-íyè 'yellow wagtail', sàkòlòl-íyè 'weaver or sparrow', pèzùmà gòmbìl-íyè 'hedgehog'. Plants: sìl-íyè 'tree sp. (Anogeissus)', gòg-íyè 'neem tree', zìnd-íyè 'shrub sp. (Feretia)', and possibly (but with the wrong tone contours) sátèlíyè 'tree sp. (Bauhinea)', símpàlíyè 'tree sp' (Boscia angustifolia).

There are also some fauna terms that may contain an archaic diminutive -iyà. These are sà:"zíyà 'piapiac (magpie)', gòròmbíyà 'bunting (Emberiza)', and sàndíyà 'starling'.

5.1.9 'Man' (\acute{an}), 'woman' ($y\grave{e}$)

For the simple human nouns \acute{an} 'man' and $y\grave{e}$ 'woman', see §4.1.2, above.

Both of these may also function adjectivally, e.g. with animal terms. Thus $?\acute{a}n\acute{e}$ 'goat', $?\grave{a}n\grave{e}$ án 'billygoat', $?\grave{a}n\grave{e}$ yè 'nannygoat'. These could also be analysed as (\grave{n} \bar{n}) compounds, which have an {L}-toned initial.

In their own $\{L\}$ -toned forms, these stems occur in a range of nounadjective combinations and compounds. 'Woman' shows no irregularities: $y\hat{\epsilon}$ $p\hat{\epsilon}y$ 'old woman', $y\hat{\epsilon}$ $k\hat{a}nd\hat{a}$ 'newlywed bride', $y\hat{\epsilon}$ - $b\hat{i}d\hat{u}$ 'betrothal at birth'.

'Boy' is regular ènè án, literally 'child male'. 'Girl' is the slightly irregular èn-íyè.

5.1.10 Compounds with *bàdú* 'owner'

bàdú or bànà 'owner, master' occurs as final in a few compounds (143).

```
(143) a. (\hat{n} \bar{n})

\[ \left( \bar{b}\hat{e}\bar{b}\hat{d}\delta' \text{ owner of the sacrificial altar' (l\hat{e}\hat{b}\hat{e})}{\partial mb\partial l\partial b\hat{d}\delta' \text{ owner of an idol (fetish)' (\partial mb\partial l\partial)} \]

b. (\bar{n} \hat{n})

\[ \frac{25l\delta b\hat{d}\delta}{\delta} \text{ 'house owner'} \]
```

Senses like 'hunchback' are usually not expressed as 'owner of' compounds, rather with Characteristic derivational suffix $-j\hat{i}$ (§4.2.1).

For 'owners' functioning somewhat like a relative head (with unspoken 'who said' and an overt quoted clause), see (780) in Text 1.

5.1.11 Loose and tight compounds with *ni*: 'mother' (entire plant)

nì: 'mother' can be used as a compound final with e.g. flora terms, to denote the entire tree or herb as opposed to just its fruits or other focal part. However, this compound final competes with tìmè 'tree' in these cases. Thus màngòrò-tìmè or màngòrò-nì: 'mango tree'.

I am not aware that 'mother' is used as compound final in the sense 'true X' or 'primary/focal X' (as opposed to 'false X' or 'secondary X').

5.1.12 'False X' ('hyena's X', 'slave of X')

For 'false/secondary X' denoting a species similar to a more focal species X, a possessor denoting an animal, a child, or the like can be added: tà:-célbà 'hyena-eggplant' is Solanum incanum, a plant with poisonous fruits; tà:-èlèm 'false jujube' (Ziziphus mucronata) is opposed to true jujube (Z. mauritiana); 25né-kìlè-mù Lkùdà 'goatherds' wild grape' is the liana Ampelocissus africana whose berries resemble those of wild-grape tree (Lannea microcarpa); cènjù-mú Lkàdò 'agama lizards' calabash' is water lettuce Pistia stratiotes; cènjù-mú Lkàmbè 'agama lizards' zaban fruit' is the inedible wild melon Cucumis melo; àntùmùlù-bì: 'dwarf-Sclerocarya' is the tree Commiphora africana (smaller than Sclerocarya birrea); gà: -égèlè 'cat-peanut' is a leguminous herb Crotalaria podocarpa.

The compound type [X-gùnò] 'slave of X' for a similar species associated with that denoted by X is attested in [yà:dù-kùmà]-gùnò 'slave of Hibiscus longisepalus', denoting another bush of the same botanical family (seen planted in a village), Abutilon pannosum; in pàl-gùnò 'sesame-slave' for Ceratotheca sesamoides; in tàbà-gùnò 'tobacco-slave' for the weedy herb Blumea axillaris (whose young leaves resemble those of tobacco); and in lòl-gùnò 'néré-slave' for Acacia amethetophylla, smaller and less important than néré tree (Parkia biglobosa).

I have only one case where an adjective with a sense like 'false' is added to the species term X. This is $\grave{e}m\grave{a}^L$ sálálá 'false sorghum', denoting the sorghum-like weed Sorghum arundinaceum. sálálá is not used in other combinations.

5.1.13 Nominal compounds with medial linking element -mà- (-nà-)

The element $-m\grave{a}$ - occurs in a few X- $m\grave{a}$ -X compounds denoting caterpillars and small plants (144a). The first X and the linking $-m\grave{a}$ - are low-toned, the second is {HL} toned. $s\acute{o}y\acute{e}$ means 'larva, grub, caterpillar'. There is a tonally similar nonreduplicative example with $-m\grave{a}$ - in (144b), and one with $-n\grave{a}$ - in (144c). Nonbiological compounds with $-m\grave{a}$ - are in (144d).

```
(144) a. s \grave{o} y \grave{e}^L d \grave{a} n - m \grave{a} - d \hat{a} n 'hairy caterpillar (family Arctiidae)' \sim s \grave{o} y \grave{e}^L d \grave{a} n \grave{u} - m \grave{a} - d \acute{a} n \grave{u} 'sheath-carrying caterpillar' \acute{a} y - [d \grave{o} \eta - m \grave{a} - d \hat{o} \eta] 'herb sp. with burrs'
```

- b. $bùl\partial -m\grave{a}-t\hat{a}:^n \sim -t\grave{a}:^n$ 'spreading grass sp. (Cynodon)'
- c. gòlò-nà-ám(è)lè 'bush with hairy leaves (Waltheria)'

d. bègù-mà-bégù 'hiccup' (noun, used with verb bègé-)

sòyè L dàn-mà-dân is thought to be connected to dăn 'sour', alluding to the hairs that can stick in a person's skin.

sòyè^L pègù-mà-pégù is based on pégù 'hitching post' (a small post to which animals are tied with a looped rope.

áy-[dòŋ-mà-dôŋ] is said to be (partially?) from Tommo So (áy 'mouse'), alluding to the practice of putting a stem with burrs into mouseholes.

*bùlò-mà-tâ:*ⁿ contains *bùló* 'kinsman, relative' and (despite the opaqueness of *-tâ:*ⁿ) is understood by natives to mean something like 'have several kin' (alluding to the plant's putting down roots at stem nodes).

gòlò-nà-ámlè is understood to mean 'in-law of fire', cf. àmlè 'in-law' and gòlò 'fire'. Similar terms for this species (Waltheria indica) occur widely in northern Mali.

Another term, $\frac{\partial n}{\partial n}$ bìrè-mà-dòŋ 'white-billed buffalo weaver' (with $\frac{\partial n}{\partial n}$ 'bird') contains the compound $\frac{\partial n}{\partial r}$ 'hard worker', which is also used for people. Since the Yanda noun $\frac{\partial n}{\partial r}$ 'work' has $\frac{\partial n}{\partial r}$ rather than $\frac{\partial n}{\partial r}$, this phrase may be a foreignism, cf. Jamsay $\frac{\partial n}{\partial r}$ (mà is the possessive linker in Jamsay).

5.1.14 Instrumental relative compounds ('oil for rubbing')

The examples in (145) involves an inanimate singular imperfective relative verb form with $-\eta$, see §14.1.7.2. This construction is used when the function of the noun can be expressed by a simple verb (rather than a verb plus noun complement). The nouns in (145) are inju 'water', na: 'cow', and ni: 'oil, butter'.

- (145) a. $inju^L$ $niy^n \acute{a} \eta$ water drink-Impf.Rel.InanSg 'water for drinking'
 - b. $inju^L$ dìyá-ŋ
 water^L bathe-Impf.Rel.InanSg
 'water for bathing'
 - c. $n\grave{a}$: L $Z\widecheck{i}$ -n cow^L take.away-Impf.Rel.InanSg 'ox (as beast of burden)' ($Z\widecheck{i}n$ 'take away')
 - d. nì: L ?ə́pá-ŋ

```
oil<sup>L</sup> eat-Impf.Rel.InanSg 'oil for eating (cooking)'
```

```
e. nì: pádíyá-ŋ
oil rub.on-Impf.Rel.InanSg
'oil for rubbing' (verb pádíyé)
```

When the function requires both a verb and an object, as in 'meat-cutting knife', different constructions are used. First, the object is compounded with the verb in the form of a verbal noun. This compound may then appear as a preposed possessor, as in (146). In these examples, the final noun raises its tones.

```
(146) a. àsègè-[sèm-Ø] <sup>H</sup>pól animal-[slaughter-VblN] <sup>H</sup>knife 'knife for slaughtering animals' (sémé, pòl)
```

- b. nàmà-[cèz-ù] Hpól meat-[cut-VblN] Hknife 'meat-cutting knife' (cézó, pòl)
- c. $k \partial d \partial [s \partial b u]$ calabash-[pierce-VblN]

 "awl for piercing calabashes' ($c \hat{c} m$)

Or the verbal noun compound may follow the head noun as a kind of adjective (147).

```
(147) a. mànà^L apàn-[tà-y] plastic bird-[shoot-VblN] 'slingshot' (tá: 'shoot')
```

- b. $c\grave{e}m^L$ $k\grave{\partial}d\grave{\partial}$ - $[s\grave{\partial}b-\grave{u}]$ point^L calabash-[pierce-VblN] 'awl for piercing calabashes' $(c\grave{e}m)$
- c. mènzìnà L bòrò-[pìy-Ø]
 needle L grain.sack-[sew-VblN]
 'needle for sewing grain sacks' (mènzínà, bòrò, píyé)

5.2 Adjectival compounds

5.2.1 Bahuvrihi ("Blackbeard") compounds

Bahuvrihi compounds (cf. black-hearted, two-fisted, butterfingers, Blackbeard) can function as adjectives or nouns. The compound as a whole has its grammatical number and animacy determined by the referent. The tones are distinct from those of other compounds.

5.2.1.1 Bahuvrihi $(\bar{n}/\check{n} \ \grave{a})$ with adjectival compound final

The nominal initial denotes a body part. Initials that already have a H-tone are unchanged, but $\{L\}$ -toned initials shift the final syllable (the final mora of Cv:) to H-tone. The adjective drops its tones to $\{L\}$.

```
(148)
            bahuvrihi
                             gloss
                                                components
        a. initial is monosyllabic
          {L} becomes {H}
            ín-kòsì:
                             'buck-toothed'
                                                in 'tooth', kòsí: 'oblique'
             ín-pày<sup>n</sup>
                             'buck-toothed'
                                                in 'tooth', năy 'oblique'
                                                (synonyms)
          {L} becomes {LH}
            nă:-zàlà
                             'long-legged'
                                                nà: 'leg', zàlà'long'
        b. initial is bisyllabic
          {H} unchanged
             céné-bìn
                             'big-mouthed'
                                                céné 'buttocks', bǐn 'small'
          {LH} unchanged
             dùmó-cèmè
                             'small-buttocks'
                                                dùmó 'buttocks', cèmè 'small'
          {L} becomes {LH}
             bèdé-bìn
                             'big-bellied'
                                                bèdè 'belly', bǐn 'big, stout'
             bèdé-cèmè
                             'small-belly'
                                                bèdè 'belly', cèmè 'small'
            gùzú-jèmè
                             'black-skinned'
                                                gùzù 'skin', jèmé 'black'
                             'white-skinned'
                                                gùzù 'skin', pílé 'white'
            gùzú-pìlè
                                                cìnzà 'nose', bǐn 'big, stout'
            cìnzá-bìn
                             'big-nosed'
            kòló-zàlà
                             'long-necked'
                                                kòlò 'neck', zàlà 'longt'
        c. initial is trisyllabic
          {LHL} unchanged
            [gìd-íyè]-bìn
                             'big-eyed'
                                                gìd-íyè 'eye(s)', bǐn 'big, stout'
```

As in several other Dogon languages there are bahuvrihi-like compounds for two large bird spp., but with different tone contours. Large bustards such as *Neotis denhami* are called *jìdè-pílé* 'eye white', and the huge Abyssinian ground hornbill is called *gìdè-jèmé* 'eye-black', cf. *gìdè* 'eye(s)', *pílé* 'white', *jèmé* (~ *jìmé*) 'black'.

5.2.1.2 Bahuvrihi (*n̄ nùm*) with numeral compound final

The available examples are shown in (149). In the productive type (149a), the nominal initial preserves its lexical tones except that $\{L\}$ is raised to $\{LH\}$, while the numeral is tone-dropped. In (149b), for which I have only one example, the numeral has $\{HL\}$ tone. This form, $\dot{m}b\dot{o}-n\hat{o}$: 'two-mouthed' (149b), is in use in the sense 'double-barreled (rifle)', while near-synonym $k\acute{e}n\acute{e}-[y\grave{e}-n\grave{o}:]$ 'two-mouthed' is used for anything else (e.g. a travel bag with two openings).

```
(149)
            bahuvrihi
                                               components
                              gloss
        a. numeral is tone-dropped
          initial contains a H-tone, preserves its tones in bahuvrihi
            [gìd-íyè]-tùmà→ 'one-eyed'
                                               gìd-íyè 'eye(ball)', tùmá→ 'one'
            [gìd-íyè]-tà:ndù
                              'three-eyed'
                                               gìd-íyè 'eye(ball)', tá:ndù 'three'
            kó:-[yè-nò:]
                                               kó: 'head', yè-nó: 'two'
                               'two-headed'
            kéné-[yè-nò:]
                              'two-mouthed' kéné 'mouth', yè-nó: 'two'
          initial is lexically \{L\}-toned, shifts to \{LH\}
            nă:-[yè-kùlè]
                               'six-footed'
                                               nà: 'foot', yè-kúlé 'six'
        b. numeral has {HL} overlay
            mbò-nô:
                               'two-mouthed' mbò 'mouth (i.e. barrel, of gun)',
                                               (yè-)nó: 'two'
```

In (149a) but not (149b), the $y\hat{e}$ - classifying prefix is usually retained in the final numeral (from '2' up). This is not the case with 'three-eyed', where however the initial happens to end in $y\hat{e}$, so haplology or resegmentation may have been at work.

6 Noun Phrase structure

6.1 Organization of NP constituents

6.1.1 Linear order

The elements in a NP are usually linearized as in (150). However, under some conditions numerals can also precede adjectives or follow postnominal possessors.

(150) NP possessor or inalienable pronominal possessor noun (head of entire NP) modifying adjective(s) cardinal numeral postnominal alienable possessor pronoun determiner (demonstrative pronoun or definite morpheme) universal quantifier ('all')

Definite morphemes, especially animate plural $w\dot{o}$, may alternatively cliticize to the last occurrence of animate plural suffix $-m\dot{u}$ in the preceding NP. This may involve jumping over a numeral; see §6.5.3.

The tightest unit is noun plus modifying adjective(s), i.e. the **core NP**.

kámá 'each' follows nouns (only two combinations are attested). It is omitted from (150) because its linear position vis-à-vis other postnominal elements is moot.

Examples showing the normal ordering, pair by pair, are in (151).

L ?àlò (151)Poss-N a. săydù ^Lhouse S 'Seydou's house' h. *?àlò*^L ièmέ N-Adj house^L black 'a black house' c. ?àlò^L jèmέ yè-tá:ndù N-Adj-Num $house^{L}$ black Inan-3 'three black houses'

- d. ?ðlò^L jèmé nà-ŋ N-Adj-Poss house^L black 3Sg-Poss.InanSg 'his/her black house'
- e. nà:-mù á-nò: mì-yè-mù N-Num-Poss cow-AnPl An-two 1Sg-Poss.An-AnPl 'my two cows'
- f. nà: mí-yè gè N-Poss-Def cow 1Sg-Poss.An Def.AnSg 'my cow (definite), the cow of mine'
- g. cin † $g\acute{e}$ $c\^{e}m$ N-Def-'all' stone Def.InanSg all 'all the stones'

6.1.2 Adjective-Numeral Inversion

The sequence N-Adj-Num is optionally inverted to N-Num-Adj under some conditions. In effect, the stem-class distinction between adjective and numeral, which is elsewhere quite sharp in the syntax, is suspended or at least blurred, with the numeral being treated (for purposes of linearization) as a second adjective. The order of two ordinary modifying adjectives is variable in the absence of idiomatic collocations (examples are given below). Therefore if the numeral is treated as an adjective for purposes of linear ordering in the presence of another adjective, an optional "inversion" is expectable. Instead of formulating this as an actual inversion, one could therefore imagine a rather abstract stem-class conversion that then allows alternative linearizations. However, I will refer to the process as inversion.

Usually the inversion is **licensed** (i.e. allowed, but not required) by the copresence of a demonstrative or a possessor, or when the NP in question is head of a relative clause. In other words, licensors are those elements **external to the N-Adj-Num sequence that restrict reference**.

In the absence of an external licensor, (152a) is clearly preferable to (152b). The ordering in the latter was never given spontaneously by informants in elicitation or recorded texts, and was disapproved of or "accepted" unenthusiastically when presented to them. I therefore flag (152b) with a question mark. The remaining examples in (152) involve an additional external licensor: a postposed pronominal possessor in (152c-d), a preposed nonpronominal possessor in (152e-f), a relative clause in (152g-h), and a

demonstrative in (152i-j). A postposed pronominal possessor can also participate in the reordering, so (152c-d) have further variants.

The tonal transcriptions reflect my second informant's usual pronunciation discerned in repeated elicitation. Where the numeral stem is tone-dropped, as in $\frac{\hat{a}-t\hat{a}:nd\hat{u}^L}{n}$, the H-toned animacy prefix is sometimes also heard as L-toned (such variants are not shown here). Additional variants involving alternative placement of animate plural -mu are not directly relevant and are omitted here.

- (152) a. $n\grave{a}$: L $j\grave{e}m\acute{e}$ - $m\acute{u}$ \acute{a} - $t\acute{a}$: $nd\grave{u}$ cow^L black-AnPl An-three 'three black cows'
 - b. ? $n\grave{a}:-m\grave{u}$ $\acute{a}-t\grave{a}:nd\grave{u}^L$ $j\grave{e}m\acute{e}-m\grave{u}$ cow-AnPl $An-three^L$ black-AnPl [=(a)]
 - c. $n\grave{a}$: L $j\grave{e}m\acute{e}$ - $m\grave{u}$ $m\acute{l}$ - $y^n\grave{e}$ - $m\grave{u}$ \acute{a} - $t\acute{a}$: $nd\grave{u}$ cow^L black-AnPl 1SgP-An-AnPl An-three 'my three black cows'
 - d. nà:-mù á-tà:ndù^L jèmé-mù mí-yⁿè-mù cow-AnPl An-three^L black-AnPl 1SgP-An-AnPl [=(c)]

further variants of c-d, with the possessor relocated, are:

nà: L jèmé-mù á-tá:ndù mí-ynè-mù
nà: L mì-ynè-mù jèmé-mù á-tá:ndù
nà:-mù á-tà:ndù mì-ynè-mù jèmé-mù
nà:-mù mí-ynè-mù á-tà:ndù jèmé-mù
nà:-mù mí-ynè-mù jèmé-mù á-tá:ndù

- e. săydù ^L[nà: jèmè-mù] á-tá:ndù
 S ^L[cow black-AnPl] An-three
 'Seydou's three black cows' (tonosyntactic bracketing)
- f. sǎydù Lnà:-mù á-tà:ndù jèmé-mù
 S Lcow-AnPl An-three black-AnPl
 [=(e)] (tonosyntactic bracketing of 'three' ambiguous)
- g. $[n\grave{a}: j\grave{e}m\grave{e} \qquad \acute{a}-t\grave{a}:nd\grave{u}]^L \qquad p\acute{l}\grave{e}-z\grave{o}-m\grave{u}$ $[cow \quad black \quad An-three]^L \quad fall-Perf2-AnPl$

'the three black cows that fell'

```
h. [n\grave{a}:-m\grave{u} \qquad \acute{a}-t\grave{a}:nd\grave{u} \qquad j\grave{e}m\grave{e}-m\grave{u}]^L \qquad p\acute{l}\grave{e}-z\grave{o}-m\grave{u} [cow-AnPl \qquad An-three \qquad black-AnPl]^L \qquad fall-Perf2-anPl = [=(g)]
```

- i. [nà:-mù á-tà:ndù jèmɛ]^L òmíyⁿɛ̂
 [cow-AnPl An-three black]^L Prox.AnPl
 'these three black cows'
- j. $[n\grave{a}: j\grave{e}m\grave{\varepsilon}-m\grave{u} \qquad \acute{a}-t\grave{a}:nd\grave{u}]^L \qquad \grave{o}m\acute{i}y^n\grave{\varepsilon}$ $[cow \qquad black-AnPl \qquad An-three]^L \qquad Prox.AnPl = (i)]$

These examples show that a numeral is tonosyntactically independent of the adjective in the standard sequence N^L-Adj-Num, as in (152a,d), but that a numeral (like a noun) is tone-dropped when it precedes the adjective in the sequence [N-Num]^L-Adj, as in (152d,h,i). This tone-dropping usually does not affect a H-toned animacy prefix on the numeral.

The **morphological** effect of inversion relates to animate plural suffix $-m\dot{u}$. Where it is semantically appropriate, $-m\dot{u}$ follows an unmodified noun $(N-m\dot{u})$ or a N-Adj combination $(N \text{ Adj-}m\dot{u})$. The suffix is also common (though optional) after the noun in a N-Num sequence $(N-m\dot{u})$ Num) and after the adjective in a N-Adj-Num sequence $(N \text{ Adj-}m\dot{u})$ Num). This difference between numerals and adjectives is maintained under Adjective-Numeral Inversion, so that $-m\dot{u}$ is often (though not obligatorily) present on the noun in inverted N-Num-Adj sequences $(N-m\dot{u})$ Num Adj). Therefore numerals do not completely merge with adjectives in the inversion construction.

When two regular adjectives modify the same noun, they may occur in either order (unless one of them forms a tight, lexicalized unit with the noun). So (153) varies with (153b).

```
(153) a. [nà: dàgà(-mù)]<sup>L</sup> pílé-mù
[cow small(-AnPl)]<sup>L</sup> white-AnPl
'small white cows'

b. [nà: pílé(-mù)]<sup>L</sup> dàgá-mù
[cow white(-AnPl)]<sup>L</sup> small-AnPl
[= (a)]
```

When a numeral is added to two adjectives in an NP also including an inversion licensor, all six possible orders are acceptable. Factoring out the alternative

ordering of the two regular adjectives by arbitrarily placing 'small' before 'white', the numeral may occur before, between, or after the adjectives (154a-c). The bracketing is tonosyntactic.

- (154) a. [nà:-mù á-tà:ndù dàgà(-mù) pìlè-mù]^L òmíyⁿè [cow-AnPl An-three small(-AnPl) white-AnPl]^L Prox.AnPl 'these three small white cows'
 - b. $[n\grave{a}: d\grave{a}g\grave{a}(-m\grave{u}) \qquad \acute{a}-t\grave{a}:nd\grave{u} \qquad p\grave{l}l\grave{\varepsilon}-m\grave{u}]^L \quad \eth m\acute{t}y^n\grave{\varepsilon}$ [cow small-AnPl An-three white-AnPl] Prox.AnPl [= (a)]
 - c. $[n\grave{a}:^L d\grave{a}g\grave{a}-m\grave{u} p\grave{l}\grave{\epsilon}-m\grave{u} \acute{a}-t\grave{a}:nd\grave{u}]^L \grave{\partial}m\acute{y}^n\grave{\epsilon}$ $[cow small-AnPl white-AnPl An-three]^L Prox.AnPl$ [=(a)]

The final demonstrative has broad tonosyntactic control over the postnominal modifiers in the most fluent pronunciations, which are given in (154). However, elicitation of tone patterns in such complex sequences is always difficult, and pronunciations based on narrower groupings were also heard, especially when the slightest hesitation or prosodic break was present.

Further examples in (155) show a lexically $\{H\}$ -toned noun $26n\epsilon$ 'goat' instead of 'cow' which appeared in the preceding examples. 'Goat' is part of the tone-dropping domain controlled by the adjective in (155a-b) and by the demonstrative in (155c-d).

- (155) a. [?ànè-mù á-tà:ndù]^L jèmé-mù mí-yⁿè-mù [goat-AnPl An-three]^L black-AnPl 1SgP-An-AnPl 'my three black goats' [compare (152d)]
 - b. $?\partial n\hat{\epsilon}^L$ $j\partial m\hat{\epsilon}-m\hat{u}$ $\acute{a}-t\acute{a}:nd\hat{u}$ $m\acute{i}-y^n\hat{\epsilon}-m\hat{u}$ goat black-AnPl An-three 1SgP-An-AnPl 'my three black goats' [cf. (152c)]
 - c. $[?\partial n\hat{\epsilon}-m\hat{u} \quad \acute{a}-t\hat{a}:nd\hat{u}]^{L} \quad \partial m\acute{t}y^{n}\hat{\epsilon}$ [goat-AnPl An-three]^L Prox.AnPl 'these three goats'
 - d. $\frac{\partial n\hat{\epsilon} m\hat{u}^{L}}{\partial c}$ $\frac{\partial m(y^{n}\hat{\epsilon})}{\partial c}$ Prox.AnPl

'these goats'

6.1.3 Order of numeral versus postnominal possessor

When a postnominal pronominal possessor is present, unmarked order is N-Adj-Num-Poss, with the possessor following the numeral (156a). However, I have occasional examples of the numeral following the possessor (156b). It is unclear what syntactic or semantic conditions are involved. Since numerals and postposed possessors are not tonosyntactic controllers, the linear variation has no tonosyntactic consequences.

- (156) a. $n\grave{a}:(-m\grave{u})$ $\acute{a}-t\acute{a}:nd\grave{u}$ $m\acute{i}-y^n\grave{\varepsilon}-m\grave{u}$ cow(-AnPl) An-three 1Sg-Poss.An-AnPl 'my three cows'
 - b. $n\grave{a}:-m\grave{u}$ $m\acute{i}-y^n\grave{e}-m\grave{u}$ $b\acute{o}-t\acute{a}:nd\grave{u}-m\grave{u}=w\grave{o}$ cow-AnPl 1SgP-An-AnPl An-three-AnPl=Def.AnPl 'my three cows'

Examples (152cd) in §6.1.2 above are repeated here as (157a-b) since they bear on this point. When an adjective and a numeral can occur in either normal or inverted order, an accompanying postposed pronominal possessor follows the adjective.

- (157) a. $n\grave{a}$: L $j\grave{e}m\acute{e}-m\grave{u}$ $m\acute{l}-y^n\grave{e}-m\grave{u}$ \acute{a} - $t\acute{a}$: $n\grave{d}\grave{u}$ cow black-AnPl 1SgP-An-AnPl An-three 'my three black cows'
 - b. $[n\grave{a}:-m\grave{u}$ $\acute{a}-t\grave{a}:nd\grave{u}]^L$ $\acute{j}\grave{e}m\acute{e}-m\grave{u}$ $m\acute{i}-y^n\grave{e}-m\grave{u}$ [cow-AnPl $An-three]^L$ black-AnPl 1SgP-An-AnPl [=(a)]
 - c. $[n\grave{a}:-m\grave{u}^L$ $\acute{a}-t\grave{a}:nd\grave{u}$ $m\acute{i}-y^n\grave{\varepsilon}-m\grave{u}]^L$ $j\grave{e}m\acute{\varepsilon}-m\grave{u}$ [cow-AnPl An-three $1SgP-An-AnPl]^L$ black-AnPl [=(a)]

6.1.4 Headless NPs (absolute function of demonstratives, possessors, etc.)

A nonpronominal NP is normally headed by an overt noun stem, but the noun may be omitted (if obvious, unimportant, or unknown) under certain conditions.

This gives the appearance of another word in the NP "functioning as" the head noun.

Examples show (apparent) absolute functions of adjectives (158.a), numerals (158b), pronominal possessors (158c), nonpronominal possessors (158d), demonstratives (158e), and the universal quantifier (158f). "__" shows where the noun would have been.

(158) a. [__ băn wò] mì-ý [__ red Def.InanSg] 1Sg-Acc 'Give me the red one (e.g. stone)!' 'ndí give.Imprt 'ndí give.Imprt c. [_ \acute{o} -g wò] \acute{m} - \acute{y} [_ 2SgP-InanSg Def.InanSg] 1Sg-Acc 'ndí give.Imprt 'Give me yours-Sg!' d. [[zòmɔ́ wò] nà Poss] [[hare Def.InanSg] in 'in Hare's (field)' (excerpt from (835) in Text 4)] mì-ý 'ndí 1Sg-Acc give.Imprt 'Give me those!' f. *cêm* mì-ý 'ndí 1Sg-Acc give.Imprt 'Give me all (of it)!'

The definite morphemes cannot be used in this way; they must follow some other nonzero constituent within the NP.

For fuller discussion of the genitive construction with \hat{y} as in (158d), see §6.2.1.2.

6.1.5 Bifurcation (in relatives)

The head NP of a relative clause is (seemingly) bifurcated into a possessed or unpossessed N(-Adj)(-Num) sequence that appears internally within the relative

clause, and a NP coda consisting of determiners, non-numeral quantifiers, and discourse-function elements ('also', Topic, etc.) which appear after the verb.

For examples see §14.1.9-10.

6.1.6 Internal bracketing and tone overlays

This is a schematic summary. Examples and further details are given in various other sections of this chapter. The elements that control tone-dropping to their left, prototypically on an adjacent noun that heads the NP, are those in (159).

- (159) Right-to-left controllers, impose tone-dropping on preceding word(s)
 - a. adjective (controls a preceding noun or adjective)
 - b. kámà 'each' or '(not) any' (controls a preceding noun)
 - c. demonstrative (controls a preceding noun, adjective, numeral)
 - d. relative clause (controls the head NP)

For adjectives, see §6.3.1. $t \tilde{u} m \tilde{a} \rightarrow$ 'one' (§4.7. 1.1) and $g \tilde{a} m b \tilde{u} l \tilde{e}$ 'a certain one' (§6.3.2) are treated as adjectives. For $k \tilde{a} m \tilde{a}$ 'each', which occurs with only a few nouns, see §6.6.2. For demonstratives, see §6.5.2. For internal head NPs in relative clauses, see §14.1.

Numerals, postposed pronominal possessors, definite morphemes, universal quantifiers ('all'), and discourse-function morphemes do not control tone overlays on other words.

Definite morphemes and postposed pronominal possessors do not affect tones of other words in the NP.

Preposed possessors (all nonpronominal possessors and some pronominal possessors) also control tones, left-to-right, on the following possessed noun. For nonpronominal possessors, the overlay is either {H} or {L} prior to Rhythmic Tone-Raising, depending on whether the possessor does or does not contain a H-tone, see (162) below. Preposed pronominal possessors, which occur with kin terms (inalienables), impose either {H} or {LH} depending on the kin term, see (178-9) below.

Competition between two or more right-to-left controllers is difficult to analyse. In sequences like N-Adj-Dem, N-Adj-RelS (with a relative clause), N-Dem-RelS, and N-Adj-Dem-RelS, where all nonfinal elements are tone-dropped, we can get the same result by cyclical tone-dropping by each controller in turn, or by single-step tone-dropping on the entire string controlled by the rightmost element.

In elicitation, numerals and especially their H-toned animate classifying prefixes often retain lexical tones in tone-dropping environments. When a

numeral surfaces with a H-tone, it also blocks the potential controller from going past them to control a targeted word or string on the opposite side. That is, a non-tone-dropped numeral is a barrier to further tonosyntactic control. See §6.1.2 and §6.4.

Postposed pronominal possessors are likewise resistant to tone-dropping in elicited utterances involving a potential tonosyntactic controller. Most such postposed possessors are internally complex (§4.3.3).

Competition between possessor-controlled (left-to-right) and any right-to-left controller is more transparent and revealing. There are two issues: a) does the left-to-right or right-to-left controller dominate, by successfully targeting the noun? b) does the domain of control of the dominant controller also extend beyond the noun to words on the other side of the noun?

In (160), the various combinations involving a preposed nonpronominal possessor (Poss) and a composite **alienably possessed** NP are set out. In the "output" column (phonetic, if you will), tones overlaid on a word are marked by subscripts to the right. In the "analysis" column (phonological, if you will), the overlay is marked as a superscript, is on the side pointing toward the operative controller, and can apply to a bracketed phrase or to a single word.

(160) Alienable possession

sequence	output	analysis
Poss-N	Poss N _L	Poss ^L N
Poss-N-Adj Poss-N-Dem	$\begin{array}{c} Poss \ N_L \ Adj_L \\ Poss \ N_L \ Dem \end{array}$	Poss ^L [N Adj] Poss ^L N Dem
Poss-N-Num Poss-N-'all'	Poss N _L Num Poss N _L 'all'	Poss ^L N Num Poss ^L N 'all'

For alienable possession (by a preposed possessor), the possessor is the dominant controller. This is ambiguous in Poss-N-Dem, since both the possessor and the demonstrative are tonally free, and since the {L} overlay on the noun could be due to either as controller. However, in Poss-N-Num and Poss-N-'all', the possessor clearly controls tones on the noun (though not on the numeral or quantifier), since numerals and 'all' are not tonosyntactic controllers. Moreover, in Poss-N-Adj, the possessor controls tone-lowering on the entire N-Adj sequence, so that even a {H}-toned adjective is dropped to {L} along with the preceding noun.

The outputs shown in (160) are subject to subsequent adjustments by Rhythmic Tone-Raising, which raises the tones of the possessed noun to {H}

when the entire possessor NP is $\{L\}$ -toned, as when this possessor is an undetermined $\{L\}$ -toned noun or an undetermined N-Adj combination with a $\{L\}$ -toned adjective. The (phonetic) outputs are then Poss N_H Adj_L, Poss N_H Dem, Poss N_H Num, and Poss N_H 'all'. The symbol 'placed at the left edge of the tone-raised word expresses this in the analytical formulae, e.g. Poss L [†N Adj], where by convention it is understood that the overlay $\{L\}$ applies before Rhythmic Tone-Raising, and that tone-raising is limited to one word whereas $\{L\}$ here affects the two-word bracketed string.

Inalienable possession is always pronominal in form, since even a preposed nonpronominal possessor must be resumed by a 3Sg or 3Pl pronominal, which functions as the immediate possessor. In (161), the nonpronominal possessor is assumed to be singular, so it is resumed by 3Sg *nà*. The tonosyntax is clearest for inalienably possessed nouns (kin terms) that take {LH} rather than {H} as the possessor-controlled overlay, since the {LH} overlay is audibly distinct from the {L} overlay imposed by right-to-left controllers. Inner brackets show controller-target pairs.

(161) Inalienable possession, with {LH} as possessor-controlled overlay

```
sequence
                              output
                                                     analysis
a. no modifiers
                                                     Poss [nà LHN]
    Poss 3SgP-N
                              Poss nà N<sub>LH</sub>
b. noun is tonosyntactically controlled by the modifier
                                                     Poss [n\hat{a}[N^L Adj]]
    Poss 3SgP-N-Adi
                              Poss nà N<sub>L</sub> Adj
                                                     Poss [n\hat{a}[N^L Dem]]
    Poss 3SgP-N-Dem
                              Poss nà N<sub>L</sub> Dem
c. noun is tonosyntactically controlled by the possessor
                              Poss n\grave{a} N<sub>LH</sub> Num Poss [[n\grave{a} LHN] Num]
    Poss 3SgP-N-Num
```

Poss nà N_{LH} 'all'

Poss [[nà LHN] 'all']

In (161), we see that the inalienable possessor controls its {LH} overlay on the possessed noun only when there is no right-to-left controller, i.e. when the noun is unmodified or when it is followed only by a numeral or quantifier (the latter do not control tones). When there is a right-to-left controller, viz., a modifying adjective or a demonstrative, the **right-to-left controller is dominant**, and imposes its {L} contour on the noun. The domain of control, however, does not extend across the noun to the possessor itself, which remains tonally free.

Poss 3SgP-N-'all'

6.2 Possessives

A distinction is made between alienable and inalienable (kinship) nouns. For inalienables see §6.2.3, below. Among alienables there is a further syntactic distinction between inanimate and animate possessed nouns, but only when the possessor is a pronoun.

6.2.1 Alienable possession with noun-headed NP possessor

There are two ways to combine a preposed nonpronominal alienable possessor X with a possessed NP Y. One is by juxtaposition: X Y. The other involves an intervening possessive morpheme \hat{y} , hence X \hat{y} Y, cf. Jamsay $m\hat{a}$ and Tommo So $m\hat{o}$. In both constructions, the possessed NP is subject to a tone overlay.

6.2.1.1 Construction [X Y] without intervening $\dot{\eta}$

When an alienable (or for that matter inalienable) noun is possessed by a **nonpronominal NP**, the order is **possessor-possessed**. The possessor has the form, tonally and otherwise, of a normal NP. It may have, for example, its own definite morpheme. There is no genitive morpheme.

However, the lexical tones of the possessed noun (including the plural suffix, if present) are erased, being replaced by a **tone overlay**, either {H} or {L} melody. The choice between the two overlays correlates (for alienable possession) with the tones of the possessor. If the latter is entirely {L}-toned, the possessed noun gets {H} overlay. This is possible when the possessor is an undetermined {L}-toned noun, or a N-Adj combination with lexically {L}-toned adjective. All possessors containing a H-tone, including all definite NPs, control {L} overlay on the possessed noun.

Because there is a clear phonological basis for the choice among alienable possessor-controlled $\{H\}$ and $\{L\}$, one is sorely tempted to handle this by Rhythmic Tone-Raising (§3.8.4.2). The idea would be that $\{L\}$ is the only possessor-controlled overlay, and that its output is subject to subsequent tone rules. However, Rhythmic Tone-Raising normally affects only the first syllable on the second of two consecutive $\{L\}$ -toned words, while the possessor-controlled $\{H\}$ overlay continues to the end of the stem of the possessed noun. Furthermore, if the noun is followed by an adjective, the $\{H\}$ overlay is realized as HN LAdj . This suggests that the $\{H\}$ overlay is just an abbreviated form of $\{HL\}$.

I will therefore recognize {L} and {HL}, the latter frequently truncated to {H}, as true tonosyntactic overlays for alienably possessed NPs, though the

choice between them requires reference to the tones of the possessor. We will see later that inalienables (kin terms) have their own rather different tone overlays, including {LH}.

```
is entirely {L}-toned contains a H-tone
overlay on possessed noun is...

{H}, reduced from {HL}

{L}
```

Examples with simple singular and animate plural noun possessors are in (163). The possessed nouns are 2516 'house', $\frac{\partial n}{\partial y}$ 'manner', and $\frac{\partial n}{\partial y}$ 'weeping, cry'. The possessors have their regular tones. In (163a), the possessed noun has {H} contour throughout. The possessed noun is {H}-toned after {L}-toned $\frac{\partial n}{\partial y}$ 'cows' (163c), but {L}-toned after plural nouns containing a H-tone either on the stem ('sheep-Pl') or on the animate plural suffix ('cows') (163b).

```
(163) a. possessor is {L}-toned singular noun
```

```
H<sup>P</sup>?áló
                                               'a sheep's house'
pὲ:
               <sup>H</sup>?źló
                                               'a cow's house'
nà:
               <sup>H</sup>áŋáy
                                               'a sheep's manner'
pὲ:
               <sup>H</sup>áŋáy
                                               'a cow's manner'
nà:
               H
Kódú
                                               'a sheep's cry'
pὲ:
               Hkódú
nà:
                                               'a cow's cry'
```

b. possessor is {L}-toned plural noun

```
nà:-mù Hánáy 'cows' manner'
nà:-mù Hkódú 'cows' cry'
nà:-mù H7616 'cows' house'
```

c. possessor is {L}-toned N-Adj sequence

```
n\grave{a}:^L p\grave{e}y \stackrel{H}{a}n\acute{a}y 'old cow's manner' r\grave{e}\hat{b}:^L p\grave{e}y \stackrel{H}{b}\acute{e} 'old goat's cry' old sheep's house'
```

d. possessor is singular noun containing a H-tone

e. possessor is plural noun containing a H-tone

```
pè:-mú <sup>L</sup>?∂lò 'sheep-Pl's house' 

²⁄∂né-mù <sup>L</sup>?∂lò 'goats' house'
```

```
pè:-múLàŋày'sheep-Pl's manner'lànê-mùlànày'goats' manner'pè:-múlkòdù'sheep-Pl's cry'lánê-mùlkòdù'goats' cry'
```

Examples of more complex possessors are in (164). A NP containing a definite morpheme always contains a H-tone, since if the rest of the NP is {L}-toned the definite morpheme becomes H by Rhythmic Tone-Raising (164a-b). Possessor NPs containing postnominal modifiers other than adjectives also have at least one H-tone, as with the demonstrative in (164c). This is also true of possessor NPs that are themselves alienably possessed NPs, as in (164d). Therefore the following possessed noun gets the {L} overlay when the possessor is any of these NP types.

- - b. $[p\hat{\epsilon}: ^{\dagger}g\hat{\epsilon}]$ Large $[sheep \quad Def.AnSg]$ Large [the) house of the sheep-Sg'
 - c. [\hat{an}^L \hat{\delta}ng\ellipselef] \quad \text{L?\delta}l\hat{\delta} \quad \text{lng\ellipselef} \quad \text{house} \quad \text{house} \quad \text{the} \quad \text{house of this man'} \quad \text{house} \quad \quad \text{house} \quad \text{house} \quad \quad \text{house} \quad \qquad \quad \quad \qq \quad \quad \qquad \quad \qq \quad \quad \quad \quad \qu
 - d. [săydù L?òlo wò] Ldèbù
 [S house Def.InanSg] roof
 '(the) roof of Seydou's house'

The possessed forms of a wider range of nouns are shown in (165). Note that even multisyllable possessed nouns have the full $\{H\}$ and $\{L\}$ contours.

(165) Forms of possessed nouns

```
{H}-toned
                                                                     {L}-toned
      gloss
                        noun
a. noun is {H}-toned
                                           H<sub>cíndá</sub>
                                                                    <sup>L</sup>cìndà
      'liver'
                        cíndá
                                           <sup>H</sup>yú
                                                                    <sup>L</sup>yù
      'millet'
                        γú
                                                                    <sup>Ľ</sup>?àlò
                                           H<sup>7</sup>26ló
      'house'
                         ?źló
```

```
b. noun is {HL}-toned
                                                            Lbù:dù
                                      Hbú:dú
                      bú:dù
     'money'
c. noun is {LH}-toned
                                      <sup>H</sup>bídέ
                                                             <sup>L</sup>bìdè
     'work'
                      bìdέ
                                      Hwálá
                                                             <sup>L</sup>wàlà
     'daba'
                      wàlá
d. noun is {LHL}-toned
                                      <sup>H</sup>témbén
                                                             <sup>L</sup>tèmbèn
     'brick'
                      tèmbên
                                      <sup>H</sup>ná-yyé
                                                             <sup>L</sup>nà-yyè
     'calf'
                      nă-vyè
                                      <sup>H</sup>wógótóró
                                                             <sup>L</sup>wògòtòrò
     'cart'
                      wògòtórò
e. noun is {L}-toned
                                      <sup>H</sup>†gón
H†ná:
     'gear'
                      gòn
     'cow'
                      nà:
```

The $\{H\}$ overlay applies **only to the first word** of a multi-word possessed NP. In particular, a following adjective is $\{L\}$ -toned whether the preceding noun shows the $\{L\}$ overlay, as in (166a), or the $\{H\}$ overlay, as in (166b). This brings out the underlying $\{HL\}$ quality of the apparent $\{H\}$ overlay in (166b).

b. yè HL [?616 pìlè wò] woman HL [house white Def.InanSg] 'the white house of a woman'

The {H} overlay on possessed nouns following {L}-toned possessor allow us to distinguish "possessive" compounds of type $(\bar{n}\ \hat{n})$ from true possessed NPs; see §5.1.5.

6.2.1.2 Genitive construction [[X $\dot{\eta}$] Y] and definite [[X $\dot{\eta}\eta\dot{\epsilon}$] $g\dot{\epsilon}$]

The genitive construction $[[X \hat{y}] Y]$ has an overt morpheme \hat{y} between the possessor X and the possessed NP Y. When Y is filled by an overt NP, the genitive morpheme is uncommon, but it is attested in texts in a few examples with referentially specific possessors. It cannot be used in the inalienable possessive construction, which has a resumptive pronominal pronoun preceding the possessed NP, as in [X [Pron Y]].

When Y is blank (i.e. in a headless possessed NP), the genitive morpheme is obligatory: $[[X \hat{y}]_{_}]$ 'X's $_$ '. Since \hat{y} always co-occurs with a non-null possessor, but may co-occur with a null possessed noun, it is bracketed with the possessor.

```
[ní:
(167)
        a.
                               [[zòmź
                                                           wò1
                                                                         nà],
                     gày]
                     Topic]
                               [[hare
                                           Gen
                                                           Def.InanSg] Loc],
                   [[làlì-yè L
                                          tíŋà-m
                                  ná]
                                                           nì]
                  [[expel-MP<sup>L</sup>
                                  Purp] cross-Impf
                                                          intending]
            'Now, they were about to cross over to Hare's (side) in order to
            drive (butterflies) away.' (excerpt from (835) in Text 4)
```

- b. [tà: 'fj] Lmènè [hyena Gen] Lfield 'Hyena's field'
- c. tà: Hméné hyena Hfield '(a) hyena('s) field'

In (167a), the omitted possessed noun Y is understood to refer to the field (or parcel of a larger field) belonging to Hare, who is a character in a tale. In (167b), an overt possessed noun is present, so the genitive morpheme is optional. The possessor 'hyena' is another character in a tale. Since 'hyena' is $\{L\}$ -toned, $\hat{\eta}$ undergoes Rhythmic Tone-Raising to $\hat{\eta}$. Because of this raising, either the possessor NP or $\hat{\eta}$ itself will always contain a H-tone, so the following possessed noun must have the $\{L\}$ overlay. Compare (167c) where bare $\{L\}$ -toned $t\hat{a}$: 'hyena' is the (semantically nonspecific) possessor, and the possessed noun therefore has the $\{H\}$ overlay.

When the possessed NP (Y) slot is otherwise empty, the genitive-marked possessor is usually followed by a definite morpheme $w\dot{o}$ (inanimate singular, animate plural) or $g\dot{\varepsilon}$ (inanimate plural, animate singular). The inanimate singular combination is phonologically regular $\dot{\eta} = w\dot{o}$, with $w\dot{o}$ cliticizing to $\dot{\eta}$, as in (168).

```
(168) [?\delta m \delta w \delta] pil\hat{\epsilon} = ..., [1SgP.InanSg Def.InanSg] white=it.is, [\delta x d\hat{u} \hat{\eta} = w \delta] black=it.is (Of two stones:) 'Mine is white, (whereas) Seydou's is black.' [for the predicates see §11.4.2]
```

Before $g\hat{\epsilon}$, however, a special allomorph $\hat{n}p\hat{\epsilon}$ is used. In (169), $\hat{n}p\hat{\epsilon}$ $g\hat{\epsilon}$ is animate singular.

```
(169) \int mi-v^n \dot{\varepsilon}
                     gè]
                                   sónò
                                              và
                                                       zó-Ø.
        [1SgP-An Def.AnSg]
                                                      have-3SgS,
                                   fat(n)
                                              Exist
                                                       zò-ń-Ø
        [săydù
                   'nμὲ
                                          sóηò
                           gè]
                           Def.AnSg]
                                                      have-StatNeg-3SgS
        [S
                   Gen
                                          fat(n)
        (Of two cows:) 'Mine has (lots of) fat (=is plump), (whereas) Seydou's
        has no fat (=is lean).'
```

săydù nnê gê can also be used in inanimate plural sense: 'Seydou's (things)'.

If Seydou has more than one cow, the relevant (animate plural) form is pluralized as $s \times d = w$, containing the regular animate plural suffix.

 $\hat{n}p\hat{e}$ is most likely etymologically composite, containing genitive * $\hat{\eta}$ and *ye animacy-number classifier ('thing-Pl' or 'critter-Sg'). In the form -npé, this morpheme also occurs optionally in imperfective relative-clause verbs like wánné 'see(s)', see (587-89) in §14.1.9.

I have one textual example (170a) where a pronoun plus genitive $\hat{\eta}$ precedes (!) an alienable noun, which is tone-dropped as after a preposed nonpronominal possessor. $\hat{sir}^n\hat{u}$ - η is already lexically {L}-toned, but I was able to elicit other examples of preposed pronominal possessors followed by an audible tone-dropped possessed noun (170b). Examples like (170a-b) with preposed alienable pronominal possessor never appeared in elicitation. In theory, such examples should reflect stack possession, e.g. [your __'s X]. Both $n\hat{a}$ - $\hat{\eta}$ (170a) and \hat{s} - \hat{y} ^{$n\hat{\varepsilon}$} (170b) were heard with a final falling tone, contrast $n\hat{a}$ - η and \hat{s} -y^{$n\hat{\varepsilon}$} as postnominal possessors. This suggests an affinity with genitive $\hat{\eta}$ used after nonpronominal possessors.

```
(170) a. n\acute{a}-\grave{\eta} ^{L}s\grave{\imath}r^{n}\grave{\upsilon}-\eta [3Sg-Poss ^{L}be.full(of.food)-Nom 'his getting full (of food)' (excerpt from (810) in Text 2)

b. \acute{\delta}-y^{n}\grave{\epsilon} ^{L}?\grave{\eth}l\grave{o} (g\grave{\epsilon}) ^{L}2SgP-InanPl ^{L}house (Def.InanPl) 'your-Sg houses' (<?\eth l\acute{o})
```

See also *ná-ŋ wò* 'his (one)' with omitted object after preposed pronominal possessor in (835) in Text 4.

6.2.2 Alienable possession with pronominal possessor

For all alienable possessed nouns, a **pronominal possessor** is expressed by a **possessor complex** that normally **follows the possessed noun** or N-Adj sequence. Most often the possessor also follows numerals (N-Num-Poss), but see §6.1.3 for exceptions. In complex combinations like N-Adj-Num-Poss, the order of the postnominal words becomes freer, since a possessor is a licensor for Adjective-Numeral Inversion and since a pronominal possessor may itself be affected by the reordering; see (156a-b) in §6.1.3.

The possessor complex takes different forms for any given possessor pronominal category, depending on intrinsic features (animacy, number) of the possessed NP. The possessor complexes have undergone considerable contraction over time, and their morphological structure is now less than fully transparent. However, most of the forms clearly derive from a possessive classifier construction of the type 'stone my-thing' or 'cow my-critter', where 'thing' and 'critter' are English renditions of inanimate and animate classifiers, respectively. For the pronominal possessor paradigms, see §4.3.3 above.

Examples with animate possessed nouns are in (171). The preceding possessed NP, maximally N-Adj-Num, has its regular tonal form. **Determiners and universal quantifiers follow** the possessor complex. If the possessed noun is animate plural, suffix $-m\dot{u}$ occurs on the N(-Adj) core and on the possessor complex.

```
(171) a. n\grave{a}: m\acute{i}-y^n\acute{e} g\grave{e} cow 1\text{SgP-An} Def.AnSg 'my cow'
```

- b. $n\grave{a}:-m\grave{u}$ $m\acute{\iota}-y^n\grave{\varepsilon}-m\grave{u}=w\grave{o}$ cow-AnPl 1SgP-An-AnPl=Def.AnPl 'my cows'
- c. $n\grave{a}:-m\grave{u}$ $m\acute{1}-y^n\grave{e}-m\grave{u}$ $b\acute{o}-t\acute{a}:nd\grave{u}-m\grave{u}=w\grave{o}$ cow-AnPl **1SgP-An-AnPl** An-three-Pl=Def.AnPl 'my three cows' [for this noncanonical linear order, see §6.1.3]
- d. $n\grave{a}:-m\grave{u}$ $b\acute{o}-t\acute{a}:nd\grave{u}$ $m\acute{i}-y^n\grave{e}-m\grave{u}$ $w\grave{o}$ cow-AnPl AnPl-three **1SgP-An-AnPl** Def.AnPl [=(c)]
- e. $[n\hat{a}:-m\hat{u} \quad m\hat{i}-y^n\hat{\epsilon}-m\hat{u}] \quad b\hat{o}-t\hat{a}:nd\hat{u}$ [cow-AnPl] **1SgP-An-AnPl**] An-three

'three of my (many) cows' (partitive)

Inanimate singular possessed nouns require a special set of pronominal possessor forms ending in $-\eta$, except for irregular 1Sg possessor portmanteau $2\delta m\delta$. For inanimate plural possessed NPs, the possessor has the same form with $-y^n\epsilon$ as for animate singular possessed NPs. See §4.3.3 for the paradigms. 1Sg possessor for inanimates is illustrated in (172).

```
(172) a. cìn 26m6
stone 1SgP.InanSg
'my stone'

b. cìn mí-yné
stone 1SgP-InanPl
'my stones'
```

For the use of the inanimate singular possessor forms as part of reflexives, as in 1Pl $k\acute{o}$ - $\gamma \acute{e}$ - η and 3rd person $k\acute{o}$ - \mathring{a} - η , see §18.1.

The combination of a noun (or N-Adj) plus postposed possessor can occur in two syntactic environments conducive to tone-dropping, viz., a) before a demonstrative and b) as internal head of a relative clause.

Before a demonstrative, most elicited examples of pronominally possessed alienables **do not drop tones**, so 'your house' (173a) and 'your houses' (173b) have the same tones they would have without the demonstrative. Here it appears that the N-(Adj-)Poss sequence constitutes a **tonosyntactic island**, symbol $\subset ... \supset$.

```
(173) a. C?áló
                           ó-ή⊃
                                                kó
                           2SgP-InanSg⊃
            ⊂house
                                                NearDist.InanSg
            'that house of yours-Sg'
        b. ⊂?áló
                           5-v<sup>n</sup>€\supset
                           2SgP-InanPl⊃
                                                NearDist.InanSg
            ⊂house
            'those houses of yours-Sg'
        c. \subset g \circ a:
                           ó-ή⊃
                                                kó
            ⊂granary
                           2SgP-InanSg⊃
                                                NearDist.InanSg
            'that granary of yours-Sg'
```

In the absence of the postposed possessor, there is no island effect, and the noun is systematically tone-dropped by an immediately following demonstrative: $\frac{\partial \partial}{\partial t} k \delta$ 'that house', $\frac{\partial}{\partial t} k \delta$ 'those houses'.

However, the **head NP in a relative clause** is usually tone-dropped in elicited utterances even when the head NP contains a pronominal possessor. In (174), the head NP 'your house' or 'your houses' was heard with a flat pitch lower than that of the relative-clause verb 'fall'.

```
(174)
        a. [[?àlò
                                                                    wò]
                           2SgP-InanSg]<sup>L</sup> fall-Perf2.Rel
                                                                    Def.InanSg]
             [house
             àmbá:
                           bò-Ø
             where?
                           be-3SgS
              'Where is your-Sg house that fell?'
                           \partial -v^n \hat{\varepsilon} l^L
                                             pílè-zó
                                                                    gè]
         b. [[?àlò
                           2SgP-InanPl]<sup>L</sup> fall-Perf2.Rel
                                                                    Def.InanPl]
             [[house
             àmbá:
                           bò-Ø
                           be-3SgS
             where?
              'Where are your-Sg houses that fell?'
```

Rarely, an alienable pronominal possessor precedes rather than follows a possessed noun. In this case, the noun has the same tone overlay as after a nonpronominal possessor. See §6.2.1.2 for examples.

6.2.3 Inalienable possession

6.2.3.1 Inalienable relationship terms with preposed pronominal possessor

True kin terms and a few other relationship terms ('friend') form a morphosyntactically distinct set that I refer to as **inalienable** nouns. These are usually possessed, but (like other nouns) they can also occur in absolute (unpossessed form), as in 'I (do not) have a(n) X'. The morphosyntax is illustrated in (175).

- (175) a. nì: †zó-nù-m mother have-ImpfNeg-1SgS 'I do not have a mother.'
 - b. mì Hní:
 1SgP Hmother
 'my mother'
 - c. \acute{o} Hní: 2SgP Hmother

'your-Sg mother'

The absolute form (with low-toned noun 'mother') is seen in (175a). This clause is entirely parallel to e.g. 'I do not have a house' with an alienable noun. The possessed forms, however, are quite different from those of alienable nouns. In (175b-c) we see that **the pronominal possessor precedes the inalienable noun**, and is not coupled with a possessive classifier. In (175d), we see that even a noun-headed NP possessor ('Seydou') must be combined with a **resumptive pronominal possessor** morpheme, here 3Sg. This construction is of the type "Seydou [his mother]," familiar to readers of English literature from the time of Ben Jonson. The effect is that possessed kin terms are **always immediately preceded by a pronominal possessor**.

Preposed pronominal possessor forms used with inalienables are those of the **proclitic** series, which are also used as preverbal subject pronouns. See (106) in §4.3.3 above for the paradigm. The tone of the pronouns (usually low, but high for 2Sg δ and for logophoric singular δ) does not affect the tone of the following kin term.

6.2.3.2 {H} and {LH} on possessed inalienables

In the possessed form, inalienable nouns are H-toned if in Cv: form, and either $\{H\}$ or $\{LH\}$ -toned (lexical choice) if prosodically heavier. The monosyllabic inalienables known to me are in (176). Animate plural $-m\dot{u}$ is shown in parentheses. Observe that $-m\dot{u}$ is included in the domain of the $\{H\}$ overlay.

(176) Cv: inalienable nouns with H-toned possessed form

absolute	after possessor	gloss
a. {H} to {H} zú:(-mù)	^H zú:(-mú)	'neighbor'
b. {L} to {H} nì:(-mù) dè:(-mù) sà:(-mù)	^H ní:(-mú) ^H dé:(-mú) ^H sá:(-mú)	'mother' 'father' 'sister (of man)'

Nonmonosyllabic inalienable nouns divide into two primary sets. One is **{H}-toned** when possessed (177).

(177) Nonmonosyllabic inalienable nouns with {H}-toned possessed form

```
absolute
                     after possessor
                                           gloss
a. \{L\} to \{H\}
  unsegmentable
                     H<sub>ÓZÓ(-mú)</sub>
    òzò(-mù)
                                           'younger same-sex sib'
                     Házá(-mú)
                                           '(man's) friend's wife' (and
    àzà(-mù)
                                           reciprocal)
                     Hsár<sup>n</sup>á(-mú)
                                           'brother (of a woman)'
    sàr<sup>n</sup>à(-mù)
                     Hsélá(-mú)
    sèlà(-mù)
                                           'concubine'
                     Hsézú(-mú)
    sèzù(-mù)
                                           'grandmother'(either side)
                     Hkúmbó(-mú)
    kùmbò(-mù)
                                           'great-great-grandparent'
                     Hámélé(-mú)
    àmèlè(-mù)
                                           'parent-in-law'
                     <sup>H</sup>kárágá(-mú)
                                           'agemate'
    kàràgà(-mù)
  composite
                     Hsézí-yé(-mú)
    sèzì-yè(-mù)
                                           'grandchild'
c. {LH} to {H}
  composite
                     <sup>H</sup>dé:-nέ(-mú)
    dè:-nέ(-mù)
                                           'father's younger brother'
                     Híyá-né(-mú)
    ìyà-né(-mù)
                                           'mother's younger sister'
```

Inalienables with **{LH} contour** when possessed are in (178). Since **{LH}** cannot be accounted for by tone-raising or by any ordinary phonological process, I recognize a **{LH}** overlay controlled by the possessor.

(178) Inalienable nouns with {LH}-toned possessed form

absolute	after possessor	gloss
a. {L} to {LH} lèzù(-mù) nèr ⁿ à(-mù) dèrè(-mù) bà-bà(-mù) nùŋò(-mù) gàlà-(mù) zèŋà(-mù)	LH lèzú(-mú) LH nèr ⁿ á(-mú) LH dèré(-mú) LH bà-bá(-mú) LH nùŋɔ́(-mú) LH nùŋɔ́(-mú) LH gàlá(-mú) LH zèŋá(-mú)	'maternal uncle' 'paternal aunt' 'elder same-sex sibling' 'grandfather' (either side) 'husband' 'brother-in-law' 'great-grandparent'

```
b. {LH} to {LH}

dìmbú(-mú)

LH dìmbú(-mú)

'concubine'
```

Since some inalienables appear with {H} when possessed and others appear with {LH} when possessed, some lexicalization of the possessed forms must be recognized. Lexicalization is common typologically for relationship terms, which are more often possessed than not. So the possessor "controls" the appearance of some "possessed" tone overlay, but the pattern itself is a lexical feature of the relationship term.

There is one relationship term, borrowed from Fulfulde, that has {HL} tones whether unpossessed or possessed (179).

```
(179) a. tśgàrà 'homonym (person with the same personal name)' b. mì tśgàrà 'my homonym'
```

Grammatically specialized noun *tò*: 'agemate, peer, counterpart' in reciprocal-like expressions, see (735) in §18.3.1, remains L-toned after a pronominal possessor (*ó tò*: 'your agemate').

Because inalienables can have either {H} or {LH} when possessed, it does not appear to be feasible to account for the tone changes by means of a more general rule raising tones on elements that follow pronominal clitics. This could work for {H} but not for {LH}; see the discussion of Post-Pronominal Tone-Raising (§3.8.4.1). I therefore consider the tone overlays to be tonosyntactic (or at least tonomorphological) in nature, and will use the H superscript accordingly.

6.2.3.3 Special vocatives for kin

A number of core kin categories have special vocative forms (cf. dad, mom). Most have {LH} or {H} tone patterns suggesting a covert 1Sg possessor. Some are Cv-Cv reduplications. Data are in (180). For 'mother' two forms are in use, yà-yá and íyà, both suppletive (cf. nì: 'mother').

```
(180)
                                                  regular term (unpossessed)
            vocative
                           gloss
        a. {LH} toned
          suppletive and reduplicated
                           'mother'
            yà-yá
                                                  nì:
            mbó:
                           '(my) friend'
                                                  làlù-ŋ
            wâv
                           '(my) friend'
                                                  làlù-ŋ
          reduplicated from Cv: stem
```

```
dè-dé
                     'father'
                                              dè:
  preserves reduplicated Cv-Cv stem
    bà-bá
                     'grandfather'
                                              bà-bà
  unreduplicated CvCv
    sèzú
                     'grandmother'
                                              sèzù
    dèré
                     'elder sib'
                                              dèrè
b. {H} toned
                    younger sib'
    ózó
                                              òzò
                     '(man's) sister'
    sá:
                                              sà:
c. other
  suppletive
                     'mother'
    íyà
                                              nì:
    bâ:y<sup>n</sup>
                     'paternal kinsman'
                                              dé:-ŋ (§6.2.3.5)
  irregular
    nâ:y<sup>n</sup>
                     'maternal kinsman'
                                              nì-yé-ŋ (§6.2.3.5)
```

6.2.3.4 Relationship terms with -*n* in unpossessed form only

Distinct possessed and unpossessed forms of two relationship terms also involve **segmental differences** where a final -*ŋ* appears only in the unpossessed form (181). I hyphenate this as a suffix but it could be considered part of the stem.

(181) Inalienable nouns (final nasal dropped)

absolute	possessed	gloss
a. {L} to {H} tìyè-ŋ(-mù)	^H tíyé(-mú)	'cross-cousin'
b. {L} to {LH} <i>làlù-ŋ(-mù)</i>	^{LH} <i>lăl(-mú)</i>	'friend, pal'

See also \vec{n} - $y\acute{e}$ -y 'maternal kinsman' and $d\acute{e}$:-y 'paternal kinsman' in §6.2.3.5 just below. It is likely that 'cross-cousin' contains $-y\grave{e}$ 'child', though the root #ti- is not otherwise attested in Yanda Dom (but cf. Najamba $t\check{x}$: 'cross-cousin').

6.2.3.5 Compound kin terms with -yè 'child'

In (182) I present several pairs of simple kin terms and compounds with $-y\dot{e}$ or variant, originally a compound final meaning 'child', see §5.1.8. For $-\eta$ in the unpossessed forms in (182c-d), see §6.2.3.4 just above. Parenthesized $-m\dot{u}$ or $-m\dot{u}$ is the animate plural suffix.

```
(182)
               unpossessed
                                      'my'
                                                                  gloss
                                      mì <sup>H</sup>sézú(-mú)
mì <sup>H</sup>sézí-yé(-mú)
          a. sèzù(-mù)
                                                                  'grandmother'
               sèzì-yè(-mù)
                                                                  'grandchild'
                                      mì Hsá:(-mú)
mí H LHsà-yé(-mù)
          b. sà:(-mù)
                                                                  'sister'
               sà-yè(-mù)
                                                                   'sister's child'
                                      mì <sup>H</sup>ní:(-mú)
          c. nì:(-mù)
                                                                  'mother'
                                      mí<sup>H</sup> LHnì-yé(-mù)
               nì-yé-η(-mù)
                                                                  'maternal kinsman'
               (for vocative n\hat{a}:y^n see §6.2.3.3)
                                     mì <sup>H</sup>dé:(-mú)
mí <sup>H</sup> LH dě:(-mù)
          d. dè:(-mù)
                                                                  'father'
                                                                   'paternal kinsman'
               dé:-η(-mù)
               (unpossessed plural also dé:-mù)
               (for vocative b\hat{a}:y^n see §6.2.3.3)
          e. [bàngè 'friendship between two men']
               bar^n i - v^n \epsilon(-mu)
                                     mi bar^n i - v^n \epsilon(-mu)
                                                                  'father's friend'
```

Since $d\acute{e}:-\eta$ 'paternal kinsman' is evidently parallel to $n\grave{i}-y\acute{e}-\eta$ 'maternal kinsman', it is presumably a deformation of *dè:-(i)yè, but segmentation is no longer transparent.

Normally L-toned pronominal possessors (1Sg m), 1Pl yè, 2Pl wò, 3Sg nà, bò) are **raised to H-tone** before the -(i)yè compounds in (182b-d) but not before those in (182a,e). This tone-raising allows an audible distinction between mì dé: 'my father' and mí dé: 'my paternal kinsman' in (182d). mí dé: is pronounced close to [mí.dé:] with downstepped high tone on the second syllable.

6.2.3.6 Senior/junior kin compounds (-dìyà, -nè)

Same-sex sibling terms distinguish senior from junior lexically: dèrè 'elder same-sex sibling', 3z3 'younger same-sex sibling'.

However, there is a compound-like senior/junior distinction in terms for same-sex siblings of one's father or mother, and for co-wives of a man, using -diyà (senior) and -nè (junior). -diyà is a compound-final variant of adjective diyá 'grown-up, adult'. -nè has no transparent relationship to any adjective (a historical connection to ènè 'child' is questionable).

```
(183)
             unpossessed
                                 'my'
                                                          gloss
                                 mì <sup>H</sup>dé:(-mú)
mì <sup>H</sup>dé:-dìyà(-mù)
         a. dè:(-mù)
                                                          'father'
             dè-dìyà(-mù)
                                                          'father's elder brother
                                 mì Hdé:-né(-mú)
             dè:-nè(-mù)
                                                          'father's younger brother'
        b. iya \sim ya-ya
                                                          'mother (vocative)'
             ìyà-dìyà(-mù)
                                 mì Híyá-díyá(-mú)
                                                          'mother's elder sister'
                                 mì Híyá-né(-mú)
             ìyà-nê(-mù)
                                                          'mother's younger sister'
```

An assistant pronounced -dìyà with low tones in possessed mì Hdé:-dìyà (183a), but with high tones in mì Híyá-díyá (183b).

ìyà-dìyà and *ìyà-nè* also denote 'mother's (senior/junior) co-wife'. Since men may have two or more wives, this relationship is common. The seniority relationship among the wives can be important. Because of jealousies among co-wives, each of whom is naturally concerned with protecting their own children, 'mother's co-wife' corresponds culturally to 'step-mother' in European societies, especially when one's own mother is deceased.

With kin (and other human) terms that do not ordinarily make a seniority distinction, *dìyá* 'senior' and *bè-bélè* 'small (hence junior)' can be added **as ordinary adjectives** when it is necessary to specify seniority. Note the tones. Examples are *yè ^L dìyá* 'senior woman (=wife)' versus *yè ^L bè-bélè* 'junior woman (=wife)', and *sà: ^L dìyá* 'older sister (of a man)' versus *sà: ^L bè-bélè* 'younger sister (of a man)'. These combinations are treated tonosyntactically like other N-Adj combinations: inalienable *mì sà: ^L bè-bélè* 'my younger sister' (adjective controls tones on noun, no possessor control), alienable *săydù ^L[yè bè-bèlè]* 'Seydou's younger wife' (possessor controls {L} on N-Adj combination).

6.2.3.7 Other composite kin terms

Above great-great-grandparent, the apical male ancestor (i.e. great-great-grandfather) is called *sún-tábú-lè*, which is slightly different from (but still transparently associated with) the expression 'don't touch (his) ear!', cf. *sún*

'ear' and *tábú*- 'touch' (prohibitive *tábú-là*). This is because genealogical relationships based on even more distant ancestral relationships are disregarded.

'(Woman's) co-wife', i.e. another woman married to the same husband, is expressed by a compound of $y\hat{\epsilon}$ 'woman' and a variant of $l\hat{a}l\hat{u}$ - η ' friend, pal', hence unpossessed $y\hat{\epsilon}$ - $l\hat{a}l$, plural $y\hat{\epsilon}$ - $l\hat{a}l$ - $m\hat{u}$. Unlike $y\hat{\epsilon}$ 'woman' itself, the compound is treated as inalienable. When possessed, the compound initial is H-toned and the final L-toned: $m\hat{\iota}$ HL $y\hat{\epsilon}$ - $l\hat{a}l$ 'my co-wife'.

6.2.3.8 Plural suffix $-v\hat{\epsilon}$ after some kin terms

An unusual **plural morpheme** $-y\hat{\epsilon}$ may follow certain kin terms, as in $l\hat{\epsilon}z\acute{u}-y\hat{\epsilon}$ '(my) maternal uncles'. This form, without an overt possessor, may be used as a formal vocative, or in other contexts as an alternative to an overtly possessed (and perhaps definite) form such as $m\hat{\iota}^{LH}l\hat{\epsilon}z\acute{u}-m\grave{u}$ wô 'my maternal uncles'. The morpheme $-y\hat{\epsilon}$ is also attested in $g\hat{a}l\acute{a}-y\hat{\epsilon}$ 'brothers-in-law', $d\hat{\epsilon}-d\acute{\epsilon}-y\hat{\epsilon}$ 'fathers', $b\hat{a}-b\acute{a}-y\hat{\epsilon}$ 'grandfathers', $n\hat{\epsilon}r^n\acute{a}-y\hat{\epsilon}$ 'paternal aunts', $s\hat{\epsilon}z\acute{u}-y\hat{\epsilon}$ 'grandmothers', and the vocative-only $mb\acute{b}:-y\hat{\epsilon}$ and $w\hat{a}y-y\hat{\epsilon}$ 'my friends!'.

An informant rejected combinations of $-y\hat{e}$ with $s\hat{a}$: 'sister (of man)', $l\hat{a}l\hat{u}$ -g 'friend, pal', $t\hat{i}y\hat{e}$ -g 'cousin', $n\hat{i}$: 'mother', and $s\hat{a}r^n\hat{a}$ 'brother (of a woman)'. One issue with the $-y\hat{e}$ suffix is the possibility of confusion with a possessed form of $y\hat{e}$ 'woman; wife', which may explain why the suffix $-y\hat{e}$ is added to the unpossessed form of the kin term; compare $l\hat{e}z\hat{u}$ - $y\hat{e}$ '(my) uncles' with $m\hat{i}$ LH $l\hat{e}z\hat{u}$ Ly \hat{e} 'my uncle's wife'.

6.2.3.9 Defective and grammatically alienable kin terms

No unpossessed form was elicitable for $t\acute{o}$ 'agemate', which occurs only in possessed form: $m\grave{i}^Ht\acute{o}$ 'my agemate'. The synonym $k\grave{a}r\grave{a}g\grave{a}$ can be used in both unpossessed and possessed contexts.

Excluded from the inalienable category are nouns whose kinship function is secondary: $y\hat{e}$ 'woman' in the possessed sense 'wife', $\hat{e}n\hat{e}$ 'child' (plural $\hat{e}n\hat{e}$) in the possessed sense 'child (offspring)'. These nouns are treated as regular alienables and take postposed pronominal possessors even in kinship senses ($y\hat{e}m\hat{i}-y^n\hat{e}$ 'my wife', $\hat{e}n\hat{e}$ 5- $y^n\hat{e}$ 'your-Sg child').

6.2.4 Treatment of modifiers following a possessed noun

6.2.4.1 Possessor-Noun-Adjective

For unpossessed N-Adj combinations, see §6.3 below.

In an **alienable** possessive, the only preposed possessors are nonpronominal. Depending on its tones, the possessor controls either {H} or {L} overlay on the following possessed noun, hence [Poss HN] or [Poss LN]. In either case, a following modifying adjective is {L}-toned, resulting in [Poss HN LAdj] and [Poss LN LAdj]]. This suggests that the apparent {H} overlay is really {HL}, reduced to {H} when it applies only to a noun. We can therefore schematize the two types as [Poss LN (Adj)]], with a flat {L} overlay extending over the bracketed string, and as [Poss HLN (Adj)]] with a contour {HL} overlay whose L-component is not always realized. In its full form, [Poss HLN Adj]] including the adjective, the tone break from H- to L-tone occurs at the internal word boundary, regardless of how many syllables the noun and adjective have. This means that the N-Adj boundary must be accessible to the rules determining the phonological realization of the contour tone overlay.

The $\{L\}$ overlay is illustrated in (184). The adjectives in (184a-d) are all audibly tone-lowered since their lexical forms contain a H-tone. The nouns in (184c-d) are also audibly tone-lowered. Based on these clear cases, I attribute (covert) tone-lowering to nouns and adjectives that happen to be lexically $\{L\}$ -tones, like \widehat{cin} 'stone'.

```
(184) a. án <sup>L</sup>[cìn jèmè (wò)]
man <sup>L</sup>[stone black (Def.InanSg)]
'the black stone of a man' (cìn, jèmé)
```

- b. [yé gè] L[cìn jèmè wò]
 [woman Def.AnSg] L[stone black Def.InanSg]
 'the black stone of the woman' (cìn, jèmé)
- c. săydù ^L[înjù ɔ̂jù wò]
 S ^L[water hot Def.InanSg]
 'Seydou's hot water' (ínjú, ɔ̂jú)
- d. săydù ^L[zèmè bìn gè]
 S ^L[blacksmith fat Def.AnSg]
 'Seydou's fat blacksmith' (zèmé, bǐn)

The {HL} overlay is illustrated in (185).

- (185) a. $y\hat{e}$ HL [cín jèmè (wò)] woman HL [stone black (Def.InanSg)] 'the black stone of a woman' (cìn, jèmé)
 - b. $y\hat{e}$ $\stackrel{HL}{=}$ $[\acute{in}j\acute{u} \quad \acute{o}j\grave{u} \quad w\acute{o}]$ woman $\stackrel{HL}{=}$ [water hot Def.InanSg] 'a woman's hot water' $(\acute{in}j\acute{u}, \grave{o}j\acute{u})$
 - c. $y\hat{e}$ $^{HL}[p\hat{e}: ^{L}\grave{a}m \qquad g\hat{e}]$ woman $^{HL}[sheep ^{L}plump \qquad Def.AnSg]$ 'a woman's plump sheep-Sg' $(p\hat{e}:, \grave{a}m)$

In **inalienable** possessives, the sequence Poss-N-Adj with nonpronominal possessor is phrased as $[Poss [[na \ N]^L \ Adj]]$ with resumptive 3Sg pronoun na if the possessor is singular, and as $[Poss [[bo \ N]^L \ Adj]]]$ with resumptive 3Pl pronoun bo if the possessor is plural. The nonpronominal possessor NP and the bracketed possessive are independent of each other in form, so we can disregard the possessor NP. The resulting general formula for an inalienable possessive is therefore $[[Pron \ N]^L \ Adj]$ with a preposed pronominal as possessor. The noun is $\{L\}$ -toned, but the adjective has its lexical tones. In the absence of the adjective, the noun has a $\{H\}$ or $\{LH\}$ overlay controlled by the possessor. Therefore the $\{L\}$ overlay on the noun in $[[Pron \ N]^L \ Adj]$ must be controlled by the adjective, not the possessor. We can bracket this tonosyntactically as $[Pron \ N]^L \ Adj]$.

Notably, a H-toned pronominal proclitic becomes L-toned in this inalienable construction. We can see this with 2Sg \acute{o} dropping to \grave{o}^L and 3Logophoric \acute{a} dropping to \grave{a}^L in (186). This is the basis for the bracketing [[Pron N]^L Adj], which shows that the pronoun-noun combination is targeted tonosyntactically as a unit by the adjective.

- (186) a. $[\hat{o} \quad l\hat{e}z\hat{u}]^L \quad g\hat{a}b\hat{u} \quad {}^{\dagger}g\hat{e}$ $2\text{SgP} \quad \text{uncle}^L \quad \text{tall} \quad \text{Def.AnSg}$ 'your-Sg tall uncle' $(l\hat{e}z\hat{u}, \, \delta \, l\hat{e}z\hat{u}, \, g\hat{a}b\hat{u})$
 - b. [[à lèzù]^L gàbù †gé] wó-m-ù wà
 [LogoSgP uncle^L tall Def.AnSg] come-Impf-3SgS say
 'He_v said that his_x tall uncle is coming.' (lèzù, á lèzú, gàbú)

Based on the preceding considerations, I apply the same bracketing to inalienable combinations involving pronominals that are already L-toned, like 1Sg mì in (187).

(187) a.
$$[mi]$$
 $l\dot{e}z\dot{u}]^{L}$ $siy\dot{e}$ $g\dot{e}$

[1SgP uncle]^L good Def.AnSg 'my good uncle' (*lèzù*, *mì lèzú*, *síyé*)

- b. [mì lèzù]^L sálá-mù = wò
 [1SgP uncle]^L bad-AnPl=Def.AnPl
 'my bad uncles' (lèzù-mù, mì lèzú-mú, sálá)
- c. [mì òzò]^L bǐn gè
 [1SgP younger.sib]^L fat Def.AnSg
 'my fat younger (same-sex) sibling' (òzò, mì ózó, bǐn)
 [variant [mì òzò]^L bìn †gé]
- d. [m] $z \hat{u}: \hat{j}^L$ $s \hat{i} y \hat{e}$ $[1 \text{SgP} \quad \text{neighbor}]^L$ good 'my good neighbor' $(z \hat{u}:, m) z \hat{u}:, s \hat{i} y \hat{e})$

Adjectives with {LH} lexical melody, like $b\check{n}$ 'fat' and $g\grave{a}b\acute{u}$ 'tall', are often flattened to {L} in such combinations before a definite morpheme, which then becomes H-toned. This also happens optionally with unpossessed N-Adj-Def sequences, so it can be disregarded here. {H}-toned adjectives like $s\acute{i}y\acute{e}$ do not drop to {L}, so this is a more or less phonological (rather than tonosyntactic) issue.

- (188) a. mì $l\grave{e}z\grave{u}^L$ $g\grave{a}b\grave{u}$ ${}^{\dagger}g\acute{e}$ 1 SgP uncle L tall Def.AnSg 'my tall uncle' ($l\grave{e}z\grave{u}$, mì $l\grave{e}z\acute{u}$, $g\grave{a}b\acute{u}$)
 - b. $s \check{a} y d \grave{u}$ $[n \grave{a} \quad l \grave{e} z \grave{u}^L \quad b \grave{n} \quad {}^{\dagger} g \acute{e}]$ S $[3 \text{SgP} \quad \text{uncle}^L \quad \text{fat} \quad \text{Def.AnSg}]$ 'Seydou's nasty uncle' $(l \grave{e} z \grave{u}, n \grave{a} l \grave{e} z \acute{u}, b \check{m}]$

As noted in §6.2.3.5 and §3.8.4.4, a few composite kin terms idiosyncratically raise preceding L-toned pronominal possessors to H-toned. In these cases, when an adjective is added, the possessor remains H-toned. So from $mi^{H \ LH} s\grave{a} - y\acute{e}$ 'my sister's child' we get (189). Here the adjective controls {L} on the kin term but does not affect the pronominal possessor.

(189) mi^H $s\grave{a}-y\grave{e}^L$ $siy\acute{e}$ $g\grave{e}$ 1SgP sister-child^(L) good Def.AnSg 'my good nephew/niece'

For a schematic summary of Poss-N-Adj constructions and their tones, see §6.1.6.

6.2.4.2 Possessor-Noun-(Adjective-)Numeral

For unpossessed N-(Adj-)Num sequences, see §6.4 below.

Numerals are generally resistant to tone-dropping in Yanda Dom, except in relative-clause head NPs. In Poss-N-(Adj-)Num combinations, the numeral retains its tones in my data.

Alienable possessives are illustrated in (190). The noun and any immediately following modifying adjective are tone-dropped by the possessor, but the numeral is tonally free (190a-b). When Poss-N-Adj-Num is inverted to Poss-N-Num-Adj, the tonosyntactic grouping appears to be in two blocks: [Poss H/LN] [Num^L Adj], as in (190c).

- (190) a. săydù ^L?ðlò yè-tá:ndù gè
 S ^Lhouse Inan-three Def.InanPl
 'Seydou's three houses' (?ŏló)
 - b. săydù ^Lnà: ^Ljèmè-mù á-tá:ndù S ^Lcow ^Lblack-AnPl An-three 'Seydou's three black cows' (nà:, jèmé)
 - c. săydù ^Lnà:-mù á-tà:ndù ^L jèmé-mù S ^Lcow-AnPl An-three ^L black-AnPl 'Seydou's three black cows' (after Adj-Num Inversion)
 - d. yè H2616 yè-kúlé wò woman Hhouse Inan-six Def.InanSg 'the six houses of a woman'

Inalienable examples are in (191). As with alienable possession, the numeral is tonally free.

- (191) a. sé:dù [nà LH lèzú-mù á-tá:ndù-mù = wò]
 S [3SgP LH uncle-AnPl An-three-AnPl=Def.AnPl]
 'Seydou's three uncles'
 - b. mì Hdé:-mú á-tá:ndù 1SgP Hfather-AnPl An-three 'my three fathers'

A numeral is also unaffected by a following (or preceding) **postnominal pronominal possessor** (192). This is as we would expect, since postnominal possessors do not normally control tone overlays.

- (192) a. *?óló yè-tá:ndù mí-yⁿé* house Inan-three 1SgP-InanPl 'my three houses'
 - b. $n\check{a}$ - $yy\grave{e}$ $b\acute{o}$ - $k\acute{u}l\acute{e}$ $m\acute{t}$ - $y^n\grave{e}$ - $m\grave{u}$ = $w\grave{o}$ cow-child An-six 1SgP-AnPl-AnPl=Def.AnPl 'my six calves'

6.2.4.3 Possessor-Noun-...-Demonstrative

A demonstrative is not tone-dropped under the control of a possessor. **Alienable** examples are in (193). In most cases, it is difficult to determine whether the possessor or the demonstrative is responsible for the {L} overlay on the noun (or N-Adj sequence), so as a hedge I put an ^L diacritic on both edges of tone-dropped word or phrase. However, in (193b) the simple common-noun possessor imposed {H} overlay on the possessed noun, suggesting that immediately preposed nonpronominal possessors trump following demonstratives as controllers.

- (193) a. săydù Louse Prox.InanSg 'this house of Seydou's' (2516)
 - b. $y\dot{e} / \acute{a}n$ $^{H}p\acute{e}$: $\grave{\partial}\eta g\acute{e}$ woman/man H sheep Prox.AnSg 'this sheep of a woman/man' ($p\dot{e}$:)
 - c. [zèmé gè] Lgùlà Č: [blacksmith Def.AnSg] Lax Prox.InanPl 'these axes of a blacksmith' (gùlà)
 - d. $s \check{a} y d \mathring{u}$ $^{L} [? \grave{e}] \mathring{o}$ $p \grave{i} l \grave{e}]^{L}$ $\mathring{g} \acute{g} \acute{o}$

S L[house white] Prox.InanSg 'this white house of Seydou's' (2516, pílé)

Inalienable examples are in (194). The form of the possessor pronoun plus the possessed noun, without the demonstrative, is given in parentheses after the free translation. In Poss-N-Dem and Poss-N-(Adj-)Dem, the demonstrative controls $\{L\}$ on the possessed noun or N-Adj. The domain of this $\{L\}$ extends leftward to the possessor pronoun, so $2Sg\ \emph{o}$ drops to \emph{o}^L in (194b). If a numeral is added, the domain of demonstrative control may extends to the possessed noun (194c). Overall, these data show that the preposed pronominal possessor (which occurs in inalienables) has weaker tonosyntactic control power than an immediately preposed nonpronominal possessor (which occurs in alienables).

- (194) a. $s \check{a} y d \check{u}$ [$n \grave{a}$ $\eth z \eth^L$ $\eth n g \acute{e}$]

 Seydou [3SgP younger.sib^L Prox.AnSg]

 'this younger brother of Seydou's' ($n \grave{a}^H \eth z \eth$)
 - b. $[\grave{o} \qquad d\grave{e}:]^L \qquad \grave{o}m\acute{y}^n\grave{e}$ $[2SgP \qquad father]^L \qquad Prox.AnPl$ 'these fathers of yours $(\acute{o}^H d\acute{e}:-m\acute{u})$
 - c. $\frac{\delta}{\delta}$ $\frac{[\partial z \partial}{\delta}$ $\frac{\delta}{\delta}$ $\frac{\delta}{\delta}$ $\frac{\partial u}{\partial k}$ $\frac{\partial u}{\partial$

There is likewise no tonal change in a demonstrative due to a postnominal possessor, or vice versa (195).

- (195) a. ?óló ó-ý ỳgó house 2SgP-InanSg Prox.InanSg 'this house of yours-Sg'
 - b. $p\hat{\epsilon}$: δ - $y^n\hat{\epsilon}$ δ ng $\hat{\epsilon}$ sheep 2SgP-AnSg Prox.AnSg 'this sheep of yours-Sg'

6.2.4.4 Possessor-Noun-...-'all'

Universal quantifiers $c\hat{\epsilon}m$ and $p\hat{u} \rightarrow$ 'all' are not affected tonally by a NP-initial possessor. This applies to alienables (196a) and inalienables (196b).

b.
$$s \check{a} y d \grave{u}$$
 $[n \grave{a}$ $[n \grave{a}]$ $[a \grave{b} Z \acute{u} - m \grave{u} = w \grave{o}$ $p \acute{u} \rightarrow J$ $[a \grave{b} S]$ $[a \grave{b} S]$

6.2.5 Recursive possession

Recursive possession ([X's Y]'s Z] is unproblematic. If Z is an inalienable, [X's Y] (like any inalienable possessor) must be resumed by a 3Sg or 3Pl possessor pronoun preceding Z. Because the inner possessed NP [X's Y] always contains a H-tone, Z will show the canonical possessed tone overlay, with no complications from Rhythmic Tone-Raising.

- (197) a. [mì Hdé:] L'àlò [1SgP Hfather] Lhouse 'my father's house' (dè:, ?\delta\delta)
 - b. $[m\hat{i}]$ $[n\hat{a}]$ $[n\hat{a}]$ $[l^{\text{H}} l\hat{e}z\hat{u}]$ [1SgP] $[1\text{SgP$
 - c. [injè mí-yⁿé] ^Lkò: wò [dog 1SgP-AnSg] ^Lhead Def.InanSg 'my dog's head' (injè, kó:)
 - d. [mì Hdé:] Hní: [1SgP Hfather] Hmother 'my father's mother' (dè:, nì:)
 - e. [săydù [nà Hdé:]] Hní:

 [S [3SgP Hfather]] Hmother

 'Seydou's father's mother' (dè:, nì:)

Phonetically, the sequence of two {H}-toned possessed inalienable nouns, like 'father' and 'mother' in (197d-e), is articulated with a variable pitch downstep on the second noun.

6.3 Noun plus adjective

6.3.1 Noun plus regular adjective

This section discusses the form of simple N-Adj combinations. Representative modifying adjectives were listed in §4.5.1, above. Modifying adjectives immediately follow the modified noun. It is possible for more than one adjective to occur with a noun (198d). The sequence of a noun with any co-occurring adjectives, but excluding any determiners or quantifiers, is here called **core NP**. A core NP without further morphology can function as an indefinite NP in a sentence. Within a core NP, all nonfinal words are tone-dropped to {L}, while the final word retains its lexical tones. In some cases, like 'rope' in (198c-d), the lexical tone contour is already /L/ so there is no audible change.

(198) Core NPs

- a. $\frac{\partial n^L}{\partial man^L}$ old 'old man' $(\frac{\partial n}{\partial man})$
- b. màngòrò L gǒm mango L rotten 'rotten mango' (mángòrò)
- c. $sù\eta^L$ $j\`em\'e$ $rope^L$ black 'black rope' $(s\grave{u}\eta)$

For combinations of N-Adj with a preposed possessor, see §6.2.4.1 above.

6.3.2 Adjective gàmbúlè(-mù) ~ gàmbílè(-mù) 'certain (ones)'

The adjective glossed '(a) certain X' with a countable singular noun X, or 'some (of the) X' with a mass noun, is $g\grave{a}mb\acute{u}l\grave{e}\sim g\grave{a}mb\acute{u}l\grave{e}$. For animate 'certain Xs, some (but not all) Xs' with countable plurals, add suffix $-m\grave{u}$. Nouns are tone-dropped before $g\grave{a}mb\acute{u}l\grave{e}$, as before other true adjectives: $?\acute{a}n\acute{e}$ 'goat', $?\grave{a}n\grave{e}$ L $g\grave{a}mb\acute{u}l\grave{e}-m\grave{u}$ 'certain (=some) goats'.

This adjective selects a specific individual or subset from a larger set. Often it occurs twice in a parallelistic construction that exhaustively partitions the larger set. Free translations of the type 'some ..., (but/while) others ...' are appropriate.

ènè^L g amb i l e - m u = w o(199)b-έ:, yà children^L certain-AnPl=Def.AnPl Real be-3PIS $gàmbíl\grave{\epsilon}-m\grave{u}=w\grave{o}$ và ún-Ø certain-AnPl=Def.AnPl Real go.Perf-3PIS 'Some of the young people are (still) around, (while) some (others) have gone.' (èné)

6.3.3 Expansions of adjective

6.3.3.1 Adjective sequences

Two or more adjectives may co-occur in a NP. The linear ordering of two descriptive adjectives is free. For example, 'big' and 'white' can occur in either order (200a-b). Only the final adjective surfaces with its lexical tones. The preceding words are tone-dropped.

- (200) a. $[?\partial l\partial pil\hat{\epsilon}]^L$ $diy\hat{a}$ $w\hat{o}$ [house white] big Def.InanSg 'the big white house'
 - b. [?àlò dìyà]^L pílé wò [house big]^L white Def.InanSg [=(a)]
 - c. [sùŋ jèmê]^L dènù [rope black]^L short 'short black rope' (sùŋ, jèmê)
 - d [?əlò dìyà]^L jèmé
 [house big]^L black
 'short black rope' (?əló, dìyá)

Occasionally there is a clear bracketing relationship that forces a particular linear order, as when a N-Adj sequence is lexicalized or when an adjective like $g\grave{a}mb\acute{u}l\grave{\epsilon}$ 'certain (ones)' clearly has scope over the inner N-Adj combination.

6.3.3.2 Adjectival intensification ('very ADJ')

Some expressive adverbials function as lexicalized adjectival intensifiers. Compare English *snow white* and the like, but the expressive adverbials are not exemplar nouns as in English, and usually have no phonological connection with any ordinary lexical stems. Many adjectival intensifiers are included in the extensive list of expressive adverbials in §8.4.7.4-5, §8.4.7.7.

An adjectival intensifier may be used by itself (201a). When it combines with the associated ordinary adjective, the intensifier follows the adjective. The adjective is often tone-dropped, suggesting that the two combine in a compound-like fashion, with $\{L\}$ -toned initial. It is possible to elicit NPs with a definite morpheme following the intensifier, showing that the latter can function as part of a NP (201c). Animate plural - $m\dot{u}$ may be added to the intensifier in this combination (201d). However, the integration of intensifiers into NPs is probably more typical of elicited than of naturally-occurring utterances.

- (201) a. kúsú-kúsú bò-∅ very.black be-3SgS 'It is jet black.'
 - b. $[n\grave{a}.^{L}]$ $j\grave{e}m\grave{e}-[k\acute{u}s\acute{u}-k\acute{u}s\acute{u}]]$ $w\grave{o}=b\acute{e}-m$ [cow black-[very.black]] see=Past-1SgS 'I saw a jet-black cow.'
 - c. $[n\grave{a}^{\text{L}}]$ $j\grave{e}m\grave{e}$ - $[k\acute{u}s\acute{u}$ - $k\acute{u}s\acute{u}]$ $g\grave{e}]$ $w\grave{o}$ = $b\acute{e}$ -m [cow black-[very.black] Def.AnSg] see=Past-1SgS 'I saw the jet-black cow.'
 - d. [nà: L jèmè-[kúsú-kúsú-mù] bó-nó:] wò = bé-m
 [cow L black-[very.black] Def.AnSg] see=Past-1SgS
 'I saw two jet-black cows.'

 $gir^n\hat{\epsilon}$ 'very' can be combined with any following adjective, in modifying or predicative function. An assistant strongly preferred the extended form of the adjective in this combination (§11.4.4). He volunteered that $gir^n\hat{\epsilon}$ and lexical intensifiers do not co-occur.

- (202) a. $g i r^n \hat{\epsilon}$ $g a b i \cdot r^n$ $b b \varnothing$ very tall-Adj 'be-3SgS 'He/she is very tall.'
 - b. $?\partial l\dot{\partial}^L$ $gir^n\dot{\epsilon}$ $z\dot{a}l\acute{a}-y^n$ $w\dot{o}$

house^L very long-Adj Def.InanSg 'the very long house'

6.3.3.3 'Good to eat'

The phrasing that expresses this sense is not an expansion of the adjective, rather it is an adjectival predicate (§11.4) with a verbal noun as subject: not 'mangoes are [good [to eat]]' but rather '[eating mangoes] is good'. (203a) is therefore syntactically parallel to (203b).

- (203) a. [[máŋgòrò gè] mìrⁿé-lé] ĕl-m bò-∅ [mango Def.InanPl swallow-VblN] sweet-Pred be-3SgS 'Eating mangoes is good.'
 - b. [bìdé bìdé-lé] ĕl-m bò-∅ [work(n) work-VblN] sweet-Pred be-3SgS 'Doing work is good.'

6.4 Noun plus cardinal numeral

The forms of numerals, including composite numerals, were presented in §4.7, above. This section describes unpossessed NPs of the type N-(Adj-)Num.

A cardinal numeral follows the core NP (i.e. the noun plus any modifying adjectives) but precedes any determiners. I refer to the combination of core NP plus a numeral as the **NumP** (numeral phrase). A numeral from '2' to '10' begins with a classifier, either $y\dot{e}$ - (inanimate plural) or \acute{a} - or $b\acute{o}$ - (animate plural). For the choice between \acute{a} - and $b\acute{o}$ - see §4.7.1.2, above. Animate core NPs have their regular plural suffix -mu preceding the numeral. We begin with indefinite NumPs in (204).

(204) NumP (indefinite)

- a. án-mù á-nó: man-AnPl An-two 'two men'
- b. [nà: L bǐn-mù] bó-píyél [cow fat-AnPl] An-ten 'ten fat cows'

c. zàmdúrú-mù bó-tá:ndù donkey-AnPl An-three 'three donkeys'

With the irregular noun 'child' §4.1.2 (singular ènè, plural èné), the noun nò 'person' may be added in a quasi-appositional function. It is prosodically grouped with the numeral and here functions as a marginal classifier (205a). A regular construction with a- is also possible (205b).

- (205) a. èné nò-píyél children person-ten 'ten children'
 - b. èné á-píyél children An-ten 'ten children'

Examples of NumPs with following definite morphemes are in (206). If the noun is inanimate, the regular definite morpheme is simply added to the indefinite construction (206a). If the noun is animate, the one notable detail is that **animate plural** -mu is repeated on the numeral (206b).

- (206) a. cin yè-píyél gè stone Inan-ten Def.InanPl 'the ten stones'
 - b. nà:-mù bó-píyél-mù = wò
 cow-AnPl An-ten-AnPl=Def.AnPl
 'the ten cows'

For combinations inclusing a preposed possessor, e.g. Poss-N-(Adj-)Num, see §6.2.4.2 above.

6.5 Noun plus determiner

6.5.1 Prenominal definite absent

Several Dogon languages allow an inanimate pronoun $(k\hat{u}, k\acute{o},$ etc.) in possessor-like form to precede a NP in strong discourse-definite ('that same') function. This construction is not attested in Yanda Dom.

6.5.2 Demonstrative pronoun after N(-Adj)(-Num)(-Poss)

Forms of demonstrative pronouns are presented in §4.4.2.1. They occur in the position after a postposed pronominal possessor, which in turn follows the NumP (core NP plus numeral).

Demonstrative pronouns are tonosyntactic controllers. When directly preceded by a core NP, i.e. N(-Adj), without possessor, the preceding string appears with $\{L\}$ tones, so the outputs are $[N^L Dem]$ and $[N^L Adj^L Dem]$. In the latter case, since both adjectives and demonstratives control $\{L\}$, we cannot tell whether the tonosyntax is cyclical, as in $[[N^L Adj^L] Dem]$ or (with first-cycle tonal erasure) $[[N^L Adj]^L Dem]$, or single-step as in $[[N Adj]^L Dem]$.

Numerals are rather resistant to tone-dropping. In combinations like N-Num-Dem, usually either the N-Num string is tone-dropped as a whole, or the numerals retains at least the H-tone on its classifying prefix and also protects the noun from being tone-dropped.

The inputs and outputs are schematized in (207).

(207)		without Dem	with Dem
		N	N ^L Dem
	b.	N ^L Adj	[N Adj] ^L Dem
		N Num	[N Num] ^L Dem
	d.	[N ^L Adj] Num	[N Adj Num] ^L Dem
			or: [N ^L Adj] [Num L Dem]

Examples are in (208). Counterparts without the demonstrative are in parentheses after the free translation. The alternatives for (207d) are seen in the variable tonal form of the adjectives in (208d-e).

```
(208) a. ?≥1≥<sup>L</sup>
                                       ὴgó
                 house<sup>L</sup>
                                      Prox.InanSg
                  'this house' (?źló)
           b. ?àlà<sup>L</sup>
                                   ièmè<sup>L</sup>
                                                       ὴgó
                                   black<sup>L</sup>
                 house<sup>L</sup>
                                                       Prox.InanSg
                  'this black house' (?àlà jèmé)
                                   yè-kùlè<sup>L</sup>
           c. ?àlò<sup>L</sup>
                                    Inan-six<sup>L</sup>
                 house<sup>L</sup>
                                                        Prox.InanPl
                  'these six houses' (?áló yè-kúlé)
```

- d. $2\partial l \partial^L$ $j \partial m \hat{\epsilon}^L$ $y \partial k \hat{l} \hat{\epsilon}$:

 " $j \partial m \hat{\epsilon}$ $y \partial k \hat{l} \hat{\epsilon}$ house black Inan-six Prox.InanPl

 'these six black houses' ($2\partial l \partial j \partial m \hat{\epsilon}$ $y \partial k \hat{l} \hat{\epsilon}$)
- e. $?\partial n\hat{\epsilon}^L$ $j\hat{e}m\hat{\epsilon}^L$ $\hat{a}-k\hat{u}l\hat{e}^L$ $\partial miy^n\hat{\epsilon}$ " $j\hat{e}m\hat{\epsilon}$ \hat{a} " " " goat black black An-six Prox.AnPl 'these six black goats' ($?\partial n\hat{\epsilon}$ $j\hat{e}m\hat{\epsilon}$ \hat{a} -kúlé)
- f. $\frac{\partial \dot{\partial}^{L}}{\partial \dot{\partial}^{L}}$ $\frac{\dot{y}\dot{e}-t\dot{a}:nd\dot{u}^{L}}{\dot{v}\dot{e}-t\dot{a}:nd\dot{u}}$ "house^(L) Inan-three^(L) FarDist.InanPl 'those three houses'

For combinations involving both a demonstrative and a possessor, see §6.2.4.3 above.

6.5.3 Definite morpheme plus noun

The forms are $g\hat{\epsilon}$ (animate singular, inanimate plural) and $w\hat{o}$ (animate plural, inanimate singular). Definite morphemes do not control tone-dropping on preceding nouns or other words. The tones of the definite morphemes are raised to ${}^{\dagger}g\hat{\epsilon}$ and ${}^{\dagger}w\hat{o}$ after {L}-toned NPs by Rhythmic Tone-Raising (§3.8.4.2), see §4.4.1. The † diacritic merely indicates that the H-tone is due to this process and is not lexical.

Definite morphemes may occur in the same linear position as demonstratives, i.e. following a numeral one is present. However, $w\grave{o}$ often **cliticizes** to a vowel-final word, resulting in contraction. Furthermore, animate plural $w\grave{o}$ tends to be attracted to the closest word to the left that ends in animate plural suffix $-m\grave{u}$. That is, $w\grave{o}$ optionally jumps leftward over a numeral to cliticize to a noun or adjective with this suffix. (Numerals do not normally end in $-m\grave{u}$, but when the optional relinearization of $w\grave{o}$ does not take place, wo "grows" a preceding -mu.

The animate plural combination is therefore $-m\dot{u} = w\dot{o}$, subject to local tone rules that can raise the tone of one or the other of these morphemes. Segmentally, $-m\dot{u} = w\dot{o}$ usually **contracts to phonetic** [mɔ:], realized tonally as [mɔ:], [mɔ:] or [mɔ:]. This contraction makes segmentation difficult, and the variation in ordering suggests that $w\dot{o}$ is in the process of becoming a suffix, and of fusing with $-m\dot{u}$ into a portmanteau. My usual transcription of this combination is -mu = wo (i.e. $-m\dot{u} = w\dot{o}$, $-m\dot{u} = ^{\dagger}wo$ or $-m\dot{u} = w\dot{o}$), using clitic

notation. This is less phonetically accurate than *-mo:* would be, but it does make the morphemic structure more transparent.

Two ways to say 'the two women' are given in (209a-b). In (209b), $w\dot{o}$ has relocated leftward by attraction to $-m\dot{u}$. In (209a) this movement does not happen, so the numeral is forced to "grow" a $-m\dot{u}$ suffix that it does not otherwise have. The corresponding indefinite is (209c).

```
(209) a. y\hat{\varepsilon}-m\hat{u} n\acute{o}:-m\hat{u} = w\acute{o} woman-AnPl two-AnPl=Def.AnPl 'the two women'
```

- b. $y\hat{e}-m\hat{u}={}^{\dagger}w\acute{o}$ $\acute{a}-n\grave{u}$ woman-AnPl=Def.AnPl An-two 'the two women'
- c. $y\hat{e}$ - $m\hat{u}$ $n\acute{o}$: woman-AnPl two 'two women' (also $y\hat{e}$ - $m\hat{u}$ \acute{a} - $n\acute{o}$:)

Similar cliticization and contraction of wo occurs with $\partial n e'$ children', which irregularly omits animate plural -mu, hence $\partial n e' = w \partial$ 'the children', often realized as [$\partial n e'$]. The syntax is the same as for 'the women' when a numeral is added.

The same two constructions as in (209a-b) are elicitable with inanimate plural $g\varepsilon$ (210a-b). However, (210a) seems to be strongly preferred, so I will qualify (210b) with a question mark.

```
(210) a. cin yè-nó: gè
stone Inan-two Def.InanPl
'the two stones'
```

Definite markers follow postnominal possessor pronouns. For animate plural NPs, the possessor ends in animate plural $-m\tilde{u}$ agreeing with the noun, so there is no need for definite animate plural wo to jump over a word in order to cliticize to $-m\tilde{u}$.

```
(211) n\grave{a}:-m\grave{u} \acute{o}-m\grave{u}=w\grave{o} cow-AnPl 2\operatorname{SgP-AnPl}=\operatorname{Def.AnPl}
```

'your-Sg cows (definite)'

6.6 Universal and distributive quantifiers

- 6.6.1 'All'
- 6.6.1.1 'All' quantifiers (*cêm*, *pú*→) in NPs

 $c\hat{\epsilon}m$ 'all', which is also found in Jamsay, is the common NP-final universal quantifier. It follows determiners (212a) and numerals (212b). It can be used absolutely, i.e. as a noun 'all, everything' (212d). However, human 'everyone' is expressed as the NP $n\hat{o}-m\hat{o}=w\hat{o}$ $c\hat{\epsilon}m$, lit. 'all the people'. $c\hat{\epsilon}m$ has no effect on the tones of preceding words in the NP, and is itself not subject to tone-dropping controlled by a possessor.

- (212) a. [?óló gè cêm] yà pílé-∅ [house Def.InanPl all] Real fall.Perf-3SgS 'All the houses fell.'
 - b. [án-mù tá:ndù-mù = wò cêm] wò-bé-m [man-AnPl three-AnPl=Def.AnPl all] see-Past-1SgS 'I saw all three (of the) men.'
 - c. [yú wò cêm] yà úbíyé-Ø [millet Def.InanSg all] Real spill.Perf-3SgS 'All the millet (was) spilled.'
 - d. $c\hat{e}m$ $y\hat{a}$ $n\hat{i}y^n\hat{e}-\mathcal{O}$ all Real drink.Perf-3SgS 'He/She drank everything.'

The regionally ubiquitous (Fulfulde, Jamsay) emphatic universal quantifier is also found, in the form $p\acute{u} \rightarrow$ with variant $f\acute{u} \rightarrow$. It may be substituted for $c\^{e}m$ in the preceding examples, but note $n\grave{o}$ $p\acute{u} \rightarrow$ 'everyone'. $p\acute{u} \rightarrow$ may also follow $c\^{e}m$ (213).

(213) [yú wò cêm pú \rightarrow] yà úbíyé- \varnothing [millet Def.InanSg all all] Real spill.Perf-3SgS 'All the millet (was) spilled.' In the high-frequency combinations izèn cêm and (synonymous) $izèn^L p\acute{u} \rightarrow$ 'every day', the noun izèn 'day' drops its tones. However, tone-dropping is not regular in other combinations: $c\acute{\iota} p\acute{u} \rightarrow$ or (synonymous) $c\acute{\iota} c\^{e}m$ 'every thing'

Postpositions and the accusative suffix -i: $\sim -\dot{y}$, if present, follow $c\hat{e}m$ or $p\vec{u} \rightarrow$, showing that these quantifiers are within the NP, even though they sometimes seem adverbial (like floating *all* in English). An example with $p\vec{u} \rightarrow$ is (214).

(214) [nò
$$p\dot{u}\rightarrow J(-\dot{y})$$
 yà dèmé- \varnothing
[person all](-Acc) Real hit.Perf-3SgS 'He/She hit all the people.'

6.6.1.2 'All' quantifiers with pronouns

Both $c\hat{\epsilon}m$ and $p\acute{u} \rightarrow$ may combine with pronouns. The pronominal forms used are the nonsingular 'all/together' forms (§4.3.1.1).

(215) category with
$$c\hat{e}m$$
 with $p\acute{u} \rightarrow$

a. 1Pl $y\hat{a}$: $c\hat{e}m$ $y\hat{a}$: $p\acute{u} \rightarrow$
2Pl $w\hat{a}$: $c\hat{e}m$ $w\hat{a}$: $p\acute{u} \rightarrow$
LogoPl \hat{a} : $c\hat{e}m$ \hat{a} : $p\acute{u} \rightarrow$

b. 3Pl $b\acute{o}$ $c\hat{e}m$ $b\acute{o}$ $p\acute{u} \rightarrow$

Examples are in (216).

6.6.1.3 **kúnú** 'entire, whole, intact'

The adjective $k\acute{u}n\acute{u}$ is used with nouns denoting bounded entities: $c\emph{i}^L$ $k\acute{u}n\acute{u}$ '(the) whole thing', $d\grave{a}m\grave{a}^L$ $k\acute{u}n\acute{u}$ '(an/the) entire village', $z\grave{\partial}g\grave{\partial}^L$ $k\acute{u}n\acute{u}$ '(an) intact (uncut) watermelon'.

The phrases in (217) consist of a noun denoting a time interval plus another 'all' quantifier $k \dot{u} n \dot{u}$. In (217a), the nouns are $d \dot{e} n \dot{u} \dot{\eta}$ 'day (entire daytime period)', variant $d \dot{e} r^n(i) \eta$, and its antonym $n \dot{a} y \eta$ 'night (entire nighttime period)'. Contrast $\dot{u} z \dot{e} n$ 'day' (as temporal locator) and $d \dot{e} n d \dot{a}$: 'night' (general term).

```
(217) a. dènùŋ kúnú 'all day (long)'
nàyŋ kúnú 'all night (long)'
b. sɔà: kúnú 'all month (long)'
àr nàgùzù kúnú 'all year (long)'
```

6.6.2 'Each' (*kámá*, *pú*→)

kámá 'each' is sometimes distributive as in no^L kámá 'each person' (also no^L kámá cêm with the addition of cêm 'all') and ci^L kámá 'anything, whatever'. For the latter, see (780) in Text 1. An informant rejected combinations with other common nouns such as $\#an^L$ kámá 'each man'. kámá is more often used in **negative-polarity** contexts: no^L kámá '(not) anyone, nobody', ci^L kámá '(not) anything, nothing', $\partial m\partial^L$ kámá '(not) anywhere' (786), ∂m^L kámá '(not) a word' (235a). $\partial m\partial^L$ kámá '(not) anywhere' (786), ∂m^L kámá '(not) a word' (235a). $\partial m\partial^L$ kámá '(not) anywhere' (786), $\partial m\partial^L$ kámá '(not) a word' (235a). $\partial m\partial^L$ kámá '(not) anywhere' (786), $\partial m\partial^L$ kámá '(not) anywhere'

For other nouns, a distributive sense is expressed (loosely) by a universal quantifier $p\vec{u} \rightarrow$ 'all', following a noun or pronoun that is marked for plurality where morphologically possible: $\vec{a}n-m\vec{u}$ $pu \rightarrow$ 'all (of the) men; each man'; $y-\hat{a}$: $p\vec{u} \rightarrow$ 'all of us; each of us'. The noun or pronoun has its usual tonal form. The distributive sense may be expressed by an iterated distributive numeral elsewhere in the clause (218a), or by distributive $t\vec{u}m\vec{a}y-t\vec{u}m\vec{a}y \sim t\vec{u}-t\vec{u}m\vec{a}y$ 'one by one' within the quantified NP itself (218b).

(218) a. [y-â: pú→] [témèdèrè yè-nó:-nò:] bèlá-m-ìy
[1Pl-all all] [hundred Inan-two-two] get-Impf-1PlS

'We will all get two hundred each (riyals, i.e. 1000 CFA).'

b. [yè^L tùmày-túmáy pú→] pè: ńdà-m-è
[woman^L one-one all] sheep give-Impf-3PIS
'They will give a sheep to each/every woman.'

6.6.3 Universal and distributive quantifiers with negation

Under negation, $k\acute{a}m\acute{a}$ 'each, any' has wide scope while $c\acute{e}m$ 'all' has narrow scope. Emphatic $p\acute{u}\rightarrow$ is not ordinarily used under negation.

- (219) a. [ci^L kámá] ?óná-lì-Ø [thing^L each] eat.meal-PerfNeg-3SgS 'He/She didn't eat anything.'
 - b. [nàmà †wó cêm] kúbó-lù-m [meat Def.InanSg all] eat.meat-PerfNeg-1SgS 'I didn't eat all the meat.'

Example (219a) can be paraphrased as 'for each X, not [he/she ate X]'. (218b) can be paraphrased as 'not [for all X [I ate X]]'.

'(Not) at all' forms that can be added to emphasize negation include the interjection-like $f \in y$ (< Fulfulde) and the adverb k u w o. The widespread Arabic loan abada 'never' or 'absolutely not' is also in use.

6.7 Accusative suffix $(-i: \sim -\dot{y})$

The accusative suffix (or clitic) behaves like a postposition in being added once, at the end of a NP. It occurs primarily with **definite animate direct objects**, and animate recipients with the verbs 'give' and 'show'. It is very common after animate pronouns, optional and noticeably less common after nonpronominal animate NPs. It is uncommon with inanimate NPs though it is possible when the reference is definite. It does not occur with inanimate pronoun $k\delta$. Compare locative adverb $k\delta y$ just over here' (§4.4.3.1).

Segmentally, the suffix appears as -i: after a consonant, but desyllabifies to -y after a vowel. The tone is low, except when raised to high after a $\{L\}$ toned noun or adjective by Rhythmic Tone-Raising: $\grave{a}z\grave{e}g\grave{e}-\acute{y}$ 'animal', $n\grave{a}:-\acute{y}$ 'cow'.

Animate plural -mù assimilates, resulting in -mì-ỳ (subject to tone rules): púlá-mì-y 'Fulbe(s)', pè:-mí-ỳ 'sheep-Pl', nà:-mì-ý 'cows'.

Before -y, pronouns take the same proclitic form they have as subject pronominals in nonsubject relatives, so most of them are L-toned, but 2Sg and

logophoric singular are H-toned. Here $-\dot{y}$ is always H-toned, showing that Post-Pronominal Tone-Raising is at work: $3\text{Sg }n\dot{a}-\dot{y}$, $1\text{Pl }y\dot{e}-\dot{y}$, $2\text{Sg }\acute{o}-\dot{y}$, $3\text{Logophoric }\acute{a}-\dot{y}$ (§4.3.1).

Examples of direct objects are in (220). In (220a) and similar examples, accusative $-\hat{i}$: $\sim -\hat{y}$ after the pronoun is regularly heard in freely elicited examples, but an informant accepted a version without $-\hat{i}$: $\sim -\hat{y}$. In (220b) and similar examples with nonpronominal animate objects, $-\hat{i}$: $\sim -\hat{y}$ is usually absent in freely elicited examples, but an informant accepted versions with $-\hat{i}$: $\sim -\hat{y}$. In (220c) and similar examples with inanimate objects, $-\hat{i}$: $\sim -\hat{y}$ is absent in freely elicitable examples, but an informant accepted versions with $-\hat{i}$: $\sim -\hat{y}$ in special contexts. In (220c), for example, he stated that the $-\hat{i}$: $\sim -\hat{y}$ might be used in a context involving an otherwise stoneless area where the presence of one stone stood out.

- (220) a. [$\acute{\epsilon}b\grave{a}$ $n\grave{a}$] $\acute{o}-\acute{y}$ $w\grave{o}=b\acute{\epsilon}-m$ [market Loc] 2Sg-Acc see=Past-1SgS 'I saw you-Sg in the market.'
 - b. sǎydù(-y) wà-lú-m S(-Acc) see-PerfNeg-1SgS 'I didn't see Seydou.'
 - c. $[cin^{L} tùm\acute{a}\rightarrow(-\dot{y})]$ $w\grave{\partial}=b\acute{e}-m$ $[stone^{L} one-(Acc)]$ see=Past-1SgS'I saw one stone.'

The indirect object of 'show' and 'give' (i.e. the recipient) is treated morphologically as a direct object. This NP is ordinarily animate. In freely elicited examples, -i: $\sim -\dot{y}$ is rather common with nonprominal animate NPs. In (221b), the tones in underlying /LH | \dot{a} 1- \dot{a} 1. \dot{a} 2 are realigned (as the result of resyllabification of the medial 1) to result in \dot{a} 3- \dot{a} 1.

- (221) a. săydù-y ízó yà dámdé-m S-Acc fish Real show.Perf-1SgS 'I showed (a) fish to Seydou.'
 - b. [mì LH làl]-î: bú:dù yà ńdé-m [1SgP LH friend]-Acc] money Real give.Perf-1SgS 'I gave money to my friend.' (mì LH lǎl)
 - c. ànàn-í: yú yà ndé-m bird-Acc millet Real give.Perf-1SgS

'I gave (some) millet (grain) to a bird.'

- d. tól-i: yú yà ndé-m
 pig-Acc millet Real give.Perf-1SgS
 'I gave (some) millet (grain) to a pig.'
- e. èmà nà-ý yà ndé-m sorghum 3Sg-Dat Real give.Perf-1SgS 'I gave him/her (some) sorghum.'

When present in a multi-word NP, the accusative suffix appears at the end of the phrase. For example, definite $n\grave{a}$: ${}^{\dagger}g\acute{e}$ 'the cow' has accusative form $n\grave{a}$: ${}^{\dagger}g\acute{e}$ - \acute{y} , and with universal quantifier $c\grave{e}m$ we have accusative $n\grave{a}$:- $m\grave{u}$ ${}^{\dagger}w\acute{o}$ $c\acute{e}m$ - \grave{i} : 'all the cows' (after resyllabification of $/c\grave{e}m$ - \grave{i} :/).

7 Coordination

7.1 NP coordination

7.1.1 NP conjunction ('X and Y') ($mi \rightarrow$ 'and')

The conjunctive particle $mi \rightarrow$ follows both coordinands in a parallel structure. It is related to instrumental (and comitative) postposition mi (§8.1.2). The high-toned form $mi \rightarrow$ occurs after a low-toned constituent. However, the actual pitch is strongly influenced by intonation, so the first $mi \rightarrow$ has relatively high pitch (nonterminal intonation) and the second has low pitch (terminal intonation). Thus in (222a), the (phonologically) high-toned $mi \rightarrow$ at the end is usually lower-pitched than the (phonologically) low-toned $mi \rightarrow$ in the middle.

- (222) a. $[\acute{a}n-m\grave{u} \quad m\grave{i}\rightarrow] \ [y\grave{\epsilon}-m\grave{u} \quad {}^{\dagger}m\acute{i}\rightarrow]$ [man-AnPl and] [woman-AnPl and] 'men and women'
 - b. $[p\hat{\epsilon}:-m\hat{u} \quad m\hat{i}\rightarrow] \quad [?\delta n\hat{\epsilon}-m\hat{u} \quad m\hat{i}\rightarrow]$ [sheep-AnPl and] [goat-AnPl and] 'sheep-Pl and goats'
 - c. $[p\hat{\epsilon}: \ ^{\dagger}g\hat{\epsilon} \ m\hat{\imath}\rightarrow] \ [?\delta n\hat{\epsilon} \ g\hat{\epsilon} \ m\hat{\imath}\rightarrow]$ [sheep Def.AnSg and] [goat Def.AnSg and] 'the sheep-Sg and the goat'
 - d. [íyé mì→] [éw mì→] bìdá-m-ìy
 [today and] [tomorrow and] work-Impf-1PIS
 'We will work today and tomorrow.'

The series may expand to three or more conjuncts (223).

(223) $[p\hat{e}:-m\hat{u} \quad m\hat{i}\rightarrow]$ $[?\acute{e}n\acute{e}-m\hat{u} \quad m\hat{i}\rightarrow]$ $[n\hat{a}:-m\hat{u} \quad ^{\dagger}m\acute{u}\rightarrow]$ $[sheep-AnPl \ and]$ $[goat-AnPl \ and]$ $[cow-AnPl \ and]$ 'sheep-Pl, goats, and cows'

7.1.2 Conjunction of pronouns

When one or both of the coordinands is a personal pronoun, it takes the same proclitic form as a pronoun used in preverbal subject function and in inalienable-possessor function (§4.3.1). That is, the pronoun is low-toned for 1Sg, 1Pl, 2Pl, 3Sg, and 3Pl, but high-toned for 2Sg and for 3Logophoric. 3Logophoric also merges singular with plural in this series. $mi \rightarrow$ has its tone raised by Post-Pronominal Tone-Raising.

(224)	category	independent	preverbal subj	'and'
	1Sg	mí	mì	mì ^H mí:
	2Sg	ó	ó	ó ^H mí→
	1Pl	yé	yè	yè ^H mí:
	2Pl	wó	wò	wò ^H mí:
	3Sg	ná	nà	nà ^H mí:
	3Pl	bó	bò	bò ^H mí:
	3LogoSg	á	á	á ^H mí→
	3LogoPl	á-mù	á	á ^H mí→

An example of two conjoined pronouns is (225).

(225)
$$[\acute{o} \quad \stackrel{\text{H}}{m}\acute{n} \rightarrow] \quad [m\grave{i} \quad \stackrel{\text{H}}{m}\acute{n} \rightarrow]$$
 [2Sg $\quad \stackrel{\text{H}}{a}$ and] [1Sg $\quad \stackrel{\text{H}}{a}$ and] 'you-Sg and I'

The preferred construction, however, is one that consists of or ends in a summarizing pronoun (226) that contains a quantifier. The pronominal person is 1P1 if the speaker is included, otherwise 2P1 if an addressee is included, otherwise 3P1. The forms for 'X-two' are slightly irregular, with $-n\hat{u}$ (cf. $n\delta$: as regular numeral). Combinations involving other specific numerals sich as 'three' are regular in form, but usually when the total number of individuals is three or more we get a generalized form with $-\hat{a}$: that is here glossed 'X-all' although it is unrelated in form to the normal universal quantifiers. The third person forms are based on the stem \hat{a} . It was noted in §4.7.1.2 that \hat{a} - or $b\hat{o}$ - is often prefixed to numerals with animate plural reference, so we should not jump to the conclusion that \hat{a} in (226) is specifically anaphoric in nature.

```
    a. 1Pl  yé-nù  yé-tá:ndù  y-â:
    b. 2Pl  wó-nù  wó-tá:ndù  w-â:
    c. 3Pl  á-nù  á-tá:ndù  â:
```

The summarizing quantified pronoun may be combined with a single preceding coordinand that denotes one element of the whole (227).

(227) a.
$$[\acute{o} \stackrel{H}{m} \acute{n} \rightarrow] y\acute{e}-n\grave{u}$$

[2Sg $\stackrel{H}{a}$ and] 1Pl-two
'you-Sg and I' = 'the two of us-Inclusive'

The 'X-all' forms are of historical linguistic interest since they resemble ordinary plural pronouns in some other Dogon languages (e.g. Nanga, Ben Tey).

7.1.3 Ordering of coordinands

Since pronouns are preferably conjoined using a summarizing quantified pronoun (preceding section), the issue of preferred linear order among pronominals is of little significance. When both component pronouns are overtly presented, an informant preferred the order 3rd-2nd-1st. An example of 2nd-1st ordering is 'you-Sg and I' (225) in §7.1.2, above.

7.1.4 "Conjunction" of verbs or VPs

Verbs and VPs are not conjoined in the fashion of NPs and pronouns. Instead, they are combined by chaining mechanisms described in Chapter 15.

7.2 Disjunction (mà→ 'or')

The 'or' particle is $m\hat{a} \rightarrow$, becoming falling-toned ${}^{\dagger}m\hat{a} \rightarrow$ after a low-toned constituent. An example is $m\acute{a}ng\grave{o}r\grave{o}$ $m\grave{a}\rightarrow p\grave{a}p\acute{a}y$ 'mangoes or papayas.'

7.2.1 NP disjunction

The particle may follow both coordinands (228a), or it may occur once, between them (228b). In the latter case it is difficult to justify bracketing the particle with the left or right coordinand, since its prosodic grouping is variable in this case. Note also that (228b) is literally "four or three," showing that numeral disjunctions with approximate sense do not have to follow an ascending sequence.

- (228) a. [$iz\dot{e}n^L p\acute{u} \rightarrow J$ [$[p\dot{e}: \ ^t m\^{a} \rightarrow J \ [?\acute{e}n\acute{e} \ m\grave{a} \rightarrow J \ s\acute{e}m\grave{a}-m-\varnothing]$ [day^L all] [[sheep or] [goat or] slaughter-Impf-1SgS 'Every day I slaughter (either) a sheep or a goat.'
 - b. [èbà-lègè cêm]
 [market-day all]
 [pè:-mú bó-cézó mà→ bó-tá:ndù] dòrá-m̀-∅
 [sheep-AnPl An-four or An-three] sell-Impf-1SgS
 'Every (weekly) market day I sell three or four sheep.'

7.2.2 Pronominal disjunction

One or both of the disjunctive elements may be a pronoun. The pronoun takes regular (high-toned) independent pronoun form, not the proclitic pronoun series that is used in pronominal conjunction. Thus $1\text{Sg }mi\ m\grave{a}\rightarrow$, $1\text{Pl }y\acute{e}\ m\grave{a}\rightarrow$, and $2\text{Pl }w\acute{o}\ m\grave{a}\rightarrow$. For logophoric, \acute{a} is used for singular or plural reference. Since the pronouns are H-toned, the 'or' particle is not tone-raised.

- (229) a. $[\acute{o} \qquad m\grave{a}\rightarrow] \qquad [m\acute{n} \qquad m\grave{a}\rightarrow]$ [2Sg or] [1Sg or] 'you-Sg or I'
 - b. $[\acute{a} \quad m\grave{a} \rightarrow] \quad [\acute{y}\acute{e} \quad m\grave{a} \rightarrow]$ [Logo or] [1Pl or]

 '(he_x said:) he_x or us'

 '(they_x said:) they_x or us'

7.2.3 Clause-level disjunction

Clause-level disjunction is difficult to distinguish from juxtaposition of two polar interrogatives that are offered as alternatives to choose from. In those cases where the translation is clearly a noninterrogative disjunction, the first clause ends in the 'or' particle. The second clause may occur without the particle (230a), with a clause-initial low-toned particle, usually after a prolonged pause (230b), or with a clause-final instantiation of the particle (230c).

```
(230) [\hat{i}z\hat{e}n^L p\acute{u} \rightarrow] [g\hat{a}\hat{a}] [day^L all] [grand all]
                                       ¹ná] yú:
                                                      gòndó-m-ìy
                                                                              mà→,
                          [granary Loc][millet take.out-Impf-1Pl or,
                               [έbà
                                         nà]
                                                έbà-m-ì
            b.
                               ſέbà
                                         nà]
                                                έbà-m-ì
                     mà→
                               Γέbà
                                                έbà-m-ì
                                         nà]
                                                                mà→
          'Every day we (either) take millet out from the granary or we buy
         (some) in the market.'
```

An assistant rejected disjunctive combinations of imperatives ('Eat, or go!'). These were rephrased as indicatives ('You will eat, or you will go').

8 Postpositions and adverbials

Yanda Dom has a number of postpositions. The monomorphemic postpositions have forms beginning with a high tone when the preceding NP or pronoun is low-toned, and all-low toned forms when the NP or pronoun contains a high tone.

There are no "tonal locatives" of the Jamsay variety.

'About X' in context of the topic of discussion is not expressed by a postposition, rather as a compound with dòm 'talk'.

```
(231) tìmè-dòm dàmá-m-ìy
tree-talk speak-Impf-1PlS
'We will talk about trees.'
```

8.1 Dative and instrumental

8.1.1 Dative ($b \grave{e} r^n \grave{a}$)

The recipient of 'give' or 'show' is treated morphologically as a special case of direct object; see accusative -i: or $-\hat{y}$ (§6.7).

For the indirect object of 'speak, tell', one possibility is instrumental-comitative *mì* and variants (see the immediately following section).

A specifically dative postposition used with 'speak, tell' is $b \dot{e} r^n \dot{a}$ (232a). It is tone-raised to $b \dot{e} r^n \dot{a}$ after proclitic pronouns and after {L}-toned NPs. The basic form $b \dot{e} r^n \dot{a}$ is heard after nonpronominal NPs containing a H-tone. In other words, $b \dot{e} r^n \dot{a}$ is treated tonally like a possessed noun.

This postposition is also regular with verbs like 'send' (232b). In other words, the notion of conveying a commodity (whether physical or abstract) is a necessary condition for using $b \stackrel{\circ}{e} r^n \stackrel{\circ}{a}$.

'I will send you-Sg (some) money.'

- c. bú:dù [săydù bèrⁿà] tọá-m̀-Ø money [Seydou Dat] send-Impf-1SgS 'I will send Seydou (some) money.'
- d. bú:dù [sǎydù Hbérná] tọá-mò-Ø money [Seydou HDat] send-Impf-1SgS 'I will send Seydou (some) money.'

See also beneficiary postposition y (§8.3).

8.1.2 Instrumental-comitative ($mi \sim mi \approx mi$)

The instrumental-comitative postposition appears as high-toned mi: (less often mi) after a {L}-toned NP and after pronouns. After NPs containing a H-tone, the postposition is low-toned mi. The tonal variants usually correlate with differences in vowel length. The variant mi: is distinct from 1Sg independent pronoun mi. (For $mi \rightarrow$ 'and' see comments below.)

Before the postposition, pronouns take proclitic form, like preverbal subject pronouns in relative clauses. In the proclitic series, $2\text{Sg } \acute{o}$ and logophoric \acute{a} are H-toned, while other pronouns are L-toned. Examples are $2\text{Sg } \acute{o}$ Hmf: 'with you-Sg' and \acute{m} Hmf: 'with me'.

This postposition is used in prototypical **instrumental** contexts (using a tool or similar object in a purposeful activity). It is also used for means of transportation (233c). In such instrumental examples, the NP in question is in practice always inanimate.

- (233) a. [séw mì] té: yà dèné-m [ax Instr] wood Real chop.Perf-1SgS 'I chopped the wood with an ax.'

 - c. [bàmbà ¹ná] [mò(m)bîl mì] úrⁿ-ùm-Ø [Bamba Loc] [vehicle Instr] go-Impf-1SgS 'I will go to Bamba (village) by motor vehicle.'

The same postposition is used in **comitative** (accompaniment) sense. Here the NP is frequently human, indicating joint activity (234), but any form of accompaniment (as in 'He went away with the keys') can be considered comitative.

Another function of mi is to indicate what in English would be the **indirect object** of the verb dama 'speak, tell'. For other indirect objects, see the dative (§8.1.1).

```
(235) a. [[yé gè] mì] [dòm<sup>L</sup> kámá] dàmà-lú-m

[[woman Def.AnSg] to] [talk<sup>L</sup> any] speak-PerfNeg-1SgS

'I didn't say anything to the woman.'
```

The instrumental postposition mi is related to conjunction $mi \rightarrow$ 'and', which however is intonationally prolonged (§7.1).

8.2 Spationtemporal postpositions

8.2.1 Locative, allative, and ablative functions

In the various locational postpositions described below, there is no distinction between static locative ('in', 'at', etc.), allative ('to'), and ablative ('from'). Directionality is indicated by verbs like 'go in' and 'go out', which are commonly chained with other verbs.

8.2.2 Simple and complex PPs

As in many languages, in addition to the simple postpositions there are several complex (composite) postpositions of the type 'in front of X' or 'at the back of X'. These have (or had) the structure [[X NOUN] Loc], where X is the possessor of NOUN (usually a body part term), and the resulting possessed noun is followed by a locative postposition. The formula [[X NOUN] in] should

be understood as subsuming cases where X is a pronoun, in which case it follows the possessed noun, as in [[NOUN my] Loc].

The noun-like elements in complex postpositions are mostly $\{L\}$ -toned bisyllabics. Some but not all of them still behave tonally as possessed nouns, i.e., they have a word-level $\{H\}$ overlay after a $\{L\}$ -toned NP. Their "basic" $\{L\}$ -toned form can therefore also be attributed to a possessor-controlled $\{L\}$ overlay. The noun-like elements that escape these overlays are subject merely to Rhythmic Tone-Raising of their initial syllable after a $\{L\}$ -toned NP. Elicitation from one assistant produced the split in (236). I suspect that there is much itnerspeaker variation in this respect.

```
(236)
             postposition
                                                after {L}-toned NP ('a granary')
                               gloss
        a. not treated as possessed
             [X bèr<sup>n</sup>à] nà
                                'inside X'
                                                [goà: †bérnà] nà
                                'on X'
                                                [goà: †dár<sup>n</sup>à] nà
             [X dàr<sup>n</sup>à] nà
                                'in front of X' [goà: ¹jídè] nà
             [X jìdè] nà
                                                [goà: †témbè] nà
             [X tèmbè] nà
                                'above X'
             [X tìŋà] nà
                                'toward X'
                                                [goà: †tíŋgà] nà
        b. treated as possessed
                                                [gɔaː Hárá] nà
             [X àrà] nà
                                'beside X'
                                                [goà: Htúnú] nà
             [X tùnù] nà
                                'behind X'
        c. monosyllabic, possessed status unclear
             [X dù] nà
                                'under X'
                                                [goà: dú] nà
```

8.2.3 Simple locative *nà* and *bà* 'in, at, on'

?áló ⁺ná

The simple locative postpositions are $n\hat{a}$ and $b\hat{a}$. H-toned † $n\acute{a}$ and † $b\acute{a}$ occur directly after nouns and adjectives, except those with ...HL tones, which require an L-toned postposition (237c). The H-toned postposition in (237b) is due to Rhythmic Tone-Raising. Unusually, these postpositions also carry over a final lexical H-tone on a preceding unpossessed noun or adjective (237a), but not after a possessed word with a {H}-toned overlay (237d). The examples in (237) involve $n\grave{a} \sim n\acute{a}$, but $b\grave{a} \sim b\acute{a}$ variants have the same distribution.

```
(237) locative glossa. H-toned after unpossessed noun or adjective with final H-tone
```

'in a/the house'

```
dàmá †ná 'in a/the village' 

'in (the) water' 

kó: †ná 'in/on a/the head' 

†àlò pílé †ná 'in a white house'
```

b. H-toned after noun or adjective with all-low tones

```
bò:rò †ná 'in a sack'
èzù †ná 'in a/the waterjar'
òy †ná 'in (the) outback'
tìmè †ná 'in a/the tree'
?ɔà: †ná 'in (the) grass'
?ðlò pèy †ná 'in an old house'
```

c. L-toned after noun or adjective with $\{...HL\}$ contour

bédè nà 'in/on (the) highway'

làsá:zù nà 'in a rifle'

d. L-toned after possessed noun with {H} overlay $y \grave{\epsilon}^{H} ? 616 n\grave{a}$ 'in a woman's house'

L-toned forms of the postpositions occur after all NP elements other than nouns and adjectives: numerals, determiners, postposed possessors, 'each' and 'all' quantifiers (238a-d). We also get L-toned forms after nouns with $\{L\}$ -toned overlay after a preposed possessor (238e). The data in (238) are therefore compatible with recognition of L-toned $n\hat{a}$ and $b\hat{a}$ as basic, since Rhythmic Tone-Raising cannot apply to particles following such elements.

```
(238) locative gloss
```

a. locative follows a numeral

?óló yè-tá:ndù nà 'in three houses'

b. locative follows a determiner (demonstrative or definite)

[?èlò^L kó] nà 'in that house' (near-distant)

[?áló wò] nà 'in the house'

c. locative follows a postposed possessor

[?áló ó-ń] nà 'in your-Sg house' [?áló ?ámó] nà 'in my house'

d. locative follows an 'each' or 'all' quantifier

[?óló cêm] nà 'in each/every house'

```
[?óló gè pú→] nà 'in all the houses'
[cì L kámá] nà 'in everything/anything'

e. [sǎydù L?òlò] nà 'in Seydou's house'
[yè L?óló] nà 'in a woman's house'
```

To summarize the tonology: if we posit $n\hat{a}$ and $b\hat{a}$ as basic, we can account for all of the L-toned outputs, and for the H-toned outputs in (237b). However, the H-toned outputs in (237a) cannot be explained by the regular phonology.

Semantically, $n\hat{a}$ is the most general locative, and it is common in examples like (239a). The alternative (239b), with $b\hat{a}$, can be used to index a spatial displacement from 'here' (compare English *over* before a locational), and might occur in a conversation that takes place outside the village. $b\hat{a}$ can also suggest a more vaguely defined location, cf. §4.4.3.2.

- (239) a. [dàmá †ná] yà kún-Ø [village Loc] Real be.in-3SgS 'He/She is in (the) village.'
 - b. [dàmá †bá] yà kún-Ø [village Loc] Real be.in-3SgS 'He/She is (over) in (the) village.' 'He/She is (somewhere) in (the) village.'

In compound postpositions like 'behind X' and 'in front of X' (see sections below), $n\grave{a}$ regularly occurs when the reference point X (expressed as a possessor) is first person, as in [[tunu ?ómó] nà] 'behind me'. [[tunu ?ómó] nà] is said to be possible only to denote a vague location 'somewhere behind me'. With second or third person reference point, $b\grave{a}$ is more easily used: [[tunu ó-ŋ] bà] alongside [[tunu ó-ŋ] nà] 'behind you-Sg'.

Prototypically the focal object (trajector) is enclosed in a bounded three-dimensional space, i.e. in a container (240a-c). It may also be immersed in a medium like 'water' with no well-defined boundary.

- (240) a. [?śló †ná] yà kúrⁿ-£: [house Loc] Exist be.in-3PlS 'They are in(side) the house.'
 - b. [[dàmá wò] nà] yà kúrⁿ-é: [[village Def.InanSg] Exist be.in-3PlS 'They are in the village.'

- c. yú: [gọà: †ná] yà kún-dé-m millet [granary Loc] Real put.Perf-1SgS 'I put (the) millet in (the) granary.'
- d. [ínjú †ná] yà nọε-Θ [water Loc] Real go.in.Perf-3SgS 'He/She went into the water.'

The focal object may also be 'on' a surface. The relationship to a horizontal or vertical surface is instead expressed by the following (intransitive or transitive) verb, as in (241).

- (241) a. [nà: 25m6] [tèbà †ná] yà ná:-ndé-m [foot 1SgP.InanSg] [wood on] Real pass-Tr-Perf-1SgS 'I put-Past my foot (up) across the wood.'
 - b. cènjù [lòtùnù †ná] tàdà-Ø agama.lizard [wall on] be.on.wall.Stat-3SgS '(The) agama lizard is on the wall.'

As some of the above examples show, a contextually appropriate definite morpheme is sometimes omitted in these locative PPs (compare English *in town*), especially when it is obvious which container or surface is involved. There is no restriction against definite morphemes before $n\hat{a}$, which can be added to any NP if the semantics permit. There are no irregular morphophonological interactions between $n\hat{a}$ and definite or demonstrative morphemes.

'Night' and 'daytime', and time-of-year expressions like 'rainy season', are used adverbially without a locative postposition (242).

- (242) a. dèndà: wó-m-ù night come-Impf-3SgS 'He/She will come at night.'
 - b. zèrⁿà cìlè-mú [wàjù †ná] ûn-m-è rainy.season herder-AnPl [far Loc] go-Impf-3PlS 'In the rainy season (the) herders go far away.'

In parsing texts, care must be taken to distinguish locative $n\hat{a}$ and variant ${}^{\dagger}n\hat{a}$ from the homophonous 3Sg pronouns $n\hat{a}$ and $n\hat{a}$.

8.2.4 Locative $n\hat{a}$ and $b\hat{a}$ with place names

Locative *nà* or *bà* are frequently used with place names. *nà* is far more common.

```
(243) [bàmbà †ná] bò-m

[B Loc] be-1SgS

'I am in Bamba (village).'
```

Likewise *mótì nà* 'in Mopti', *yàndá* †*ná* 'in Yanda', *bàmàkó nà* 'to Bamako'. Textual examples are in (785).

8.2.5 'Inside X, in the interior of X' ($[X \ b \`er^n \grave{a}] \ n \grave{a}/b \grave{a}$)

A more explicit indication that the focal object is enclosed in a bounded space is with the complex postposition $[[X \ b \`er^n \grave{a}] \ n \grave{a}]$, literally 'in (the) middle/interior of X', cf. noun $b\`er^n \grave{a}$ 'middle, interior, inside'. An informant rejected $\#[[X \ b \`er^n \grave{a}] \ b \grave{a}]$, another accepted it in specialized senses involving multiple interiors.

(244) nò-mó [[ʔáló bèrʰà] nà] yà kúrʰ-ɛ́:
person-AnPl [[house interior] Loc] Exist be.in-3PlS
'(The) people are inside the house.'

Unlike dative $b\grave{e}r^n\grave{a}$, which is treated like a noun tonally with "possessed" form ${}^Hb\acute{e}r^n\acute{a}$, $b\grave{e}r^n\grave{a}$ in the 'inside X' phrase is not subject to a word-level {H} overlay. It therefore remains {L}-toned in (245a). Instead, it is subject to Rhythmic Tone-Raising after a {L}-toned NP, affecting just its first syllable (245b).

- (245) a. [kó bèrⁿà] nà [InanSg interior] in 'inside that, therein'
 - b. [gɔà: ¹bér¹à] nà
 [granary interior] in
 'inside a granary'

8.2.6 'On (the head of) X, above X' ($[X dar^n a] na/ba$)

There is no highly grammaticalized 'on [the head of X]' construction of the Jamsay type, though such a combination can be constructed compositionally where literally appropriate. There are two nouns meaning 'head', $dar^n a$ and $k \delta a$:

and the former is generally used in this context (246). An examples with $k\acute{o}$: is in (813) in Text 3.

```
(246) yèndù [[dàr<sup>n</sup>á ?ə́mó] nà] náŋà-Ø
basket [[head 1SgP] Loc] be.up.on.Stat-3SgS
'(The) basket is (up) on my head.'
```

The construction in (246), or a similar expression 'on my neck' with $k\partial l\partial$ 'neck', can be extended to describe more abstract burden (e.g. of feeding dependent children).

[$X \ dar^n a$] na can also mean 'above X, over X', though this sense is more usually expressed by [$X \ tembe$] na.

8.2.7 'Next to, beside X' ([X àrà] nà/bà)

The noun \grave{ara} 'side' is the basis for a postpositional expression 'next to X' or 'beside X'. The noun is possessed (by the reference entity), and the resulting NP is followed by locative $n\grave{a}$ or $b\grave{a}$.

```
(247) a. [[săydù àrà] nà] bò-m

[[S side] Loc] be-1SgS

'I am next to Seydou.'
```

b. fùrnô: [[àrà ?ámó] nà] dè-dá
burner [[side 1SgP.InanSg] Loc] set-Tr.Imprt
'Set-2Sg the burner (down) next to me!'

If the reference entity is unspecified, we have adverbial 'to the side' (i.e. 'nearby'). This can be expressed as $\frac{\partial \hat{a}}{\partial t} \hat{a}$, or as $\frac{\partial \hat{a}}{\partial t} \hat{b}$.

8.2.8 'In front of X' ([X jìdè] nà/bà)

In the context 'in front of (person, vehicle)' or 'in front of (vehicle)', the phrasing is 'in (the) eye (of)...', using either $[[X \ jide] \ na]$ or $[[X \ jide] \ ba]$, cf. jide or jidiye 'eye' (248). I have also heard $[[X \ jido] \ na]$ and $[[X \ jido] \ ba]$, and variants with g instead of j.

(248) a. [[nò-mó jìdè] nà] Ldàmè-Ø [[person-AnPl eye] Loc] Lspeak.Perf-3SgS 'He/She spoke in front of (the) people.'

b. tánà [[mòmbîl jìdè] bà] dùn-dó stick [[vehicle eye] Loc] set.down-Tr.Imprt 'Put down (=lay) a log in front of (the) vehicle.'

As an adverb 'in front, ahead', I recorded *jìdè ¹bá*.

By contrast, 'in front of (house)' is expressed as 'in (=at) (the) door.'

(249) [[úmbùl wò] nà] yà ?ánà-Ø [[door Def.InanSg] Loc] Real stop.Stat-3SgS 'He/She is stopped (=standing) at the door (=in front of the house).'

8.2.9 'Behind/after X' ([X tùnù] nà/bà)

'Behind X' in the spatial sense is [X tùnù] nà or [X tùnù] bà, literally 'at the back of X', with noun tùnù 'back (body part)'. A pronominal example is [tùnù 25mó] bà 'behind me'.

The expression [?áló tùnù] bà '(over) behind the house(s)' denotes the area at the edge of the village where people go to defecate.

An adverbial phrase is tùnù †bá 'behind, in the rear'.

8.2.10 'Over X, at the top of X' ([X tèmbè] nà/bà)

The noun (or adverb) *témbè* 'above, top', as in adverbial *témbè bà* 'above, overhead', is part of the complex postpositions [X tèmbè] nà and [X tèmbè] bà 'on top of X, over X, above X'. The form with nà suggests a precise location (at a summit, or directly overhead the reference object), while that with bà is more diffuse.

(250) ànàn [[témbè ?àmò] nà] kílíyé-m bò-∅ bird [[top 1SgP.InanSg] Loc] fly-Impf be-3SgS '(The) bird is flying (directly) over me.'

8.2.11 'Under X, below X, at the bottom of X' ([X dù] nà/bà)

The noun $d\acute{u}$ 'bottom, base', as in adverbial $d\acute{u}$ bà 'below, underneath, at the bottom', is part of the complex postpositions [X $d\grave{u}$] $n\grave{a}$ and [X $d\grave{u}$] bà 'under X, below X, at the bottom of X'.

In (251a), the focal object is directly under the reference object (house). In (251b), its location is defined as (approximately) 'at' the base of the reference object. This 'at the base of X' sense is possible when the reference object is a large object with a well-defined top, side, and bottom.

(251) a. [[[?áló wò] dù] nà] nà-ý Lbèz-ò [[[house Def.InanSg] bottom] Loc] 3Sg-Acc Lbury.Perf-3PlS 'They buried him/her under the house.'

```
b. [[[kóŋô wò] dù] nà]
[[[mountain Def.InanSg] bottom] Loc]
?ó1ó ónzò-z-è:
house build-Perf2-3PIS
'They (have) built a house at the base of the mountain.'
```

This construction is not used in the literal sense 'beside (someone)'. However, 'X is under Y' can be said of two persons when X has a serious grudge against Y and is likely to do harm to (up to and including killing) Y.

8.2.12 'Toward' ([X tìnà] nà bà, [X àrà] nà bà)

'Toward X' can be expressed by a compound postposition based on either of the nouns tinala (roughly: 'destination') or ara 'side', followed by na or by ba. In the combination involving ara, it is understood that the protagonist is heading for a location in the general vicinity of the named location.

- (252) a. [[bàmbà †tínà] bà] ùr"è-Ø [[B destination] Loc] go.Perf-3SgS 'He/She went toward Bamba (village).'
 - b. [[bàmbà Hárá] bà] ùr^bê-Ø [[B Hside] Loc] go.Perf-3SgS 'He/She went toward (=in the general direction of) Bamba.'

The oldest generation still uses the verb phrase [tinallande na] in the sense 'go on a trip, travel'. Younger speakers say [dama na] in, literally 'go to (a) village', perhaps calqued on Jamsay.

8.2.13 'Between' ([XY bèrⁿà] nà/bà)

'Between X and Y' with both coordinands expressed is exemplified in (253a). The alternative is to use a single NP with plural reference (253b).

The noun $b \grave{e} r^n \grave{a}$ 'middle; interior' is used, and the construction is identical in form to that meaning 'in the interior of X, inside X'.

(253) a. [[[
$$\acute{o}$$
 H $m\acute{n}\rightarrow$] [$m\grave{i}$ H $m\acute{n}\rightarrow$]] $b\grave{e}r^{n}\grave{a}$] $n\grave{a}$ [[[2Sg H and] [1Sg H and]] middle] in 'beteween you-Sg and me'

8.2.14 'From X to Y' ($b\check{a} \rightarrow$, $h\acute{a}l\grave{e}$, $f\acute{o} \rightarrow$)

'He/She ran from Bamba to Koro' can be expressed as (254), literally "running in (=from) Bamba, he went until in Koro." The particle $b\check{a} \rightarrow$ 'until, all the way to' follows the second locational expression.

The regionally widespread clause- or phrase-initial particle *hálè* 'as far as, all the way to, even' can also be used in this context (255). See §19.2.1 for more on *hálè*.

 $f \circ \rightarrow$ 'to such an extent' (with intonational prolongation) has a sense similar to *hálè*, but is associated with 'and then' VP combinations, see (799), (827), and (828) in the texts.

8.2.15 Temporal and Adverbial (gà)

Nouns denoting temporal locations, such as times of day and seasons of the year, optionally occur with a postposition $g\hat{a}$ in adverbial function. In all attested examples $g\hat{a}$ is added directly to the noun stem, and an informant rejected combinations of $g\hat{a}$ with a quantifier or determiner on the noun. After an $\{L\}$ -toned noun, $g\hat{a}$ undergoes Rhythmic Tone-Raising to ${}^{\dagger}g\hat{a}$.

```
(256) a. wà: †gá 'in the morning'
b. dèndà: †gá 'at night'
c. ìzù-bàr<sup>n</sup>à †gá 'in the hot season'
d. zèr<sup>n</sup>à †gá 'in the rainy season'
```

The noun may also be used adverbially without $g\hat{a}$, e.g. $w\hat{a}$: '(in the) morning'. $g\hat{a}$ is also used in some other adverbial phrases. For $d\acute{e}y^n$ $g\hat{a}$ 'separate, apart' see §8.4.7.2. For $s\acute{i}y\acute{e}$ ' $g\acute{a}$ 'well' (opposite of 'badly'), see §8.4.4.1. For $t\grave{u}m\grave{a}y^n \,^{\dagger}g\acute{a}$ 'together (in one place)', see §18.3.2.

8.3 Purposive-causal suffixes and postpositions

8.3.1 Beneficiary $(-\eta)$

The suffix $-\eta$ occurs in alienable possessor pronominals in the series that follows inanimate singular nouns, as in cin $\delta-\eta$ 'your-Sg stone' (§6.2.2). Another $-\eta$ is an imperfective relative verb suffix (§14.1.7.2).

In this section another function of $-\eta$ is described. It occurs with nonpronominal NPs as well as with pronouns, to indicate the (intended) beneficiary of an action. For pronouns, the forms are the same as the possessors (§6.2.2), e.g 2Sg δ - η and irregular 1Sg l2 δ m δ . After a noun, the tone follows the usual tonal pattern for suffixes, high-toned after a l1 toned noun (or adjective), otherwise low-toned: l2 ℓ 6 for a woman', l2 ℓ 7 for my father'. After a l3 ℓ 6-final noun, an epenthetic l4 ℓ 7 is heard if the consonant is a nasal (l6 ℓ 1) for a man'), and optionally if the consonant is l6 ℓ 1 (l1) l2 ℓ 1 and l3 ℓ 1 if l3 ℓ 1 and l4 ℓ 1 and l5 for my friend').

In (257a), 'my friend' is a noun-headed NP. In (257b), 2Sg ó-ŋ follows the direct object NP. This linear ordering can lead to parsing problems, but in (257b) the presence of a demonstrative pronoun modifying the direct object clarifies the bracketing. If the sense were 'I heated [this your water] (=this water of yours)', the demonstrative would follow the NP-internal pronominal possessor: 'njú ó-ŋ ŋgó.

- (257) a. [[mì LH lăl]-ŋ́] Lbìdè-m [[1SgP LH friend]-Benef] Lwork.Perf-1SgS 'I worked for my friend.' (also pronounced làlú-ŋ)
 - b. [injù^L jgó] ó-ŋ Làjù-mè-m [water^L Prox.InanSg] 2Sg-Dat Lbe.hot-Caus.Perf-1SgS 'I heated this water for you-Sg.'

8.3.2 Purposive or causal (dàn)

A postposition with high-toned form † dán after {L} toned noun, adjective, or pronoun, otherwise low-toned dân, denotes the (prospective) purpose of an action. This includes the common expression 'for the sake of God' describing unselfish good deeds not performed for profit (in this lowly world). The postposition may also be used for a (retrospective) causal force (258d).

- (258) a. [àmbà †dán] [èné gè] Lkɔè-m
 [God Purp] [child Def.AnSg] Lraise.Perf-1SgS
 'I raised the child for God (=as an act of charity).'
 - b. găw [bú:dù dàn] gólà-m-ìy
 onion [money Purp] farm(v)-Impf-1PlS
 'We grow onions for money (=as a cash crop).'
 - c. [sìmô: dàn] Lw-ò [cement Purp] Lcome.Perf-3PIS 'They have come for (=to take) the cement.'
 - d. [[zăŋ wò] dàn] [dàmá à-ŋ] Ldòg-à
 [[fight Def.InanSg] Purp] [village 3Refl-P] Lleave.Perf-3PlS
 'They have abandoned their village because of the fight.'

kó dần 'for that (reason/purpose' is a common summarizing adverbial phrase. For cì-?ànè †dán 'for what?' = 'why?', see §13.2.2.2. For dần 'than (X)' in comparatives, see §12.1.1.

8.4 Other adverbs (or equivalents)

8.4.1 Similarity ($y \approx y \approx y \approx v^n$ 'like')

The postposition $y \dot{e} \eta \sim y \dot{e} y^n$ 'like, similar to', which follows a pronoun or a nonpronominal NP (or adverb), creates adverbials of comparison. The tone shifts to high after a pronoun, or by Rhythmic Tone-Raising after a {L}-toned NP. Pronominal examples: $m \dot{i} y \dot{e} \eta$ 'like me', $\dot{o} y \dot{e} \eta$ 'like you-Sg'. An example with a noun is (259).

(259) bìdé [zàmdúrú yèŋ] bìdá-m-ù work(n) [donkey like] work-Impf-3SgS 'He/She works like a donkey (=works hard).'

yèn readily combines with noun-like adverbs, as in *íyé yèn* 'like today' and *ngí* yèn 'like here'.

 $\mathring{\eta}g\acute{o}$ yèŋ 'like this, thus' can accompany a visual demonstration. $\mathring{\eta}\eta\jmath\jmath$ 'thus, like this' is probably a contraction of this combination. Similarly, an expected $\mathring{k\acute{o}}$ yèŋ regularly contracts to $\mathring{k}\jmath$ 'thus, like that'. Another 'thus' adverb is $\mathring{j}i$: \mathring{n} , used in the context 'saying thus (i.e. as just quoted)', see (847) in Text 5.

For the use of $y \ge \eta$ in the sense 'approximately' see §8.4.3.1.

8.4.2 Extent ('a lot', 'a little')

 $s\acute{a}y \rightarrow$ 'a lot' (distinct from $s\grave{a}y$ 'only') may be incorporated into a larger NP (though it does not control tones on the noun), or it may be absolute. In absolute function it may function as a NP argument of a verb, or it may be adverbial, e.g. with an intransitive verb (260b). In cases like (260a) and (260b), $s\acute{a}y \rightarrow$ could be bracketed with the preceding common noun to form an NP, but an adverbial interpretation cannot be ruled out. For more on the syntax of $s\acute{a}y \rightarrow$, see §8.4.7.11.

- (260) a. bìdé sáy→ Lbìd-à work(n) a.lot Lwork.Perf-3PlS 'They worked a lot.' (= 'They did a lot of work.)
 - b. sáy→ zòbá-m-ù a.lot run-Impf-3SgS 'He/She runs a lot.'
 - c. nàmà sáy→ ^Lkùbè-m

An alternative expression is $diy\acute{a} \dagger g\acute{a}$ 'a lot, greatly', consisting of $diy\acute{a}$ 'big' and adverbial postposition $g\grave{a}$. Adjective 'many, numerous' is $s\acute{e}g\acute{u}$ or extended form $s\grave{e}g-\acute{t}$."

For intensification of adjectives ('very ADJ'), see §6.3.3.2.

- (261) a. bìdé cém→(-sày) Lbìd-à
 work(n) a.little Lwork.Perf-3PIS
 'They worked a little.' (= 'They did a little work.)
 - b. cém→(-sày) zòbá-m-ù a.little run-Impf-3SgS 'He/She runs a little.'
 - c. nàmà cém→(-sày) Lkùbè-m meat a.little Leat.meat.Perf-1SgS 'I ate a little meat.'

Two alternative 'a little' expressions are based on the adjective *dàgá* 'small, little', antonym *dìyá* 'big'. These are *dàgá-m* and *dàgà-mà*, the latter functioning as a relative-clause head ('the little that...', 'what little...').

An informant commented that $c \in m \rightarrow$ 'a little' and $s \notin s \notin s \rightarrow$ 'a lot' are preferred by younger speakers, while older speakers prefer the forms based on adjectives 'big' and 'small'.

8.4.3 Specificity

In addition to the constructions below, see also §4.4.3.2 on demonstrative adverbs ('right here', 'around here').

8.4.3.1 'Approximately' $(y \grave{\epsilon} \eta \sim y \grave{\epsilon} y^n)$

 $y \hat{\epsilon} \eta \sim y \hat{\epsilon} y^n$ 'like' (§8.4.1) can be used to indicate approximate quantity.

'I will buy approximately 50 sheep.'

For 'somewhere around here' etc., see §4.4.3.2.

8.4.3.2 'Exactly (one)' (
$$l\acute{e}\eta \rightarrow \sim l\acute{o}\eta \rightarrow$$
, $s\acute{e}z\acute{e}l\acute{e}$)

 $t um \acute{a} \rightarrow$ 'one' can be emphasized as $t um \acute{a} \rightarrow l \acute{e} g \rightarrow$ (variant $l \acute{o} g \rightarrow$) or as $t um \acute{a} \rightarrow$ $s \acute{e} z \acute{e} l \acute{e}$, both meaning 'exactly one' (pragmatically often 'just one').

8.4.3.3 'Exactly ' (*dôŋ*)

A more general 'exactly' adverb, used with quantity terms, is $d\hat{\partial}\eta$.

(263) pè:-mú pòlò-nûm dôŋ Lèbà-m-Ø sheep-AnPl 10-5 exactly Lbuy-Impf-1SgS 'I will buy exactly fifty sheep.'

cêw 'all' can also be used in similar contexts.

8.4.3.4 'Exactly (equal)', 'right at (a time) ($c\hat{\epsilon}w$ - $c\hat{\epsilon}w$)

 $c\hat{\varepsilon}w$ - $c\hat{\varepsilon}w$, the reduplication of $c\hat{\varepsilon}w$ 'all', can be used to indicate exact equality by some yardstick, as in (264).

(264) [èné wò] á-nò: índù cêw-cêw bò-∅ [children Def.AnPl] An-two height all-all be-3SgS 'The (two) children, both are (of) exactly the same height.'

 $c\hat{\varepsilon}w$ - $c\hat{\varepsilon}w$ is also used to specify exact time.

(265) [mòmbîl wò] [sálbànà mì] cêw-cêw ^Lnàŋà-m-ù [vehicle Def.InanSg] [2PM.prayer at] all-all ^Lpass-Impf-3SgS 'The vehicle will pass by (here) right at the 2PM prayer.'

```
8.4.3.5 'Exactly', 'specifically' (té→)
```

Adverbial $t \in \text{``exactly'}$ (note the intonational prolongation) can be used by itself to confirm or agree with another speaker's statement. This adverbial can also be added to a NP constituent in a clause (266).

```
(266) [pè:-mú pòlò-nûm té→] Lèbà-m-Ø [sheep-AnPl 10-5 exactly] Lbuy-Impf-1SgS 'I will buy exactly 50 sheep.'
```

This adverbial can also be used to single out a referent from a larger set. Here it is best translated 'specifically' or (for a human) 'personally'.

```
(267)
                       dògó-mù]
                                                       \grave{\varepsilon}b\grave{a}=b\grave{o}-y,
          [yé
                                                       want-be-1PIS.
          [1P]
                       Dogon-AnPl]
                                                         \hat{\varepsilon}b\hat{u} = l\hat{a}-\hat{m}
                               té→1
                                               tê:
          gà:
                                                         want=not.be-1SgS
          but
                    [1Sg
                               exactly]
                                               tea
          'We Dogon (in general) like tea; but I personally (=specifically) don't
          like tea.'
```

8.4.4 Evaluation

8.4.4.1 'Well' and 'badly' (adverbial gà)

Adverbial 'well' is $siy\acute{e}$ † $g\acute{a}$, compare adjective $siy\acute{e}$ 'good'. gá occurs in a few combinations, converting an adjective into an adverbial phrase.

'Badly' is $g \partial m \partial^{\dagger} g a$, cf. $g \partial m \partial^{\dagger}$ 'bad'. Another adverbial phrase with g a is $d \partial y a g a$ 'in large amounts', cf. adjective $d \partial y a$ 'big'. There are also a few temporal adverbial phrases with g a (§8.2.15).

However, such adverbial phrases compete with alternatives where the adjective modifies a noun. This phrasing is favored when an appropriate noun, for example a cognate nominal, is available. (269a) literally means "He/She farms (i.e. does) [good farming]." (269b) is a similar case with 'bad'.

(269) a.
$$[g\partial l\partial^L siy\acute{e}]$$
 $[farming^L good]$ $[do.farm.work-Impf-3SgS]$

'He/She farms well (=works well in the fields).'

b. [dòm^L gòmò] dàmá-m-ù [talk(n)^L bad] speak-Impf-3SgS 'He/She speaks badly.'

8.4.4.2 'Proper, right' (zà:")

The noun-like element $z\hat{a}$: is used as a predicate with $b\acute{o}$ - 'be', and is negated by stative negative $-\acute{n}$ -. It denotes behavior that is (socially) normal, customary, expected, or proper (right). The subject is a nonreferential 3Sg. A direct object may be added to denote the (expected) agent of the behavior.

- (270) a. [$bid\hat{e}^L$ $\dot{\eta}g\dot{o}$] $mi-\dot{y}$ $z\hat{a}:^n=b\dot{o}-\mathcal{O}$ [work^L Prox.InanSg] 1Sg-Acc proper=be.3SgS 'This work is proper for (=expected of) me.'
 - b. wà:-gìdènú zà:-ń-Ø
 morning-sleep(n) proper-StatNeg-3SgS
 'Sleeping in the morning (=daytime) is not right.'

The form is also attested as an adjective, with rising tone: $g o n^L z \check{a} : n w o$ 'the appropriate (necessary) gear'.

8.4.5 Manner

English manner adverbial phrases may be translated either by specialized adverbials (271a), instrumental or other postpositional phrases (271b), or by adding a modifying adjective to a direct object or cognate nominal (271c). See also 'like' phrases (§8.4.1).

- (271) a. bìdé òjí→ Lbìdà-m-Ø work(n) fast Lwork-Impf-3SgS 'He/She works fast.'
 - b. [pàŋà †mí→] [cìn †wó] Ljìzè-Ø [strength Instr] [stone Def.InanSg] Lthrow.Perf-3SgS 'He/She threw the stone with force (=hard).'
 - c. [zà^L síyé] ^Lmànà-m-ù

```
[meal<sup>L</sup> good] <sup>L</sup>cook-Impf-3SgS 
'He/She cooks well', lit. "cooks good meal(s)"
```

gìdè and àŋáy are nouns meaning 'manner, way (of doing or being)'. They can function as heads of manner adverbial relative clauses (§15.4.2), but headless versions also occur.

8.4.6 Spatiotemporal adverbials

bá-goè:

8.4.6.1 Temporal adverbs

Some of the major temporal adverbs are in (272). Regarding (272b), the traditional market-week cycle in the area was six days, versus five days in Sangha.

```
'today; nowadays'
(272) a. íyé
                                             'yesterday; formerly, in the old days'
              nìηà:
              íyé dèmè tá:ndù
                                             'day before yesterday'
              nìmêm
                                             'now', often as topic ní: kày
              ní:
         b. (days of the traditional 6-day week)
              έw
                                             'tomorrow; in the future'
              \grave{\varepsilon}w-d\grave{e}r<sup>n</sup>\acute{\varepsilon}
                                             'day after tomorrow'
              dèr<sup>n</sup>è-kúrú
                                             'second day after tomorrow' (third from
                                             today)
              kùrùmjìmbé
                                             'third day after tomorrow' (fourth from
                                             'fourth day after tomorrow' (fifth from
              bà:nǎy
                                             today)
                                             'last year'
         c. gòl
                                             'this year'
              ngá
```

Most of these adverbs (those except $nim\hat{\epsilon}m$ 'now') are morphologically nouns. In adverbial function (setting a time frame for a predication), the nouns may occur in their simple form, as given above. Those denoting prior time spans may be expanded by adding the temporal postposition $g\hat{a}$ (§8.2.15), as in $nin\hat{a}$: $g\hat{a}$ 'yesterday' and $g\hat{o}l$ ' $g\hat{a}$ 'last year'. An assistant rejected $g\hat{a}$ with the nouns denoting contemporaneous or subsequent time spans, but the nominal quality of

'next year'

most of the stems can be brought out by adding definite $w \grave{o}$ ($iy\acute{e}$ $w \grave{o}$ 'today', $n \grave{o} \acute{a}$ $w \grave{o}$ 'this year', $\acute{e} w$ $w \grave{o}$ 'tomorrow'). $n \grave{i} m \acute{e} m$ 'now' is a particle that does not pattern as a noun and cannot be followed by definite $w \grave{o}$.

For $\not\in w$ 'tomorrow' the regular expansion of the simple form is $\not\in w$ $d\grave{e}$, literally 'if tomorrow'. For 'next year', the parallel expansion with $d\grave{e}$ 'if' requires unpacking the morphology and rephrasing as a verb: $b\acute{a}$ $y\grave{a}$ $g\acute{o}$ $d\grave{e}$ 'if time $(b\acute{a})$ goes out'. For more on $b\acute{a}$ see §11.1.4.

8.4.6.2 'First' (*tí*→)

As in Jamsay, $ti \rightarrow$ is used as an adverbial meaning 'firstly', i.e. first in an ordered sequence, with various pragmatic extensions.

```
(273) ti \rightarrow inju-dom n \times im = bo \cdot \emptyset firstly water-talk difficult=be-3SgS 'Firstly (=above all) the issue of water is difficult.' (inju)
```

8.4.6.3 Spatial adverbs

Some basic adverbs are in (274).

(274)	a.	témbè nà dú nà	'above, top, summit' 'below, bottom, down'
	b.	túmó-ŋ píló-ŋ dù-dágá tèŋ-dágá mùzù-dágá	'east', cf. verb <i>túmó</i> '(sun) rise' 'west', cf. verb <i>pílé</i> 'fall; (sun) set' 'east/northeast' (along base of cliffs) 'south', cf. Tengou (Dogon group) '(far) south', cf. Mossi (ethnic group)
	c.	tùnù bá jìdè bá	'in the rear' 'forward; in front'

tones

With nùmà 'hand', we have nùmà ^L ?ònè 'right hand' (cf. verb ?óné 'eat') and nùmà ^L nàndà 'left hand'. Likewise nà: ^L ?ònè 'right foot' and nà: ^L nàndà 'left foot'. There are no spatial adverbs 'on/to the left (or right)'.

8.4.7 Expressive adverbials and onomatopoeias

Expressive adverbials (EAs) correspond to so-called ideophones in many African and other languages. Syntactically, they may function as adverbial phrases with no specific thematic function, or they may be made predicates by adding an inflectable predicator. They do not normally form part of NP constituents, although the combination of an adjective and an associated intensifier can be phrased as a compound (§6.3.3.2).

A morpheme $n\hat{i}$ is optionally added to any EA, in adverbial or predicative function; it becomes ${}^{\dagger}n\hat{i}$ after a {L}-toned EA. I will gloss it as "Adv" in interlinears.

(275)
$$c\acute{e}n\grave{e}$$
 $[k\acute{a}^n \rightarrow (ni)]$ $b\grave{o}-\varnothing$ mouth [gaping (Adv)] be-3SgS 'The mouth is wide open.'

Some additional mini-adverbial phrases can be created using postposition *gà* after an adjective. Such adverbials behave syntactically like EAs and like spatial PPs.

The inflectable predicators used in EA predicates are the same as those used with spatiotemporal and manner PPs. A state or activity may be predicated with $b\hat{o}$ - 'be (somewhere)' or its negation $\hat{o}n\hat{u}$ - 'not be (somewhere), be absent'. Inchoative predicates are produced using $b\hat{i}y\hat{\epsilon}$ -, which elsewhere means 'stay, remain (somewhere)'. These predicates are illustrated in the following section, with $d\hat{\epsilon}m \rightarrow$ 'straight'. Actions and abrupt events can be phrased with $k\hat{\epsilon}n$ 'do' or some other verb (e.g. a verb of motion).

8.4.7.1 'Straight' ($d\acute{e}m \rightarrow$)

As in several other Dogon languages, adverbial 'straight' is expressed by the adverbial $d\acute{e}m \rightarrow$. It can be applied to a trajectory, a path, or an object such as a stick. Predicative examples were give at the beginning of §8.4.7. In (276) it functions as an adverbial phrase.

```
(276) [dém→ (nì)] [bàmbà †ná] ûn-m-ìy
[straight (Adv)] [Bamba Loc] go-Impf-1PlS
'We'll go straight to Bamba (village).'
```

 $d\acute{e}m$ → is a positive stative predicate in (277a) with $b\grave{o}$ - 'be (somewhere)', the corresponding negative stative predicate in (277b) with $\grave{o}n\acute{u}$ - 'not be (somewhere)', and an inchoative predicate in (277c) with $b\grave{i}v\acute{e}$ - 'stay'.

- (277) a. $[\acute{o}z\acute{u} & w\grave{o}]$ $[\acute{d}\acute{e}m\rightarrow (n\grave{i})]$ $b\grave{o}-\varnothing$ [road Def.InanSg] [straight (Adv)] be-3SgS 'The road is straight.'
 - b. $[\acute{o}z\acute{u} \quad w\grave{o}] \quad [\acute{d}\acute{e}m \rightarrow (n\grave{i})] \quad \grave{o}n\acute{u}-\varnothing$ [road Def.InanSg] [straight (Adv)] not.be-3SgS 'The road isn't straight.'
 - c. [dém→ (nì)] yà bìyé-Ø [straight (Adv)] Real stay.Perf-3SgS 'It has become straight.'

The adverbial can be iterated (without the intonational prolongation) as dém-dém, which has the same syntax.

8.4.7.2 'Apart, separate' ($d\acute{e}y^n g\grave{a}$)

The parallel construction [X [$d\acute{e}y^n$ $g\grave{a}$] $b\grave{o}$ -, Y [$d\acute{e}y^n$ $g\grave{a}$] $b\grave{o}$ -], including an inflected form of $b\grave{o}$ - 'be', is used to indicate the physical separation of two entities, or their essential differentness (nonidentity).

```
(278) pὲ:-m-ó:
                                    [déy<sup>n</sup>
                                               gà]
                                                         b-è:,
         sheep-AnPl-Def.AnPl
                                                         be-3PIS,
                                   [apart
                                              Adv]
         ?ຈ໌ກέ-m-ὸ:
                                   [déy<sup>n</sup>
                                              gà]
                                                         b-è:
         goat-AnPl-Def.AnPl
                                   [apart
                                                         be-3PIS
                                              Adv]
         'Sheep-Pl and goats are separated (or: distinct).'
```

The reduplication $d\acute{e}y^n$ - $d\acute{e}y^n$ is also available, and is necessary in negative contests where the parallelistic construction would not work (279).

```
(279) [[p\hat{\epsilon}:-m\acute{u} \quad m\grave{i}\rightarrow] \quad [?\acute{a}n\acute{\epsilon}-m\grave{u} \quad m\grave{i}\rightarrow]] [[sheep-AnPl \quad and] \quad [goat-AnPl \quad and]] d\acute{e}y^n-d\acute{e}y^n \quad \grave{o}n\acute{\iota}-y\grave{\epsilon} apart-apart not.be-3PlS 'Sheep and goats are not separated (or: distinct).'
```

8.4.7.3 'Always' (àsú→), 'never' (àbádá)

'Always' is expressed by the adverbial $\grave{a}s\acute{u} \rightarrow$. Alternatives are 'all (=every) day' expressions $\grave{i}z\grave{e}n^L$ $p\acute{u} \rightarrow$ and $\grave{b}\grave{a}l$ - $\grave{l}\grave{e}g\grave{e}$ $p\acute{u} \rightarrow$ (cf. $\grave{b}\grave{a}l$ - $l\acute{e}g\grave{e}$ 'day'). Its negation can be expressed using the experiential perfect negative verb form, or more directly as the regionally ubiquitous adverb $\grave{a}b\acute{a}d\acute{a}$ 'never' (of Arabic origin).

- (280) a. $\grave{a}s\acute{u} \rightarrow [b\grave{i}d\grave{e}^L \quad \grave{n}g\acute{o}] \quad b\grave{i}d-\acute{e}: \quad \grave{e}b\grave{a} = b\acute{o}-m$ always [work^L Prox.InanSg] work-and.SS want=be-3SgS 'I want to do this work always (=permanently).'
 - b. $[iz\dot{e}n^L \quad p\acute{u} \rightarrow] \quad 5n\acute{e}-y \quad b\grave{o}-\varnothing$ $[day^L \quad all] \quad be.tired-Past.and.then \quad be-3SgS$ 'He/She is always (=every day) tired.'
 - c. àbádá gòlò èbù = là-m never farming want=not.be-1SgS 'I don't ever want to do farm work.'
 - d. gòlò gòlò = térá-lù-m farming do.farm.work=ExpPf-PerfNeg-1SgS 'I have never done farm work.'

 $\grave{a} \grave{s} \acute{u} \rightarrow$ is rarely predicative but combinations with $\grave{b} \grave{o}$ - 'be' and $\grave{o} n \acute{u}$ - 'not be' were elicitable.

8.4.7.4 More simple EAs

Some fairly detailed inventories of EAs will be given in this and the following sections. Those in (281) are typical EAs with no internal segmentation (except as described below). They are organized by syllabic shape. All can occur with $b\hat{o}$ - 'be' and its negation $\partial n\hat{u}$ - 'not be', so they pass the test for EA-hood. Most, but not quite all, are characterized by prolongation of the final segment (vowel or sonorant), indicated by \rightarrow . Phonological vowel length cannot be distinguished in this context. Those glossed with 'very ADJ' are adjectival intensifiers (compare *brand new*, *dead drunk*).

(281) Simple EAs

a. *Cv*→

```
pó→ (bò/ònú)
                                    'wide open, gaping (doorway, mouth,
                                    sack)'
     s\acute{\varepsilon}^n \rightarrow (b\grave{o}/\grave{o}n\acute{u})
                                    'looking straight (at sth)' (with tigé 'look')
                                    'knocked flat on the ground'
     m \epsilon \rightarrow (b \partial / \partial n u)
     b\grave{\eth}^n \rightarrow (^{\dagger}b\acute{o}/\grave{o}n\acute{u})
                                    'reddish, off-red', hence more specifically
                                    'chocolate colored', 'reddish (bloodshot
                                    eyes)', 'weak light (small or dying fire)'
     bǔ→ (bò/ònú)
                                     'very long'
b. Cwi→
     swí→ (bò/ònú)
                                    'full of smoke (kitchen, motor)'
      swí→ (bò/ònú)
                                    'sunken (eyes)'
     gwí→ (bò/ònú)
                                    'having big eyes'
     twí→ (bò/ònú)
                                    '(plants) in full bloom, flowering'
     kwí→ (bò/ònú)
                                     'very short'
     bwí<sup>n</sup>→ (bò/ònú)
                                    'feeble light (e.g. distant campfire, pre-
                                    dawn glow)'; 'ripening (red fruits, mango
                                    or wild grape)'
c. CvC \rightarrow (with final sonorant)
     dám→ (bò/ònú)
                                     'completely blind'
     dém→ (bò/ònú)
                                    'straight'
     dím→ (bò/ònú)
                                     'motionless' or 'piled up, heaped'
     kǎy<sup>n</sup>→ (bò/ònú)
                                     'wide open (eyes)', 'bared (teeth)'
     t\check{a}y^n \rightarrow (b\grave{o}/\grave{o}n\acute{u})
                                    'tasty (salted)', 'hot (sun, temperature)'
     t \check{\epsilon} v^n \rightarrow (b \grave{o} / \grave{o} n \acute{u})
                                     'getting better, recovering (from illness or
                                    binge)' or 'tasty, adequately salted or
                                    sugared'
     j \not \in y^n \rightarrow (b \partial / \partial n u)
                                    'slender (person)'
     c \check{\epsilon} w^n \rightarrow (b \grave{o} / \grave{o} n \acute{u})
                                    'very small, tiny, undersized (anything)'
     g\check{a}w^n \rightarrow (b\grave{o}/\grave{o}n\hat{u})
                                     'conspicuously visible (rock, horns)'
                                    '(millet or sorghum grain head) completely
     bêm→ (bò/ònú)
                                    covered with fuzz (flowers)'
                                    'sole, just (one)', often followed by sày
     léŋ→ (bò/ònú)
                                     'only'
     kěy→ (bò/ònú)
                                    'sticking out (slightly)'
     lěm→ (bò/ònú)
                                    '(object) resting on a surface (head, palm
                                    of hand, table)' or 'very clean'
d. CvC (no prolongation)
     kêl (bò/ònú)
                                    '(door) flush to the frame, shut all the way'
```

```
e. CvCv \rightarrow
     màr<sup>n</sup>í→ (bò/ònú)
                                 'sticky (clayey soil, chewing gum)' or
                                 'having an ugly face'
     sàrí→ (bò/ònú)
                                 'sticking way out, jutting, projecting out'
     dògé→ (bò/ònú)
                                 'walking with head high (not looking
                                 down)'
     b \grave{o} b \acute{u} \rightarrow (b \grave{o} / \grave{o} n \acute{u})
                                 'very fat (person)'
     bòbú→ (bò/ònú)
                                 'pot-bellied (person)'
     dèbù→ (bò/ònú)
                                  'covering mouth', see (790)
    pédè→ (bò/ònú)
                                 'very full (container, of liquid or grains)'
                                 'flat-topped (head, hat), flat (lips)'
    pétè→ (bò/ònú)
    pátà→ (bò/-ònú)
                                 'flat and wide (buttocks, feet)'
     m\acute{u}y^n\grave{a}\rightarrow (b\grave{o}/\grave{o}n\acute{u})
                                 '(large person or animal) facing off, posing
                                 menacingly (facing an enemy)'
f. Cv:Cv→
    g\grave{\varepsilon}:"li \rightarrow (b\grave{o}/\grave{o}n\acute{u})
                                 'ajar, slightly open'
g. CvCCv→
    jémbè→ (bò/ònú)
                                 'projecting out overhead'
h. CvCvC \rightarrow
    yàgáw→ (bò/ònú)
                                 'very lightweight (and fairly big)'
    yègéw→ (bò/ònú)
                                 'very lightweight'
     sim \varepsilon y^n \rightarrow (b \partial / \partial n u)
                                 'walking with one's head bent forward'
    púdúm→ (bò/ònú)
                                 'lots of dust or ashes' or '(plant) covered
                                 with flowers'

óndóm → (b∂/∂nú)

                                 'oversized, swollen (pregnant woman,
                                 bowl)
     'shady (tree)'
i. CvCCvC \rightarrow and CvCCvC
     kéndém→ (bò/ònú)
                                  '(person, place) silent (after being noisy)'
     c \in nz \in y^n \rightarrow (b \partial / \partial n u)
                                 'lean, emaciated', cf. cénzém-béléy→
j. trisyllabic and longer
  with prolongation
    jèmbìlí→ (bò/ònú)
                                 'teetering, at risk of falling off'
  without prolongation
    nànàlàm (†bó/ònú)
                                 'very rough, coarse'
    nă:pìndìyà (bò/ònú)
                                 'enormous'
    nă:pìndù (bò/ònú)
                                 'enormous'
```

Most of the forms are not closely related to any non-EA stem. They are therefore generally unsegmentable. One can sense vaguely segmentable final $y^n \sim i \cdot n^n$ and m in some of the nonmonosyllabic forms; note especially $c \in nz \in y^n \rightarrow n$ and synonym $c \in nz \in m$ in various predicates (adjectival extension $-i \cdot n$ and variants, and suffix -m in various predicates (adjectival before $b \circ n$, imperfective, stative, progressive).

nă:pìndìyà and nă:pìndù in (281j) are regionally widespread borrowings from Songhay (Humburi Senni), where they parse as 'mother('-s)-buttocks'.

The $Cwi \rightarrow$ shape in (281b) does not match a #Cwi stem type in non-EA vocabulary. It likely reflects resyllabification of $*Cuy \rightarrow$ as the prolongation of the *y lead to desyllabification of the *u.

Most EAs contain at least one H-tone, but some are $\{L\}$ -toned. In this case $b\hat{o}$ - 'be' becomes ${}^{\dagger}b\acute{o}$ - by Rhythmic Tone-Raising.

8.4.7.5 Iterated EAs without vowel change

The stems in (282) are transparently iterated. In a few cases, the uniterated stem also exists as a non-EA stem, in which case iteration is a derivational device to produce EAs. Many, however, are suppletive. Many adjectival intensifiers (glossed 'very ADJ') are iterated, especially *CvC-CvC* and *CvCv-CvCv*.

(282) Iterated EAs without vowel shift

```
a. Cv:-Cv:
     c\acute{\epsilon}: "-c\acute{\epsilon}:" (bò/ònú)
                                         'very green'
     pέ:-pέ: (bò/ònú)
                                         '(breeze) blowing lightly'
                                         'sprawling (vegetation), much-
     dì:-dà: (†bó/ònú)
                                         branched (tree)' or '(clouds) overcast'
b. CvC-CvC
     céy<sup>n</sup>-céy<sup>n</sup> (bò/ònú)
                                         'very hard'
     gáy<sup>n</sup>-gáy<sup>n</sup> (bò/ònú)
                                         'very full, expanded to the maximum
                                         (stomach, sack)'
     táy<sup>n</sup>-táy<sup>n</sup> (bò/ònú)
                                         'very tight (rope, garment)'
                                         'very hot (object)'
     pál-pál
     găy<sup>n</sup>-găy<sup>n</sup> (bò/ònú)
                                         '(door) tightly closed'
     péy-péy (bò/ònú
                                         'very unripe'
     dăy<sup>n</sup>-dăy<sup>n</sup> (bò/ònú)
                                         'very red'
                                         '(cleaned) completely'
     sěy-sěy (bò/ònú)
```

tăy-tăy (bò/ònú) nĕŋ-nĕŋ (bò/ònú) yĕy-yĕy (bò/ònú) yàw-yàw (¹bó/ònú)	'(cleaned) completely', 'completely used up (money, food, etc.)' 'very sweet' 'falling exhausted to the ground (weak animal, defeated wrestler)' '(bird) taking off, flapping wings ready to fly' (also kán), 'fast-growing (erect plant)'
c. CvCv-CvCv	
òró-òró (bò/ònú)	'(head) completely clean-shaven'
ár ⁿ á-ár ⁿ á (bò/ònú)	'scattered, here and there'
sébú-sébú (bò/ònú)	'very tall and thin (e.g. antenna)'
sèbù-sèbù (†bó/ònú)	'liquid seeping in (footsteps in mud
	near water, mouth salivating before
	vomiting)'
téŋé-téŋé (bò/ònú)	'very fine (powder)', expandable as
	téŋé-téŋé kórú with kórú 'burnt-bone
	powder' as exemplar
púlá-púlá (bò/ònú)	'brand (new)'
púlá-púlá (bò/ònú)	'steaming hot (food or liquid right off the fire)'
bòdú-bòdú (bò/ònú)	'very soft, very supple'
bàzú-bàzú (bò/ànú)	'very wet'
bìrú-bìrú	'(fire) flaring up, having long flames'
bìrú-bìrú(-bìrú)	'(sb) absorbed in work, working with
	great concentration'
wílé-wílé (bò/ònú)	'flapping, dangling' (also <i>kán</i>)
nèŋé-nèŋé (bò/ònú)	'very sharp (point, blade)'
pérú-pérú ~ párú-párú (bò/o	
písú-písú (bò/ònú)	'hopelessly lost'
cér ⁿ é-cér ⁿ é (bò/ònú)	'very thin'
cérú-cérú (bò/ònú)	'(moonlight) shining brightly'
kúsú-kúsú (bò/ònú)	'very black'
gàzù-gàzù (†bó/ònú)	'(milk, cream of millet) separating into
	layers when boiled' or '(unripe millet
	grains) oozing latex'
tágù-tágù (bò/ònú)	'spotted' (kán 'become')
dàyé-dàyé (bò/ònú)	'wave (hand)' (also <i>kán</i>)
tègú-tègú (bò/ònú)	'trembling, quaking'
bìrù-bìrù (bò/ònú)	'(wounded bird, animal after throat is
	cut) flopping around'

```
tómù-tómù (bò/ònú)
                                  'having gaps (e.g. ear of corn), widely
                                  spaced, well spread out', hence
                                  'occasionally' (verb tómó 'be
                                  isolated')
d. CvCCv-CvCCv
                                  '(infant, drunk) walking clumsily',
    tòmbú-tòmbú (bò/ònú)
                                  'speaking clumsily (not making much
                                  sense)'
e. CvCvC-CvCvC
    élém-élém (bò/ònú)
                                  'lightly sugared or salted' (¿l 'sweet')
    kérém-kérém (bò/ònú)
                                  'very tight (rope)'
                                  'fit, in good shape'
    kóróm-kóróm (bò/ònú)
    dàr náy n-dàr náy n (bò/ònú)
                                  'very sour' (dăn)
    bèléy<sup>n</sup>-bèléy<sup>n</sup> (bò/ònú)
                                  '(fire, airplace, firefly) flickering,
                                  glimmering'
f. Cv:CvC-Cv:CvC
    bɔ̃:rɔ̀m-bɔ̃:rɔ̀m (bò/ònú)
                                  'soft, not firm (overripe fruit, partially
                                  disinflated ball)'
g. trisyllabic and longer
    zàrágá-zàrágá (bò/ònú)
                                  'dangling or quivering in the air (e.g.
                                  small live prey in predator's mouth)'
    kólógó-kólógó (bò/ònú)
                                  'loose-fitting, oversized (shoes, hat)'
    gágìlè-gágìlè (bò/ònú)
                                  'fidgeting (while seated)' or '(person,
                                  donkey) rubbing one's body against a
                                  wall'
    [tábì-yè]-[tábì-yè] ~ [tábí-yé]-[tàbì-yè] (bò/ònú)
                                  'pushing off with one's hands (e.g.
                                  climbing)' (verb t\acute{a}b\acute{i}-y\acute{\epsilon})
    púbùlò-púbùlò ~ púbúló-pùbùlò (bò/ònú)
                                  'rubbing', hence '(blind person)
                                  groping (with hands)' (verb púbúló)'
```

The last two examples in (282g) are straightforward derivational iterations of input verbs. I found some fluctuation between HLL-HLL and HHH-LLL tones in these cases. Given the stress attack on the first syllable of HHH and of LLL words, HLL-HLL and HHH-LLL are difficult to distinguish.

In (283a), the iteration is not complete, and the initial looks more like a *Cv*-reduplication. In (283b), the iteration is of an adjective with the -*i*:ⁿ extension,

though in the case of $[\partial k - i:^n] - [\partial k - i:^n]$ the corresponding uniterated adjective $(\#\partial k\hat{u}, \#\partial k - i:^n]$ does not exist). The base in (283c) can be doubled or tripled, more or less onomotopoeically.

```
(283) a. s \hat{\epsilon}^n - s \hat{\epsilon} : \hat{\epsilon}^n (b \hat{o} / \hat{o} n \hat{u}) 'newborn'

b. [\hat{o}k - \hat{i} : \hat{\epsilon}^n] - [\hat{o}k - \hat{i} : \hat{\epsilon}^n] (b \hat{o} / \hat{o} n \hat{u}) 'walking fast, striding' (strong word)
[\hat{o}j - \hat{i} : \hat{\epsilon}^n] - [\hat{o}j - \hat{i} : \hat{\epsilon}^n] (b \hat{o} / \hat{o} n \hat{u}) 'fast, rapidly' (adv) (\hat{o}j \hat{u} 'hot, fast')
[b \hat{e}d - \hat{i} : \hat{\epsilon}^n] - [b \hat{e}d - \hat{i} : \hat{\epsilon}^n] (b \hat{o} / \hat{o} n \hat{u}) '(villages, houses, trees) closely spaced, in sight of one another'; 'from time to time, occasionally'

c. k \hat{i} m - k \hat{i} m (-k \hat{i} m) (\hat{b} \hat{o} / \hat{o} n \hat{u}) 'shivering with cold' or 'trembling, quaking'
```

8.4.7.6 Iterated EAs with vowel shift to a

In a few cases, a once-doubled (iterated) base shifts one or more vowels to *a* in the second occurrence. In (284b), the iteration is optional. In (284c), the vowel shift is not consistent.

(284) Iterated EAs with vowel shift to a in second occurrence

```
a. wìlìl-wàlàl (¹bó/ònú) 'having roots spreading at base (tree)' or '(wires, cords, hairs) spreading out'
b. sô:n (bò/ònú) 'oily, dripping with oil 'oily, dripping with oil'
c. múrnúnù-múrnúnù ~ múrnúnù-márnúnù (bò/ònú, or with ún 'go') '(snake) slithering along slowly'
d. cébí-càbì-cébí-càbì-cébí 'with short quick steps', see (781)
```

In EAs with the base tripled rather than just doubled, the shift to a is very common. It applies to the medial occurrence, which is also tone-dropped. If the base is nonmonosyllabic, the shift to a occurs in the first syllable, and extends to later syllables where the base has \mathfrak{d} (but not \mathfrak{u}). The tripling of the base is generally iconic, as most of these EAs denote gaits characterized by multiple repetition of an awkward movement.

(285) Twice-iterated EAs with shift to a and {L}-tone in medial occurrence

```
a. Cv:-Ca:-Cv:
   tǐ:-tà:-tǐ: (bò/ònú)
                                    'struggling to walk or run'
    zè:-zà:-zè: (†bó/ònú)
                                    'swaying slowly from side to side
                                   (like hawk gliding)'
                                   'lurching from side to side'
    zì:-zà:-zì: ( †bó/ònú)
b. Cv(C)Cu-Ca(C)Cu-Cv(C)Cu etc.
   jìbú-jàbù-jìbú (bò/ònú)
                                   'staggering or stumbling along'
   gùndú-gàndù-gùndú (bò/ònú)
                                   'swaying, lumbering (like elephant
                                   walking)'
    tòmbú-tàmbù-tòmbú (bò/ònú)
                                   'staggering or stumbling along'
c. Co:Co(C)-Ca:Ca(C)-Co:Co(C)
    nà:gó-nà:gà-nà:gó (bò/ònú)
                                    'walking with body lurching
                                   forward & backward (e.g. animal
                                   with long legs or long neck)'
    bɔ̃:rɔ̀m-bā:ràm-bɔ́:rɔ̀m
                                   'over-ripe and soft (fruit)', variant
                                   of bă:ràm-bă:ràm
d. CvCuCu-CaCuCu-CvCuCv
   pèmbúrù-pàmbùrù-pèmbúrù (bò/ònú)
                                           '(tall person) walking
                                   stiffly (with legs rubbing)'
```

8.4.7.7 Iterated EAs with multiple final *Cv* reduplication

Another fairly common type of EA involves a CvCv base whose final Cv is repeated two or three (occasionally more) times, in some cases with a consonantal alternation involving liquids $(r^n/n, r/d, r/l, nd/l)$. Some examples are derived from adjectives and function as intensifiers. Others are unrelated to any other stem. This type of EA has a strong sensory bias. It is popular with smell categories, with visual gestalts (repetitive visual patterns, conspicuous size), and to a lesser extent taste.

(286) Multiple Final Reduplication

pèlélé(lé) (bò/ònú) 'very tasty' (adjective *pèlěl*) b. deadjectival, from trisyllabic base $\partial r^n \acute{o} n\acute{o} n\acute{o} (b\grave{o}/\grave{o} n\acute{u})$ 'very smooth' ($\partial r^n \partial n d\hat{u}$) c. illumination dàzázázá (bò/ònú) 'bright light aimed in a direction (headlights, flashlight)' bòzózózó (bò/ònú) 'bright (point of light, e.g. start) wèzézézé (bò/ònú) 'bright, well-illuminated (space)' wàzázázá (bò/ònú) 'bright, well-illuminated (space)' [wider space] d. visible characteristics sérⁿénénéné (bò/ònú) 'straight-nosed' súbúbúbú (bò/ònú) 'very tall' pùn ঠμὸμὸμὸ(μὸ) (bò/ònú) 'having lots of flowers' dànálálálá (bò/ònú) 'wide, round space (e.g. for playing or a site for a new house)' àyáyáyá (bò/ònú) 'conspicuously visible (body of water)' 'very large (animal, e.g. elephant, àpápápá (bò/ònú) python)' '(planted crops) sprouting well all yàrálálálá (bò/ònú) over' yàgárálálá (bò/ònú) 'running at top speed' téndélélélé (bò/ònú) 'running at top speed' (cf. adj tèl) sùrúdúdú (bò/ònú) 'sth long and thin (rope, snake) landing on the ground after jumping or falling' or '(grain) being poured into a sack' '(door, hole, sack opening) tightly mě:rⁿèm (bò/ònú) closed' e. smell and taste kèmémémé (bò/ònú) 'foul-smelling (urine)' 'foul-smelling (animal secretions)' kùzázázá (bò/ònú) 'acrid-smelling (fresh onions or cowgòlólóló (bò/ònú) peas)' gòmómómó (bò/ònú) 'rotten-smelling, very rotten' àmámámá (bò/ònú) 'foul-smelling (rancid but not yet rotten meat), foul-smelling (fart)'

```
sàmámámá (bò/ònú) 'smelling like fresh fish, meat, or milk' (noun sámámù)
```

8.4.7.8 Composite EAs

Most EAs are unsegmentable, except for iterations and reduplicative syllables. A few appear to be marginally composite, either on grounds of prosodic appearance or because one element is attested elsewhere (287). Some others are used with a body-part term (partonym), which may be incorporated as a compound initial or may be separate (287c).

(287) Composite EAs

```
a. phrased prosodically like compounds
    èrègè-dĕw→ (bò/ònú)
                                     'everything, totally'
    òrògò-dŏw→ (bò/ònú)
                                     'completely clean-shaven', cf.
                                    synonym òró-òró
b. initial also occurs separately
    cénzém-béléy→ (bò/ònú)
                                     'emaciated' (cf. cénzéy<sup>n</sup>)
    bàbù-tàrà (†bó/ònú)
                                     'very thick, massive' (cf. bàbú→)
    b\partial r^n\partial -z\partial y^n († bo/\partial nu)
                                     'reddish (ripening fruits)' (bòr"5 noun
                                     'reddish color of gravel' or 'suffering
                                    due to sickness')
    sím bă→ (bò/ònú)
                                    'towering (tall as a palm tree) (sím
                                     'borassus palm'
c. with partonym
    gid-íyè j \not\in v^n \rightarrow (b \dot{o} / \dot{o} n \dot{u})
                                     'small-eyed, narrow-eyed'
    dìmè gòmbú→ (bò/ònú)
                                     '(forehead) protruding (with eyes
                                    recessed)'
                                     '(forehead) protruding (with eyes
    dìmè jémbè→ (bò/ònú)
                                    recessed)'
    gìdè dà:-dà:, gìd-íyè [dà:-dà:] (†bó\ònú)
                                                       'having poor vision
                                    (but not blind)'
    dùmó ká:<sup>n</sup>-kà:<sup>n</sup>-ká:<sup>n</sup> (bò/ònú)
                                              'walking with legs widely
                                    separated (after being circumcised)'
    nùmà [dàyé-dàyé] kán
                                    'wave hand (as a signal)'
```

8.4.7.9 EAs not attested with bò- and ònú-

Some expressive adverbials are not attested as simple predicates with $b\hat{o}$ - 'be' and $\hat{o}n\hat{u}$ - 'not be'. Some are used with $k\hat{a}n$ 'do, make' (288a), and others are attested only with (intransitive or transitive) motion verbs (288b).

```
a. with kán 'do, make'
(288)
            kák kán
                                     '(stop) still'
            mèmélém kán
                                      'go out of sight (hidden behind sth)'
                                     '(bird, tree) landing with a thud'
            wòyòw→ kán
            bàbù kán
                                     '(mango, toad) plopping, hitting the ground
                                     hard'
            nà: téy<sup>n</sup>→ kán
                                     '(monkey) stick out foot'
        b. with motion verb
          with 'chase away'
            yěy-yěy làlí-yé
                                     'shoo flies away'
          with 'pass by'
            pélúm năŋ
                                     'pass by with a swoosh'
          with 'go in'
            mèlěm nó
                                     'run headling into' (also kán)
            mér<sup>n</sup>ém nó
                                     'burst in'
          with 'go out'
            sàrí→ gó
                                      'stick way out'
            pwí gó
                                     'go out abruptly' (also kán)
          with 'go'
                                     '(cripple) drag self along, (snake) move
            súrùdù-súrùdù ún
```

kán 'do, make' is also regular with nonce onomatopoeias, manual gestures, etc. Compare English *go X* as in *it went "kerplop"*.

8.4.7.10 Iterative EAs

Some expressive adverbials are iterative in form. Simple iterations with no phonological difference between the two parts are in (289a). The first two examples in (289a) show that different EAs can be differentiated by vowel symbolism. The EAs in (289b) are tripartite and shift the vowel of the medial occurrence to a.

(289) a. simple

kàyàw-kàyàw (kán) 'sound of crunching (e.g. carrot, cassava, kola)' kòyòw-kòyòw (kán) 'sound of crunching (dry food, e.g. dried fish or meat, bread, dog crunching a bone)' 'sound of chomping (on meat)' nànám-nànám (bò/ònú) sùyàw-sùyàw (†bó/ònú) 'crunching, rustling (walking through dry grass)' 'swallowing sound' ságú-ságú (kán) tôy-tôy (kán) '(dog) crunching (e.g. a bone)' b. tripartite with medial a kòló-kàlà-kòló (bò/ònú) 'sudden noise, hubbub, mêlée' 'loud chatter' hô:-hà:-hô: (bò/ònú) dím-dàm-dím (bò/ònú) 'sound of footsteps'

8.4.7.11 Borderline or aberrant EAs

(290)

The expressive adverbials in (290) are somewhat idiosyncratic in form or in syntax.

EA gloss (and comment) a. *tí→* 'at first, firstly' (not predicative; can be treated as a noun or adjective: $ti \rightarrow w\dot{o}$ 'the first [one]', $iz\dot{e}n^{\perp}$ tí→ wò 'the first day') b. té→, té:-té: (bò/ònú) 'precisely' (usually follows NP, pronoun, or adverb: ná té→ 'precisely him/her', tól gè té→ 'precisely the pig', kôyⁿ té:-té: bò 'it's precisely thus'; occasionally incorporated into NP with following definite morpheme, but no tonosyntactic effect on preceding word: ná té→/té:-té: gè 'precisely him', tól $t\acute{e} \rightarrow g\grave{e}$ 'precisely the pig')

```
c. jèṇă-ŋ (bò/ònú) 'tilted' (cf. also jèŋ gá bò) 

jèn-jè-y ( †bó/ònú) 'tilted'
```

8.4.8 Other iterative adverbs

For the forms of distributive numerals ('one by one' = 'one at a time', etc.), see §4.7.1.6. These numerals can be used adverbially in contexts like like '(they came) two by two' and '(I gave them candies) two apiece'.

8.4.8.1 'Scattered, here and there' (àmó-àmó)

The noun $\partial m\delta$ 'place' can be reduplicated to form the distributive adverb $\partial m\delta - \partial m\delta$ 'in places, here and there', suggesting a sparse and scattered distribution.

8.4.8.2 'Occasionally' (*lègè-légè*)

The noun *légè* 'day' (also *bàl-légè* 'day') forms a reduplicated adverb *lègè-légè* '(on) some days', i.e. 'occasionally, from time to time'.

9 Verbal derivation

The productive suffixal derivations (stem to stem) for verbs are the reversive ('un-...') and the causative. Some verbs occur with either of two endings, mediopassive and transitive. Adjectives have corresponding intransitive (inchoative) and transitive (factitive) verb forms, but these are in most cases not directly formed from the adjective by adding a suffix.

9.1 Reversive verbs (-1v-)

The reversive suffix is -lv-, realized as $\{-l\acute{\epsilon} - l\acute{\epsilon} - l\acute{\epsilon} - l\acute{\epsilon}\}$ depending on the vocalism of the input stem. Reversive derivatives can often be translated with English un- verbs, intransitive or transitive. Reversive -lv- in Yanda Dom is clearly distinct from transitive -dv-, unlike the case in some other Dogon languages where the two derivations are often homophonous.

A reversive derivation may be followed by further suffixes (mediopassive, causative). However, the reversive derivation itself puts clear restrictions on the form of input stems. The attested output shapes are *Cvl-lv-*, *CvCv-lv-*, and *CvCCv-lv-*.

Most of the known examples are CvCv-lv- from CvCv- inputs. As with other trisyllabics (except causatives), the vowel of the second syllable from the left appears as a high vowel i or u (often fluctuating). Examples are in (291).

(291) Reversive *CvCi/u-lv*- from *CvCv*

input	gloss	reversive	gloss
nàmú	'step on'	nàmú-lé	'take foot off'
kómó	'tie'	kómú-ló	'untie'
tímέ	'put lid on'	tímí-lé	'take lid off'
mùnó	'tangle'	mùnú-ló	'untangle'
mèné	'fold'	mèní-lé	'unfold'
dìŋέ	'tie (knot)'	dìŋí-lé	'untie (knot)'
sógó	'loop'	sógú-lé	'unloop'
lègé	'insert'	lègú-lé	'remove (sth
_		_	inserted)'

pégé	'button up'	pégí-lé	'unbutton'
tágέ	'put on (shoes)'	tágí-lé	'take off (shoes)'
págú	'tie'	págú-lé	'untie'
dàgú	'lock'	dàgí-lé	'unlock'

There are a few cases of *CvCCv-Iv*- where the *CC* is a homorganic nasal-stop cluster (292). The reversive sometimes reveals a *CvCCv* stem shape, and a lexical tone contour, that is concealed in the corresponding nonreversive form due to Syncope ('uncover').

(292) Reversive *CvCCi/u-lv-* from *CvCCv*

input	gloss	reversive	gloss
màndá	'seal up'	mòndú-lé	'unseal'
yám-dέ	'cover (sb)'	yàmbú-lé	'uncover'

Cvlv, Cvdv, Cv:dv, and Cvr nv (presumably also Cvrv) stems combine with the reversive suffix as Cvl-lv. This requires Syncope (§3.6.3.3) followed by assimilation of d or a rhotic to the following l.

(293) Reversive Cvl-lv-

input	gloss	reversive	gloss
from Cvlv mìlé	'braid (rope)'	míl-lé	'unbraid (rope)'
from Cvdv tádú	'be affixed'	tál-lé	'(sth affixed) be removed'
gìdέ	'immobilize'	gíl-lé	'un-immobilize, remove immobilizing object from'
pídé bùdó	'shut (door)' 'bury'	píl-lé, píl-ló búl-ló	'open (door)' 'disinter'
from Cv:dv dé:dé	'extend (e.g. arm)	' dél-lé	'pull back, retract (extended arm)'

```
from Cvr<sup>n</sup>v

măn 'seal (with mud)' mál-lé 'unseal'

(</màr<sup>n</sup>v-/)

other

gój-jó 'be inserted' gól-lí-yé 'be dis-inserted'
gó:-dó 'insert' gól-ló 'dis-insert

(remove)'
```

In the next-to-last example ($m\acute{a}l$ - $l\acute{e}$), an alternative (not favored here) would be to first delete the medial syllable (Medial Cv-Truncation, §3.6.4.7), then double the suffixal I (Lateral-Doubling, §3.6.4.2). This seems rather like taking two steps forward and one step back. In either case, the first-syllable vowel must be shortened (v-Shortening, §3.6.3.4).

See also *gól-ló* 'take off hat' in the next set below. Another such case is *kól-ló* 'unhook (sth hanging)', but this is complicated by the fact that the corresponding verb *kór-dó* 'hook (sth) up' has dissimilated from underlying /kódú-dó/, compare mediopassive *kódí-yó* 'be hung up'.

For some verbs such as those denoting putting on garments, the distinction in nonreversive contexts between dressing oneself (mediopassive) and dressing another (transitive) is neutralized in the reversive. Therefore the mediopassive suffix is normally omitted in the reversives in (294) even when (as usual) the reference is to undressing oneself rather than another person.

(294) Mediopassive omitted in reversive

input	gloss	reversive	gloss
tóbí-yó nún-jé gòdí-yó	'roll turban' 'put on (clothes)' 'put on (hat)'	tábú-lá nùŋú-lá gól-ló	'unroll turban' 'get undressed' 'take off (hat)'

The mediopassive suffix is also absent from another case, but for a different reason. Mediopassive $din-j\acute{e}$ '(flour) stick to mortar' refers to the fact that some grain pounded in a mortar remains stuck to the inside of the mortar when the rest is removed. The corresponding reversive is the transitive $dini-l\acute{o}$ 'remove (grain stuck in mortar)'. Here the real-world context requires agency only in the reversive.

The restrictions on the prosodic shape of the reversive are clearly at work in the irregular cases in (295).

(295) Prosodic mismatches from underived to reversive stem

	input	gloss	reversive	gloss
a.	dǎ: kó:	'cover opening' 'cover with hide'	dál-lé kól-ló	'uncover opening' 'remove hide covering from'
b.	bá:-ndé	'hide (sth)'	bàŋí-lé	'uncover, reveal'
c.	nán-jé	'be caught'	nàŋí-lí-yé	'become un- caught'

For *Cvl-lv* from *Cv:* in (295a), see Lateral-Doubling (§3.6.4.2, above).

In (295b), $b\acute{a}:-nd\acute{e}$ 'hide (sth)' is part of a word-family including $b\acute{a}n-j\acute{e}$ 'hide (self)' and adjective $b\check{a}\eta$ 'secret, hidden'. The verbs at least could derive from a theoretical underlying u-final stem /bàŋú/, but the relationships are synchronically rather opaque.

In (295c), $n\acute{a}n-j\acute{\epsilon}$ is syncopated from *nàngí-y $\acute{\epsilon}$ (Pergue $n\acute{a}ng\acute{i}-y\acute{\epsilon}$, Nanga $n\acute{o}ng\acute{i}-y\acute{\epsilon}$, etc.).

There are undoubtedly some frozen reversives that do not have a corresponding underived stem, e.g. sónzúló 'undo (braids)'.

9.2 Deverbal causative verbs

9.2.1 Productive causative with suffix $-m\dot{\epsilon} \sim -m\dot{\delta}$

The productive causative suffix added to verb inputs is $-m\acute{\epsilon} \sim -m\acute{\delta}$. The variant with $-m\acute{\delta}$ in the bare stem occurs after input stems with a back rounded vowel. The primary allomorph tends to be $-m\acute{\epsilon}$, as can be seen by the [+ATR] stem with -me- used often (but competing with -mo-) for verbs with $-m\acute{\delta}$ in the bare stem. (For a handful of cases where $-m\acute{\epsilon} \sim -m\acute{\delta}$ is passive rather than causative, see §9.3.2.)

The causative suffix has morphophonological properties quite different from those of other verbal derivational suffixes. The reversive, mediopassive, and transitive suffixes create stems (typically trisyllabic or longer) to which the regular constraints on vocalism and tone contours (re-)apply. This requires raising of the second vowel of CvCv-Cv to i or u, and harmonizing the ATR values of the suffixal vowel with that of the first stem vowel.

By contrast, the causative (in its own bare stem and E-stem) is added to the bare stem of the input verb, which often ends in a non-high vowel. The causative suffix inconsistently harmonizes with the stem vowels in rounding,

shifting to -m5, as in ún-m5 'cause to go' and kúdú-m5 'cause to be undiluted'. However, the suffix does not harmonize its ATR value, so [-ATR] suffix -m6 readily co-occurs with [+ATR] or [-ATR] stem vowels. The stem preceding the causative suffix retains a lexical tone in some but not all cases. The entire stem-suffix sequence is subject to tone-contour effects imposed by a AMN suffix following the causative suffix, such as perfective negative or imperfective negative.

(296) gives examples of causatives from monosyllabic inputs.

(296) Causative from monosyllabic verb

```
input
              gloss
                                 causative
                                                 gloss
a. Cv
{H}/{H}
              'go in'
                                 nó-mó
                                                 'put in'
    пэ́
                                                 'cause to slash (earth)'
    tś
              'slash (earth)'
                                 tó-mó
                                                 'cause to bring
              'bring'
    zó
                                 zó-mέ
{H}/{L} becoming {H}/{L}
              'dance'
                                 ié-mέ
                                                 'make dance'
    jé
              'weep'
    yέ
                                 γέ-mέ
                                                 'make weep'
              'hear'
                                 nó-mó
                                                 'cause to hear'
    пэ́
b. Cv:
{H}/{H}
              'become old'
                                 pέ:-mέ
                                                 'cause to be old'
    pέ:
    \acute{\varepsilon}:
              'become hard'
                                 \dot{\varepsilon}: "-m\dot{\varepsilon}
                                                 'cause to be hard'
\{LH\}/\{L\} becoming \{H\}/\{L\}
              'make (bricks)'
                                má:-mé
                                                 'cause to make (bricks)'
{LH}/{LH} becoming {H}/{L}
               'spend night'
                                 ná:-mέ
                                                 'have (sb) spend the night'
    nă:
```

Where the input stem is $\{LH\}/\{L\}$ or $\{LH\}/\{LH\}$, the causative is $\{H\}/\{L\}$. Although 'put in' and 'cause to hear' are indistinguishable in the bare stem and several other forms, $n\delta-m\delta$ 'put in' is $\{H\}/\{H\}$ while $n\delta-m\delta$ 'cause to hear' is $\{H\}/\{L\}$. The perfective negative forms are therefore $n\delta-m\delta-li$ - 'did not put in' and $n\delta-m\delta-li$ - 'did not cause to hear'.

A *Cˇv:-mɛ´* causative of a distinct type is *zˇo:-mɛ´*, variant of *zùwó-mɛ´* introduce (sb, to sb else)' reflecting an idiosyncratic contraction, cf. *zùwó* 'know'.

Causatives from bisyllabic inputs are in (297).

(297) Causative from bisyllabic verb

```
input
              gloss
                                 causative
                                                gloss
a. marginally bisyllabic
{H}/{H}
              'become ripe'
                                 ?álέ-mέ
    ?όΙέ
                                                'cause to ripen'
    ? έριέ
              'eat (meal)'
                                 ?≼ρέ-mέ
                                                'feed, nourish'
    έdέ
              'braid'
                                 έdέ-mέ
                                                'have (sb) braid'
{H}/{L}
    ńdέ
              'give'
                                 ńdέ-mέ
                                                'cause to give'
    ?όΙέ
              'go up'
                                 ?álé-mé
                                                'cause to go up'
b. CvCv, not u-final
{H}/{H}
                                 kúbó-mó
              'eat (meat)'
                                                'give meat to'
    kúbó
                                                'have (sb) sew'
    píyέ
              'sew'
                                 ρίγε-πέ
\{H\}/\{L\}
              'give change'
                                 wéjé-mé
                                                'make give change'
    wéjé
\{LH\}/\{L\}
              'drink'
                                 niy^n \acute{\varepsilon} - m\acute{\varepsilon}
                                                'give drink to'
    niy^n \varepsilon
    zàbá
              'run'
                                 zàbó-mó
                                                'make run, drive'
\{LH\}/\{LH\}
    nìy<sup>n</sup>é
              'sleep'
                                 nìy<sup>n</sup>é-mέ
                                                'put to sleep'
    lèlé
              'make mistake'
                                 lèlé-mέ
                                                'cause to err'
c. CaCu (u-final)
{H}/{H}
              'suckle'
    ádú
                                 ádú-mớ
                                                'give suck to'
    kágú
              'be charred'
                                 kágú-mé
                                                'char (sth)'
    kán
              'do, make'
                                 kán-mέ
                                                'cause to do or make'
              'be good-sized'
    ám
                                 ám-mέ
                                                'keep (animal) good-sized'
\{LH\}/\{L\}
              'be left over'
                                 wàzú-mé
                                                'cause to be left over'
    wàzú
              'speak'
                                 dám-mέ
                                                'make speak'
    dăm
              'study'
                                                'teach'
    zăŋ
                                 záη-mέ
              'become red'
                                 bán-mέ
                                                'make red'
    băn
\{LH\}/\{LH\}
    nàmú
              'step on'
                                 nàmú-mé
                                                'cause to step on'
```

The causative suffix may be added to longer stems than those illustrated above. It is generally possible to elicit it with any input stem, transitive or intransitive,

though stems with a transitive suffix -dv or -ndv that is used in causative sense are in practice not used with the regular causative suffix.

Some examples of longer stems are in (298). The causative suffix may be added to stems that already include one or more other derivational suffixes, including reversives ('untie'), mediopassives $(-y\hat{v})$, and deadjectival inchoatives.

(298) Long causatives

input	gloss	causative	gloss
a. <i>CvCCv</i>			
tómbó	ʻjump'	tómbó-mé	'cause to jump'
kúnzó	'become coarse'	kúnzó-mé	'make coarse'
b. trisyllabic			
íŋgílé	'get up'	íŋgílé-mé	'cause to get up'
έlí-yέ	'escape'	élí-yé-mé	'allow to escape'
bàdíyé	'become big'	bàdíyé-mé	'make big'
c. quadrisyllabi	c		
dèmbílí-yé	'become wide'	dèmbílí-yé-mé	'make (sth) wide'
dúm-dí-yó	'become short'	dúm-dí-yó-mέ	'shorten (sth)'
wàgí-ndí-y	€'go far away'	wàgí-ndí-yé-mé	'take far away'
kómú-lé	'untie'	kómú-lé-mé	'cause to untie'

Causatives have full AMN paradigms, and undergo the usual tonal and vocalic modifications in the various stem shapes, as exemplified in (298). Note that $z \partial b \partial - m \partial$ 'make run' follows the usual pattern whereby the A/O-stem changes stem-final (here, suffix-final) $\{\varepsilon \ \partial\}$ to a, and the [+ATR] stem changes ε to c and d to d.

(299)		'make run'	'make lie down'	category	stem
	a.	zòbó-mó zòbó-mé-	bìyó-mé bìyó-mé-	bare stem perfective	bare E
	b.	zòbó-má zòbò-mà-lí-	bìyó-má bìyò-mà-lí-	imperative perfective Neg	A/O A/O
	c.	zòbò-mè-nán- [or: zòbò-mò-n	bìyò-mè-nán- án-]	imperfective Neg	[+ATR]

Syncope and truncation of the final syllable of the stem is not usual in this causative derivation. However, I can cite two cases, one of which is properly a deadjectival factitive (300).

```
(300) input gloss causative gloss

a. syncope
sir<sup>n</sup>é 'be full (eating)' sin-mé 'make (sb) full'

b. truncation
wá:-ndí-yé 'become wide' wá:-n-mé 'widen (sth)'
```

9.2.1.1 Minor causative suffixes

Some verbs involving "transitive" suffix function as causatives. This is especially the case when a transitive verb with suffix -dv, -nv, or -ndv is paired with an unsuffixed intransitive verb ($\S9.3.1.3$).

9.3 Passive and transitive

9.3.1 Mediopassive -yv (-jv) and transitive -dv (-rv)

The mediopassive (MP) suffix is -yv (becoming -jv after a nasal or stop, following syncope), with variant -yyv after Cv(:)- stems ($p\acute{a}$ - $yy\acute{e}$ 'be joined' from $p\acute{a}$:, $k\acute{o}$ - $yy\acute{e}$ 'be raised' from $k\acute{o}$). The Tr[ansitive] suffix is -dv, rarely -rv, and (especially in contracted forms) $-nd\acute{e}$.

Many verb stems occur in mediopassive/transitive pairs, with no unsuffixed form. Other stems occur in an unsuffixed form and one or both suffixal derivatives. There are many stems that look like mediopassive verbs (i.e. trisyllabic with final yv) but that do not contrast with unsuffixed or transitive stems.

9.3.1.1 Mediopassive -yv (-jv) paired with transitive -dv (-rv)

There are numerous alternations between a mediopassive in -yv (becoming -jv after a nasal or stop, following syncope), and a paired transitive in -dv (rarely -rv). The mediopassive is often syntactically intransitive, with the transitive functioning as a simple causative. The mediopassive is sometimes

syntactically transitive ('hold'), in which case the transitive derivative is doubly transitive ('cause/help to hold'). Typical semantic domains are physical position including stance, wearing garments, and holding or carrying. The mediopassive often occurs in stative form (not shown here).

Derived mediopassive and transitive forms often show phonological changes in the stem involving syncope (*CvCv*- to *CvC*-) or truncation (*CvCv*- to *CvC*-). For syncope see §3.6.3.3, for truncation see §3.6.4.7. Syncope can lead in turn to consonant-cluster simplification processes (§3.6.4.1-5). When syncope or truncation results in a nonmonosyllabic stem with initial heavy syllable, a {LH}-toned stem shifts to {H}-tone by Initial-Heavy-Syllable <LH> to H Flattening (§3.8.3.3).

(301) Paired mediopassive (MP) -yv and transitive (Tr) -dv

```
MP
                 gloss
                                   Tr
                                              gloss
a. transitive -dv after short vowel
  Cv- unchanged
                 'lie down'
                                   bì-dé
                                              'put (sb) to sleep'
    bì-yó
  Cv:- shortened to Cv- (§3.6.3.4)
    zí:-vé
                 'flip over [intr]' zì-dé
                                              'flip [tr]'
  Cvdv- or Cvlv- truncated to Cv- (§3.6.4.7)
    dèlí-yé
                 'be set'
                                   dὲ-dέ
                                              'set, put down'
    tédí-yé
                 '(mat) be laid'
                                   tέ-dέ
                                              'lay out (mat)'
  CvIv-becoming Cvr(v)- (§3.6.4.4)
    bùlú-yó
                 'put on pants'
                                   bùrú-dé
                                              'put pants on (sb)'
b. transitive -dv after long vowel
  Cv- lengthened to Cv:- (irregular)
                 'carry on head' dú:-dé
    dì-yέ
                                              'have (sb) carry on head'
  Cv:- unchanged
    sé:-yé
                 'flip over [intr]' sé:-dé
                                              'flip [tr]'
  Cvjv- or Cvgv- (syncopated CvC-) becomes Cv:- (§3.6.4.6)
                                              'put shoes on (sb)', cf.
                 'put on shoes'
    táj-jέ
                                   tá:-dέ
                                              reversive tágí-lé 'take off
                                              shoes', noun tàjù 'shoe'
    digi-y\epsilon [archaic] ~ dij-j\epsilon 'be joined'
                                   dí:-dέ
                                              'join, link [tr]'
    pój-jó
                 '(poles) be laid' pó:-dó
                                              'lay (thin cross-poles in
                                              roof)', noun pòjù
    lέj-jέ
                 'slip self in'
                                   lέ:-dέ
                                              'stick/slide (sth) in',
                                              synonymn lègé
```

```
'be inserted'
                                 gó:-dó
                                            'insert (calabash)', cf.
   gój-jó
                                            reversive gól-ló
c. transitive -dv after consonant
  Cv(:)dv- becoming Cvr- (§3.6.4.5)
    gòdí-yó
                'put on hat'
                                  gór-dó
                                            'put hat on (sb)'
    kódí-vó
                'be hung up'
                                  kór-dó
                                            'hang (sth) up'
    wé:dí-yé
                'learn'
                                  wér-dé
                                            'teach'
  Cvbv- syncopating to Cvb-
    óbí-yó
                                  ób-dó
                                            'have (sb) sit'
                'sit'
    zìbí-yó
                'gird oneself'
                                  zíb-dó
                                            'gird (sb) with a wrap'
    tóbí-yó
                'wrap turban'
                                  tób-dó
                                            'wrap turban on (sb)'
    íbí-yέ
                'be afraid'
                                  íb-dέ
                                            'frighten (sb)'
  Cvmv-syncopating to Cvm-
    pámí-yé
                'come up beside' pám-dé
                                            'put beside'
  Cvmbv-syncopating (or truncating) to Cvm-
    bàmbí-yé
                'carry on back'
                                  bám-dέ
                                            'have (sb) carry on head'
    yàmbí-yé
                'cover (self)'
                                  yám-dέ
                                            'cover (sb)'
 irregular y/r
                'lie on back'
                                 gár-dé 'lay (sb) on back'
    gáy-yέ
```

It is clear that a transitive of the form Cvdv-dv, with consecutive dv syllables, is avoided. The table above shows cases of Cv-dv- with the first dv syllable truncated, and of Cvrv-dv- with the first d replaced by r. Another option is to shift the suffixal d to r. This happens in (302), where the cluster in Cvndv-makes the other options phonologically difficult.

```
(302) MP gloss Tr gloss

transitive -rv after dv

kóndí-yé 'be bent' kóndí-ró 'bend (e.g. stick)'
```

9.3.1.2 Mediopassive paired with transitive -ndv-

The examples in (303) involve a suffix -ndv- rather than -dv-, but the phonology is somewhat opaque.

(303) Transitive *Cv:-ndv* paired with mediopassive

MP gloss Tr gloss

```
transitive -ndv after long vowel
stem with medial nasal, not syncopated in mediopassive
    ?í:ní-yé
                 '(sth) stop'
                                  í:-ndέ
                                             'stop (sth)'
    (~ ?ání-y€)
stem with medial nasal, syncopated in mediopassive
    nún-jó
                 'get dressed'
                                  nú:-ndɔ́
                                             'dress (sb)'
                 'be tilted'
    jέn-jέ
                                  jέ:-ndέ
                                             'tilt (sth)'
                 'kneel'
                                  tú:-ndέ
                                             'cause to kneel'
    tún-jέ
    bán-iέ
                 'hide (oneself)'
                                  bá:-ndέ
                                             'hide (sth)'
stem with medial lateral
    yú:lí-yέ
                 '(sb) wake up'
                                  yú:-ndέ
                                             'rouse, wake (sb) up'
```

The long vowels in the transitive forms in (303) suggest a comparison to the pair $t\acute{a}j$ - $j\acute{e}$ 'put on shoes' (syncopated), $t\acute{a}:-d\acute{e}$ 'put shoes on (sb)', cf. $t\grave{a}j\grave{u}$ 'shoe', given above (301b). A reasonable derivation of $t\acute{a}:-d\acute{e}$ would be from /tájú-dé/ or /tájá-dé/ with the /j/ deleted in intervocalic position and the two adjacent short vowels then contracting to form a long vowel. This does not explain the nasal in -ndv, however. The fact that the deleted medial stem consonant is a coronal nasal or lateral may be connected with the appearance of n in -ndv. However, it is difficult to formalize this, and the Cv:-ndv- shape may have come to be associated templatically with Cvn-jv- and Cv:Cv-vv- mediopassive shapes.

9.3.1.3 Transitive -dv- (-nv-) or -ndv- not paired with mediopassive

There are also a number of cases where transitive -dv- or -ndv- has a morphologically simple unsuffixed counterpart without mediopassive -yv. The examples involving allomorph -dv are in (304). Included is one aberrant example with -nv after a nasal.

(304) Transitive -dv not paired with mediopassive

```
simple
                 gloss
                                  Tr
                                             gloss
a. transitive -dv after defective stative quasi-verb
simple stem is Cvn-
    kùn
                 'be in'
                                   kún-dó
                 'be piled up'
    dùn
                                   dùn-dó
                                             'pile up, set down'
b. transitive -dv after regular verb
Cvgv becoming Cv:-
    lègé
                 'insert'
                                  lέ:-dέ
                                             'insert (as mark)'
```

```
-dv after m
dăm 'speak' dám-dε´ 'speak to, address (sb)'
c. transitive -nv after nasal-final regular verb
u-final CvCu becoming CvC in both forms
yăm 'malfunction' yám-nε´ 'ruin (sth)'
```

The examples of -ndv (after a long vowel) based on a stem without the mediopassive suffix are in (305). For factitive ϵ :- $nd\epsilon$ 'tighten' (cf. inchoative ϵ :n-'become tight'), see §9.5, below.

(305) Transitive -ndv not paired with mediopassive

```
Cv stem
   gó
                 'go out'
                                   gò-ndó
                                              'take out'
Cv: stem
                 'be full'
                                              'fill'
    bă:
                                   bá:-ndέ
CvCv becoming Cv:-
                                              'do (sth) well'
    dàgú
                 'turn out well'
                                   dá:-ndέ
                 'go down'
                                              'take down'
    súwó
                                   sú:-ndó
                 'go past'
                                   ná:-ndέ
                                              'cause to go past'
    năη
                 '(bride) transfer' ti:-ndé
                                              'transfer (bride) to
    tíŋé
                                              husband's house'
    zăŋ
                 'fight'
                                   zá:-ndέ
                                              'incite (to fight)'
                                              'light (fire)' (cf. also tór"5
    tóŋś
                 '[fire] be lit'
                                   t5:-ndέ
                                              'set torch on fire')
```

Some further notes on these forms. $t\acute{o}n\acute{o}$ '(fire) be lit' reflects *t\acute{o}n\acute{o}, as is shown by its A/O-stem tona- (and by cognates like Tommo So $t\acute{e}n\acute{e}$), so the [-ATR] stem vowel in $t\acute{o}$:- $nd\acute{e}$ 'light (fire)' is original. $z\acute{a}$:- $nd\acute{e}$ is also attested in the senses 'swindle' and 'rat on, inform on (treacherously)', but this may be a homonym related to $z\grave{a}m\acute{u}$ 'betray' rather than to $z\check{a}n\acute{u}$ 'fight'. ti:- $nd\acute{e}$ 'transfer' (hence also 'contaminate') has a homonym in the phrase (with preceding cognate nominal) ti: $nd\grave{a}$ ti: $nd\acute{e}$ 'give formal counsel', where the verb may have been denominal.

Other verbs of the shape *Cv:ndv* for which no underived counterpart is presently known in Yanda Dom, but which might reflect *CvCv-dv-, include *wá:ndé* 'stir' (Tommo So *wàgí-lé*) and *té:ndé* 'revive' (Jamsay *tégéré*). On the other hand, cognates of *ní:ndé* 'accompany (to the door)' suggest an etymon already of similar shape (e.g. Tommo So *ní:-ndé*, Jamsay *ní:né*).

9.3.1.4 Mediopassive not paired with suffixed transitive

Unpaired mediopassive verbs, i.e. with -yv- added to a morphologically simple transitive verb, are common. The examples in (306) are typical. Note the range of volitionality/agency from 'coil self up' to 'be pinned'.

(306) Mediopassive -yv- paired with unsuffixed transitive verb

transitive	gloss	mediopassive	gloss
zìŋé péndé mùnó kó pá:	'have (sb) ride double' 'pin (e.g. garment)' 'coil (sth)' 'raise (a child)' 'put together, associate'	zín-jé péndí-yé mùní-yó kó-yyé pá-yyé	'ride double' 'be pinned' 'coil self up' 'be raised' 'be associated'

Mediopassive -yv- may also be superimposed on a transitive verb with reversive suffix. In (307), both the underived and the derived reversive have mediopassive derivatives.

9.3.1.5 Tone-classes for CvC-jv-, CvC-dv-, Cv:-dv-, and Cv:-ndv-

The tone-classes for CvC-jv- (mediopassive) and for CvC-dv-, Cv:-dv-, and Cv:-ndv- (transitive) derivatives are restricted to $\{H\}/\{H\}$ and $\{H\}/\{L\}$. If the stem is C-initial, we get $\{H\}/\{H\}$ if the initial C is a voiceless obstruent, $\{H\}/\{L\}$ if it is a voiced consonant. These restrictions do not apply to suffixal derivatives of other shapes, such as CvCv-Cv-, which directly carry over the tone-contour class of the input verb.

(308) Tone-contour classes

b. transitive

```
CvC-dv- {H}/{H}

{H}/{L}

Cv:-dv- {H}/{H}

{H}/{L}

Cv:-ndv- {H}/{H}

{H}/{L}
```

Most underived stems with an initial voiced consonant are $\{LH\}/\{L\}$ in the underived stem, switching to $\{H\}/\{L\}$ in the derivatives in (308). For example, $\{LH\}/\{L\}$ *zìŋé* 'have (sb) ride double' has $\{H\}/\{L\}$ mediopassive *zín-jé* 'ride double' (perfective negative *zìn-jà-lí-*), $\{LH\}L|$ *gògó* 'be hung' has $\{H\}/\{L\}$ transitive *gó:-dó* 'hang (calabash)' (perfective negative *gò:-dò-lí-*), and $\{LH\}/\{L\}$ *zăŋ* 'fight' has $\{H\}/\{L\}$ transitive *zá:-ndé* 'incite (to fight)' (perfective negative *zà:-ndà-lí*).

9.3.2 Passive suffix -m\(\varepsilon\)

A minor passive suffix $-m\acute{e}$, identical in form to the causative suffix (§9.2.1), is attested for three transitive verbs of perception. First, $t\acute{e}mb\acute{e}$ 'find, encounter (by chance)' has a passive $t\acute{e}mb\acute{e}-m\acute{e}$ 'be found,', in context also 'be findable, be available (e.g. for sale in markets)'. The other attestations are $w\acute{o}-m\acute{e}$ 'be seen' from $w\acute{o}$ 'see', and $n\acute{o}-m\acute{e}$ 'be heard' from $n\acute{o}\acute{e}$ 'hear'. The sense can be semelfactive (e.g. 'was seen [once]') as well as habitual.

9.4 Ambi-valent verbs without suffixal derivation

The productivity of the mediopassive, transitive, and causative suffixal derivations means that Yanda Dom does not normally use a verb both transitively and intransitively, in the fashion of zero-passive (unaccusative) verbs like English *break* (*I broke it, it broke*).

Similarly, transitive verbs in Yanda Dom do not normally omit objects, using at least a default noun (perhaps a cognate nominal) as object. For example, one is 'eating a meal' rather than just 'eating'. Therefore zero-antipassive (unergative) verbs like English *eat* with unexpressed object (*I'm eating*) are not normal. Many English verbs that are predominantly intransitive, like *laugh*, similarly translate into Yanda Dom as transitive sequences with conventional or cognate object ('laugh a laugh').

9.5 Deadjectival inchoative and factitive verbs

gloss

The term "deadjectival" is used loosely here, since the inchoative ('become ADJ') and factitive ('make sth ADJ') verbs are not mechanically derived from the corresponding adjective. However, it is reasonable to think of the modifying adjective as the semantic core of each such word family.

The factitive is often the -mé causative of the inchoative. In other cases, the two use the same form. The main issue is therefore the morphological relationship between the inchoative and the adjective itself.

The first set of forms are those where the inchoative verb has no apparent suffix as such (309).

inchoative factitive

(309) Unsuffixed inchoatives

băn àm

sèrè

CvCv with r/l alternation

adjective

a. Cv: inchoative				
$p\grave{arepsilon}y$	ʻold'	pέ:	pέ:-mέ	
?àyªàyª	'tight'	$\acute{\varepsilon}$:	έ:-ndέ	
bă:	'full'	bă:	bá:-ndέ	
b. <i>CvCv</i> inchoa	ative			
CvCv with med	dial sonorant	or voiced stop)	
mày ⁿ	'dry, hard'	mày ⁿ $\acute{arepsilon}$	mày ⁿ é-mé	
<i>èmù</i>	'narrow'	έmέ	έmέ-mέ	
<i>?ò1è</i>	ʻripe'	<i>?કીર્દ</i>	?álé-mé	
jèmé	'black'	jèmé	jèmé-mé	
pílέ	'white'	pílέ	pílé-mé	
únù	'dense'	únó	únó-mé	
kóló	'ruined'	kóló	kóló-mé	
kómó	'lean'	kómó	kómó-mé	
gšm	'rotten'	gòmź	gòmó-mó	
yàdú	'soft'	yàdá	yòdó-mé	
like preceding,	but with stem	n-final <mark>u</mark> in fac	titive	
kùdù	'undiluted'	kúdó	kúdú-mố	
gàbú	'tall'	gàbú	gàbú-mé	
CaC from /CaC	CaC from /CaCu/			
băn	'red'	băn (bàr ⁿ á-)	bán-mé	

'good-sized' ám

'diluted'

séré

ám-mέ

sélé-ndó

```
c. CvCCv inchoative 

kùnzù 'coarse' kúnzó kúnzó-mé
```

Other adjectives have an inchoative with one or more suffixes. Those in (310a) have the mediopassive suffix -yv. Those in (310b-c) have this -yv- following another morpheme -ndi- or -di-. The verb in (310d) with just -ndv is isolated.

(310) Suffixed inchoatives

```
adjective
                              inchoative
                                            factitive
                 gloss
a. inchoative with (mediopassive) -yv
    ờjú
                 'hot'
                              όj-jέ
                                            j-jέ-mέ
                                            ná:ní-yé-mé
    nà:r<sup>n</sup>à
                 'easy'
                              ná:ní-yέ
                 'cold; slow' ké:zí-yé
                                            ké:zí-yé-mέ
    kè:zù
                 'thick'
                                            dèmbílí-yé-mέ
    dèmbùl
                              dèmbílí-yé
                              óróndí-yέ
    àr<sup>n</sup>àndú
                                            óróndí-yé-mé
                 'smooth'
    sémélé
                              sémílí-yé
                                            sémílé-
                 'worn-out'
b. inchoative with -ndi-yv
Cv:-ndi-yv from Cvy<sup>n</sup>
                                            tó:-ndí-yó-mέ
    tòy<sup>n</sup>
                 'deep'
                              tó:-ndí-yé
                 'wide'
    wàyn
                              wá:-ndí-yé
                                            wá:-ndé
CvCv-ndi-yv with second vowel non-high
                 'sour'
                              dàr ná-ndí-yé dàr ná-ndí-yé-mé
    dăn
    èn
                 'thin'
                              éné-ndí-yé éné-ndí-yé-mé
    ĕΙ
                 'sweet'
                              élé-ndí-yé
                                            élé-ndí-yé-mé
    ÌΙ
                 'wet'
                              óló-ndí-yέ
                                            óló-ndí-yé-mé
    găl
                 'bitter'
                              gàlá-ndí-yé gàlá-ndí-yé-mé
                 'long'
                              zàlá-ndí-yé zàlá-ndí-yé-mé
    zàlà
CvCi-ndi-yv with second vowel high
                 'fat'
                              bìr<sup>n</sup>í-ndí-yé bìr<sup>n</sup>í-ndí-yé-mé
    bìn
                              wàgí-ndí-yé wàgí-ndí-yé-mé
    wàgú
                 'distant'
CvCi-ndi-yv after reduction of CvnCv to CvCv-
    mènzù
                 'slender'
                              mèzí-ndí-yé mèzí-ndí-yé-mé
c. inchoative with -di-yv
after contraction of Cvjv- to Cv:-
                 'fast'
                              5:-dí-yε
    дjú
after m
    năm
                 'difficult'
                              nám-dí-yé nám-dí-yé-mé
```

```
d. inchoative and factitive with -ndv

si:^n 'sharp' si:-nd\acute{\epsilon} si:-nd\acute{\epsilon}
```

The unusual morphology for 'sharp' (310d) probably reflects a constraint against monosyllabic verb stems with high vowels (§10.2.1). While -dv or -ndv is generally a transitive suffix, it is used in this case in intransitive (inchoative) as well as transitive (factitive) function. This ambi-valence is also found in some cognates (Ben Tey sím-dé, Jamsay sí:-né, Pergue sí:-lé).

Note that $\partial j \vec{u}$ has different inchoatives in the senses 'hot' and 'fast'.

For dìyá 'big', the unusual inchoative bàdíyé 'become big(ger)' has a partial phonological overlap. The factitive is bàdíyé-mé. For bè-bélè, dàgá, and kùnà 'small', the inchoative is suppletive áŋílí-yé, with factitive áŋílí-yé-mé. For síyé 'good' the inchoative is suppletive ézí-ndí-yé 'become good', factitive ézí-ndí-yé-mé, and cf. also dàgú 'turn out well'.

9.6 Denominal verbs

There are no productive denominal verbal derivations. 'Become (an) X' is expressed with the verb tine 'become', and 'make (sb) become (an) X' is expressed with its transitive counterpart ti:-nde 'transform, convert'.

wèzú-gí-yé 'become crazy' belongs to a word-family with noun *wèzé* 'crazy person' or 'craziness'. Factoring out mediopassive *-yv* leaves an archaic verbalizing suffix *-gv-*.

9.7 Obscure verb-verb relationships

Intransitive $k\acute{a}b\acute{u}$ 'become separated' and transitive $k\acute{a}b\acute{u}$ - $l\acute{e}$ 'separate' are among several pairs which seem to involve a derivational suffix, but that do not fit into productive derivational patterns.

10 Verbal inflection

10.1 Inflection of regular indicative verbs

Verbs are inflected for a range of indicative inflectional categories, as well as for nonindicative (deontic) mood categories (imperative, hortative).

Indicative verbs in main clauses consist of a verb stem, an aspect-negation (AN) marking usually by a suffix (accompanied by tonal and stem-final vocalic changes), and a final pronominal-subject suffix (with 3Sg expressed as zero, written $-\emptyset$). The perfective differs from other indicative categories in lacking a suffix, but it requires the E-stem of the verb. (The imperative is also unsuffixed, with the A/O-stem.) There are also some more complex indicative forms involving an inflectable past clitic $=b\varepsilon$.

In verbs in relative clauses, the pronominal-subject suffix is absent, but a version of the AN marking is present.

10.1.1 Suffixes versus chained auxiliaries (perfective system)

Several of the marked perfective-system forms involve an apparent "suffix" added to the bare stem, a combination that is susceptible to analysis as a chain of two verbs (main verb and following auxiliary). Dogon languages differ as to the optimal analysis. The key test is whether pronominal-subject proclitics may intervene between the main verb and the "suffix" in nonsubject relative clauses.

In YD, so the suffixal analysis is preferred. In (311a), the 1Sg proclitic precedes the combination of main verb ('eat') and recent perfect suffix. In (311b), it precedes the combination of main verb ('see') and experiential perfect suffix. In (311c), it precedes the combination of main verb ('fall') and perfective-2 suffix.

- (311) a. $iz\hat{e}n^L$ $z\acute{a}$ mi $?\acute{a}n\hat{e}-z\acute{e}$ $g\hat{e}$ day meal 1SgS eat.meal-RecPf.Rel Def.InanPl 'the days (when) I finished eating (meals).'
 - b. $\partial m \partial^{L} g \partial y^{n} \dot{e} m \dot{u}$ $m \dot{i}$ † $w \dot{o} t \acute{e} r \dot{e}$ $w \dot{o}$ place lephant-AnPl 1SgS see-ExpPf.Rel Def.InanSg 'the place where I have (ever) seen elephants.'

c. [\deltam\delta^L mi p\textit{ile-z\delta} w\delta]

[place^L 1SgS fall-Perf2.Rel Def.InanSg]

w\deltaj\tilde{u}-m b\delta-\varnothing

distant-Adj be-3SgS

'The place where I fell is far away.'

An informant did accept versions of (311a-b) above that I proposed to him, with the subject pronominal splitting the verb and "suffix." The split forms are (312a-b). The same informant rejected this alternative for (312c).

- (312) a. $izen^L$ za $izen^L$ za $izen^L$ izenethin izenet
 - b. $\frac{\partial m \partial^{L}}{\partial m} = \frac{g \partial y^{n} \partial m u}{g \partial y^{n} \partial m} = \frac{w \partial m u}{g \partial y^{n} \partial m}$

10.1.2 Overview of categories

The AN categories of indicative verbs are given in (313), organized into systems. Categories not specified as negative are understood to be positive.

- (313) Indicative verbal categories
 - a. perfective positive system perfective perfective-2 experiential perfect recent perfect
 - b. imperfective positive system imperfective Reduplicated imperfective
 - c. perfective negative system
 perfective negative
 experiential perfect negative
 recent perfect negative

- d. imperfective negative system imperfective negative
- e. stative system stative progressive (with an auxiliary verbs)
- f. stative negative system stative negative

The main justification for distinguishing perfective from imperfective systems is that negative counterparts of the various marked AN categories in the perfective system all include the perfective negative suffix, which is distinct from the imperfective negative morpheme.

The categories in the stative system do not distinguish perfective from imperfective aspect, and have a distinctive negation.

10.2 Verb stem shapes

Underived verbs have from one to three syllables, with bisyllabic shapes (especially CvCv) favored. Underived trisyllabic stems may have originated as suffixal derivatives of shorter stems. Suffixal derivations (reversive, mediopassive, causative) add a final -Cv- suffix to the underived stem. Multiple suffixation is possible.

The term **bare stem** is used here in a technical sense for the form of a verb used in verb-verb chains, and specifically in the 'be able to VP' construction with final verb **bèlé** (also used as the verb 'get, acquire'). The bare stem is a good choice for the lexical representation of the stem, especially regarding segments. However, it does not always allow prediction of tonal patterns in the various AN forms, so in the online lexicon I generally include both the bare stem and the perfective negative.

Before proceeding to the sections below, readers should review the initial discussions of stem-vocalism classes (§3.5) and tone-contour classes (§3.8.1.2).

10.2.1 Monosyllabic verb stems

The monosyllabic verbs known to me are in (314). The forms shown are the bare stem that occurs nonfinally in verb chains, the perfective, and the perfective negative.

The shapes Cv, Cv:, and nasalized Cv:ⁿ are well represented. The distinction between $\{H\}/\{H\}$ and $\{H\}/\{L\}$ tone-contour classes is audible in the perfective negative for Cv stems, and at least in the bare stem and in the perfective negative of the long-voweled stems. The $\{H\}/\{L\}$ class assignment for Cv stems is a proxy for $\{LH\}/\{L\}$, given the inability of Cv verbs to express a rising tone contour. Cv: verbs can express a rising tone, and divide into $\{H\}/\{H\}$ and $\{LH\}/\{L\}$ classes, with one exception. This is a Cv: verb of the $\{LH\}/\{LH\}$ tone-contour class, namely $n\check{a}$: 'spend night'. It is also the only Cv: verb with initial n or l, these being the initial consonants associated with $\{LH\}/\{LH\}$.

The most distinctive feature of monosyllabic verbs is the splitting of the stem vowel into two parts, an initial short vowel (or desyllabified semivowel) reflecting the lexical stem vowel quality, and a final short vowel expressing the stem-final vocalism required by the AN category. In (314b-d) we see this for Co, Ca: and Co: verbs in the perfective, which requires the E-stem ending in e or e. In (314e) we see it in the perfective negative, which requires the A/O-stem, here with stem-final e. In (314b) and (314e) we see it in both the perfective and in the perfective negative. All bisyllabic and longer stems simply modify the stem-final vowel, leaving at least one nonfinal stem vowel intact.

(314) Monosyllabic verb stems

```
Perf
                       PerfNeg
    stem
                                            gloss
a. Cv- with perfective Ce- or C\varepsilon-
 {H}/{H}
    yέ
             yέ-
                       yá-lì-
                                            'weep' (with nominal yàn)
    cé
             cé-
                       cé-lì-
                                            '(body part) hurt'
 \{H\}/\{L\} as proxy for \{LH\}/\{L\}
             jέ-
                                            'kill'; 'chop down (tree)'
    įέ
                       jà-lí-
    jé
             ié-
                       iè-lí-
                                            'dance' (with nominal jà:)
    wó
             wé-
                       wò-lí-
                                            'come'
             wέ-
                       wà-lí-
                                            'see'
    wś
b. Cv- with perfective Cwe- or Cwe-
 {H}/{H}
                       noá-lì-
    пэ́
             nοέ-
                                            'go in'
                                            'eat (crushed millet)'
    kś
             kǫέ-
                       koá-lì-
                       koá-lì-
                                            'raise (child)'
    kś
             kρέ-
                                            'slash earth (to sow)' (with
    tś
             tọέ-
                       toá-lì-
                                             nominal tòn)
    tś
             tɔέ-
                       toá-lì-
                                            'send'
```

```
tś
                       toá-lì-
                                             'dismantle (house)'
             tọέ-
    tś
                                             '(milk) fill up (in breast)'
             tọέ-
                       toá-lì-
 \{LH\}/\{L\}
             goé-
                       gò-lí-
                                            'go out'
    gó
                                             'hear'
             ηρέ-
                       noà-lí-
    пэ́
                       dọà-lí-
             dρέ-
                                            'insult' (with nominal doà)
    dś
                                            'arrive at, reach, approach'
    dź
             dρέ-
                       doà-lí-
c. Ca:- with perfective Caye-
 {H}/{H}
    ká:
             káyé-
                       ká:-lì-
                                             'shave'
    tá:
             táyé-
                       tá:-lì-
                                             'shoot'; 'snap fingers against'
    tá:
             táyé-
                       tá:-lì-
                                            'avoid (taboo)'
             páyé-
                                             'put up against'
                       pá:-lì-
    pá:
                                             'rent'
    há:
             háyé-
                       há:-lì-
             sáyé-
                       sá:-lì-
                                            'answer'
    sá:
                                             '(seedling) grow'
    sá:
             sáyé-
                       sá:-lì-
                                             'scoop (from water)'
    sá:
             sáyé-
                       sá:-lì-
    á:
             áyé-
                       á:-lì-
                                            'uproot by hand'
    tá:n
             táy<sup>n</sup>έ-
                       tá:n-lì-
                                             'spread (legs)'
    pá:n
                       pá:n-lì-
                                             'intersperse (crops)'
             páy<sup>n</sup>έ-
 \{LH\}/\{L\}
    wă:
             wàyé-
                       wà:-lí-
                                            'pull up (boubou)'
    mă:
             màyé-
                       mà:-lí-
                                            'make (bricks)'
    dă:
             dàyé-
                       dà:-lí-
                                            'cover (mouth)'
    dă:
             dàyé-
                       dà:-lí-
                                            'endure (e.g. heat)'
                                             'be enough', 'be equal to'
             bàyé-
                       bà:-lí-
    bă:
    yă:
             yàyé-
                       yà:-lí-
                                            'hold over fire'
    ză:
             zàyé-
                       zà:-lì-
                                            'sow in manure pile'
             zàyé-
                       zà:-lì-
                                             'carve'
    ză:
             gàyé-
                       gà:-lì-
                                             'harvest (rice) with sickle'
    gă:
    gă:
             gàyé-
                       gà:-lì-
                                             'harvest (secondary millet)'
 \{LH\}/\{LH\}
    nă:
             này<sup>n</sup>é-
                       nă:-lì-
                                             'spend night'
d. Co: with perfective Cwe-
 {H}/{H}
                                             'spit' (with sùmzú 'saliva')
             toé:-
                       tó:-lì-
    tó:
    tó:
             toé:-
                                             'take, pick up' (variant of
                       tó:-lì-
                                             tógó)
                                             'cover with hide'
    kó:
             koé:-
                       kó:-lì-
    só:
             soé:-
                       só:-lì-
                                             'dip'
```

```
e. C5: with perfective Cw\varepsilon-
 {H}/{H}
    kó:
              kɔέ:-
                         koá:-lì-
                                                '(wood) be worm-eaten'
                                                'let (earth) ferment'
                         poá:-lì-
    pź:
              ροέ:-
                                                'peck'
    sź:
              sρέ:-
                         səá:-lì-
                                                'shovel, scoop'
    sź:
              soέ:-
                         sɔá:-lì-
     sź:n
              sρέ:"-
                         sɔá:n-lì-
                                                'douse (fire)'
 \{LH\}/\{L\}
              boέ:-
                         boà:-lí-
                                                'unsheathe'
    bš:
     dž:n
              dοέ:"-
                         doà:n-lí-
                                                'put under'
e. C\varepsilon: (sometimes from *C\varepsilon\varepsilon) with A/O-stem C\varepsilon ya-
 {H}/{H}
    pέ:
              pέ:-
                         péyá-lì-
                                                'get old'
                                                'tap; squash'
    pέ:
              pέ:-
                         pέyá-lì-
    tέ:
              tέ:-
                         téyá-lí-
                                                'sprout'
              tέ:-
                                                'take (action)', with noun
     tέ:
                         téyá-lí-
                                                 dàbúl
                         céyá-lì-
                                                'delouse'
     cέ:
              cέ:-
     sέ:
              sέ:-
                         séyá-lì-
                                                'trim (hair)'
     \dot{\varepsilon}:
              έ:n_
                         éy<sup>n</sup>á-lì-
                                                '(woman) marry (man)'
e. Ce:
 {H}/{H}
    cé:
              cé:
                         cé:-lì-
                                                'nibble'
f. irregular
 {H}/{H}
                         zó-lì-
    zó
              zoé-
                                                'bring' (see below, §10.2.1.8)
```

In Coe and Coe, the diacritic indicates desyllabification of $\{oo\}$ to a w-like semivowel. One could alternatively transcribe Cwe and Cwe. oo is distinctly more open than oo, so the transcription I use is phonetically accurate, but since the ATR value is shared with the following vowel it could be allophonic.

These transcriptions bring out the ATR-harmony between the adjacent vowels. Before a, there is no audible opposition between [Coa] and [Coa]. It is therefore possible to use the simpler transcription with w without neutralizing any oppositions.

A significant take-away from the data in (314) is the fact that a-vocalism requires Ca: as opposed to #Ca shape. A second major observation is the

absence of high vowels: no #Ci, #Ci, #Cu, or #Cu: stems. Mid-height vowels occur in both Cv and Cv: shapes.

10.2.1.1 $y \varepsilon$ 'weep'

Beginning here I present full paradigms for selected verbs. The stem-vocalism class is indicated in the third column. In the fourth column, the stem tone is indicated. The tone-contour class of the verb is abstracted from this set of stem tones, bearing in mind that some AMN categories impose a tone-contour overlay on the stem (and are therefore to be disregarded when determining the lexical tone class. Generally the bare stem and the perfective negative are sufficient to make the determination. All Cv stems have H-toned bare stem, so the choice is between $\{H\}/\{H\}$ and $\{H\}/\{L\}$, as usually brought out in the perfective negative. An initial voiceless consonant in a Cv stem requires $\{H\}/\{H\}$, while an initial voiced consonant usually requires $\{H\}/\{L\}$, except that initial n (and n?) forces a lexical choice.

The vowel of the verb 'weep' alternates between ε (bare stem, perfective with E-stem) and a (A/O-stem).

(315) Paradigm of $y \in \text{`weep'}$

form	category	stem	stem tones
yέ-	perfective	E	Н
yέ	bare stem	bare	Н
yé-zò-	perfective-2	bare	H(?)
yè-téré-bè-	experiential perfect	bare	L
yé-zè-	recent perfect	bare	Н
$y \hat{\varepsilon} = b \hat{\varepsilon}$ -	past perfect	bare	H(?)
yè-zá-lì-	recent perfect negative	bare	L
$y\hat{\varepsilon}$ - $z\hat{\varepsilon} = b\hat{\varepsilon}$ -	past recent perfect	bare	L
yá	imperative	A/O	Н
yá-m-ù	imperfective 3Sg	A/O	Н
yà-m	imperfective before AUX	A/O	L
$y\hat{a}$ - $m = b\hat{\varepsilon}$ -	past imperfective	A/O	L
yâ: = bá-lì-	past imperfective negative	A/O	HL
yá-lì-	perfective negative	A/O	H(?)
yè-nán-	imperfective negative	bare	L
yè-lá	prohibitive	bare	L
yè-má	hortative	bare	L

This verb is regularly preceded by cognate nominal $y \grave{a} y$ 'weeping'. Since this nominal $y \grave{a} y$ is L-toned, it induces an initial high tone on a following L-toned word. This complicates the high versus low tonal markings on the stem. The forms shown in the table are based on isolation pronunciations without $y \grave{a} y$, but show some mixing of $\{H\}/\{H\}$ and $\{H\}/\{L\}$ tone-contour types. The categories marked H(?) in the rightmost column are those that should have L-toned stems if the verb is $\{H\}/\{L\}$. For one informant, the addition of $y \grave{a} y$ changed the tone of $y \grave{e} - t\acute{e} r\acute{e} - b\acute{e} - t\acute{e} r\acute{e} - t$

10.2.1.2 **w**5 'see'

(316) Paradigm of w5 'see' {H}/{L}

form	category	stem	stem tones
		_	
W€-	perfective	Е	Н
wś	bare stem	bare	Н
wà-zó-	perfective-2	bare	L
wò-téré-bè-	experiential perfect	bare	L
wó-zὲ-	recent perfect	bare	Н
$w\dot{\partial} = b\acute{\varepsilon}$ -	past perfect	bare	L
wò-zá-lì-	recent perfect negative	bare	L
$w \hat{\sigma} - z \hat{\varepsilon} = b \hat{\varepsilon} - c$	past recent perfect	bare	L
wá	imperative	A/O	Н
wá-m-ù	imperfective 3Sg	A/O	Н
wà-m	imperfective before AUX	A/O	L
$w\grave{a}$ - $\acute{m} = b\grave{\varepsilon}$ -	past imperfective	A/O	L
<i>wâ: = bá-lì-</i>	past imperfective negative	A/O	HL
wà-lí-	perfective negative	A/O	L
wò-nán-	imperfective negative	bare	L
wà-lá	prohibitive	bare	L
wò-má	hortative	bare	L

10.2.1.3 *wó* 'come'

The tone contours point to $\{H\}/\{L\}$ class. The perfective $w\acute{e}$ - could be derived from /woe/ with the o absorbed by the w.

(317) Paradigm of wó 'come' {H}/{L}

form	category	stem	stem tones
wé-	perfective	E	Н
wó	bare stem	bare	Н
wò-zó-	perfective-2	bare	L
wò-téré-bè-	experiential perfect	bare	L
w∕ó-zÈ-	recent perfect	bare	Н
$w\grave{o} = b\acute{\varepsilon}$ -	past perfect	bare	L
wò-zá-lì-	recent perfect negative	bare	L
$w\grave{o}$ - $z\acute{\varepsilon} = b\grave{\varepsilon}$ -	past recent perfect	bare	L
wó	imperative	A/O	Н
wó-m-ù	imperfective 3Sg	A/O	Н
wò-ḿ	imperfective before AUX	A/O	L
$w\grave{o}$ - $\acute{m} = b\grave{\varepsilon}$ -	past imperfective	A/O	L
<i>wô:</i> = <i>bá-lì-</i>	past imperfective negative	A/O	HL
wò-lí-	perfective negative	A/O	L
wò-nán-	imperfective negative	bare	L
wò-lá	prohibitive	bare	L
wò-má	hortative	bare	L

10.2.1.4 *gó* 'go out'

The lexical tone-contour class is $\{H\}/\{L\}.$ The perfective shows the E-stem vocalic split.

(318) Paradigm of go 'go out' $\{H\}/\{L\}$

form	category	stem	stem tones
goé-	perfective	Е	Н
gó	bare stem	bare	Н
gò-zó-	perfective-2	bare	L

gò-téré-bè-	experiential perfect	bare	L
gó-zè-	recent perfect	bare	Н
$g\grave{o} = b\acute{\varepsilon}$ -	past perfect	bare	L
gò-zá-lì-	recent perfect negative	bare	L
$g\grave{o}$ - $z\acute{\varepsilon}$ = $b\grave{\varepsilon}$ -	past recent perfect	bare	L
gó	imperative	A/O	Н
gó-m-ù	imperfective 3Sg	A/O	Н
gò-ḿ	imperfective before AUX	A/O	L
$g\grave{o}$ - \acute{m} = $b\grave{\varepsilon}$ -	past imperfective	A/O	L
$g\hat{o}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	past imperfective negative	A/O	HL
gò-lí-	perfective negative	A/O	L
gò-nán-	imperfective negative	bare	L
gò-lá	prohibitive	bare	L
gò-má	hortative	bare	L

10.2.1.5 $j\epsilon$ 'dance' or 'fart' and $j\epsilon$ 'kill'

'Dance' and 'fart' are homonyms, with distinct etymologies. In the absence of a preceding L-toned element, their paradigm is (319). The diagnostic forms point to $\{H\}/\{L\}$ tone-contour class.

(319) Paradigm of $j\acute{e}$ 'dance' or 'fart' $\{H\}/\{L\}$

form	category	stem	stem tones
jé-	perfective	Е	Н
jé	bare stem	bare	Н
jè-zó-	perfective-2	bare	L
jè-téré-bè-	experiential perfect	bare	L
jé-zè-	recent perfect	bare	H
$j\grave{e} = b\acute{\epsilon}$ -	past perfect	bare	L
jè-zá-lì-	recent perfect negative	bare	L
$j\grave{e}$ - $z\acute{e}=b\grave{e}$ -	past recent perfect	bare	L
jó	imperative	A/O	H
jé-m-ù	imperfective 3Sg	A/O	H
jè-ḿ	imperfective before AUX	A/O	L
$j\grave{e}$ - $\acute{m}=b\grave{\varepsilon}$ -	past imperfective	A/O	L
jô: = bá-lì-	past imperfective negative	A/O	HL
jè-lí-	perfective negative	A/O	L
jè-nán-	imperfective negative	bare	L
jè-lá	prohibitive	bare	L

jè-má hortative bare L

Both 'dance' and 'fart' verbs are associated with L-toned cognate nominals, viz., $j\hat{a}$: 'dance [noun]' and $j\hat{n}\eta$ 'fart [noun]'. Addition of the low-toned nominal before the verb shifts the initial tone of the verb to high in the diagnostic categories: prohibitive $j\hat{a}$: ' $j\hat{e}$ - $l\hat{a}$ ' don't dance!', $j\hat{n}\eta$ ' $j\hat{e}$ - $l\hat{a}$ 'don't fart!', etc.

The verb 'kill' (also 'extinguish fire' etc.) is $j\acute{\epsilon}$. The paradigm is (320). It too belongs to the $\{H\}/\{L\}$ tone-contour class.

(320) Paradigm of $j\epsilon$ 'kill' {H}/{L}

form	category	stem	stem tones
jέ-	perfective	E	Н
jέ	bare stem	bare	Н
jὲ-zó-	perfective-2	bare	L
jè-téré-bè-	experiential perfect	bare	L
jé-zè-	recent perfect	bare	Н
$j\grave{\varepsilon} = b\acute{\varepsilon}$ -	past perfect	bare	L
jè-zá-lì-	recent perfect negative	bare	L
$j\hat{\varepsilon}$ - $z\hat{\varepsilon}$ = $b\hat{\varepsilon}$ -	past recent perfect	bare	L
já	imperative	A/O	Н
já-m-ù	imperfective 3Sg	A/O	Н
jà-ḿ	imperfective before AUX	A/O	L
$j\grave{a}$ - $\acute{m} = b\grave{\varepsilon}$ -	past imperfective	A/O	L
<i>jâ: = bá-lì-</i>	past imperfective negative	A/O	HL
jà-lí-	perfective negative	A/O	L
jè-nán-	imperfective negative	bare	L
jè-lá	prohibitive	bare	L
jè-má	hortative	bare	L

10.2.1.6 cé 'hurt, be painful'

This verb can be used with a body part as subject, as in 'my foot hurts'. In the rightmost column of (321) one immediately notices a much greater density of H-tone than in the verbs discussed in preceding sections, which belong to the $\{H\}/\{L\}$ class. The HL-tone of the stem in the past imperfective negative, and its L-tone in the imperfective negative, reflect tonal features of these categories.

(321) Paradigm of cé 'hurt, be painful' {H}/{H}

form	category	stem	stem tones
cé-	perfective	E	Н
cé	bare stem	bare	Н
cé-zò-	perfective-2	bare	Н
cé-téré-bè-	experiential perfect	bare	Н
cé-zè-	recent perfect	bare	Н
$c\acute{e} = b\grave{\varepsilon}$ -	past perfect	bare	Н
cé-zà-lì-	recent perfect negative	bare	Н
$c\acute{e}$ - $z\grave{e}$ = $b\grave{e}$ -	past recent perfect	bare	Н
có	imperative	A/O	Н
cé-m-ù	imperfective 3Sg	A/O	Н
cé-m	imperfective before AUX	A/O	Н
$c\acute{e}$ - \acute{m} = $b\grave{\varepsilon}$ -	past imperfective	A/O	Н
$c\hat{o}$: = $b\acute{a}$ - l i -	past imperfective negative	A/O	HL
cé-lì-	perfective negative	A/O	Н
cè-nán-	imperfective negative	bare	L
cé-là	prohibitive	bare	H
cé-mà	hortative	bare	H

There is a stative form *céyò*- '(body part) be hurting'.

10.2.1.7 C5 verbs with perfective Cwέ-

The verbs of this type, whose defining feature the occurrence of an onset Cw in some paradigmatic forms, are listed in (322). Like other Cv verbs, they can only be H-toned in the bare stem (and some related forms). This also applies to the E-stem. The perfective negative and other diagnostic categories allow us to distinguish the $\{H\}/\{H\}$ and $\{H\}/\{L\}$ tone-contour classes. As with longer stems, an initial voiceless consonant requires $\{H\}/\{H\}$. The $C\delta$ stems with initial voiced consonant other than n are $\{H\}/\{L\}$, as a proxy for $\{LH\}/\{L\}$, since a rising tone cannot be expressed on Cv. However, my current tonal data for $d\delta$ 'arrive' are somewhat inconsistent. When the first consonant is n (or, in theory, n), the stem has a lexical choice between $\{H\}/\{H\}$ and $\{H\}/\{L\}$. In fact, 'go in' and 'hear', both being segmentally $n\delta$, differ in tone-contour class (322).

(322) C5 and perfective Cwέ-

```
a. {H}/{H}

initial voiceless consonant

t5 'slash earth (to sow)'
```

```
tó 'send'
tó 'dismantle (house)'
tó '(milk) fill up (in breast)'
kó 'eat (crushed millet)'
initial n
nó 'go in'

b. {H}/{L}, i.e. with low stem tone at least in perfective negative initial voiced consonant (other than n)
dó 'arrive, reach, approach' (but tonal data inconsistent)
dó 'insult'
initial n
nó 'hear'
```

 $t\delta$ 'send' (323) exemplifies the {H}/{H} tone-contour class. The stem is H-toned in most categories, extended to HL in the past imperfective negative, and dropped to L as usual in the imperfective negative. The $t\delta$ onset split is seen in the E- and A/O-stems.

(323) Paradigm of t5 'send' $\{H\}/\{H\}$

form	category	stem	stem tones
t <u></u> χέ-	perfective	E	H
tś	bare stem	bare	H
tó-zò-	perfective-2	bare	H
tó-téré-bè-	experiential perfect	bare	Н
tó-zè-	recent perfect	bare	H
$t \delta = b \hat{\varepsilon}$ -	past perfect	bare	Н
tó-zà-lì-	recent perfect negative	bare	H
$t \circ z = b $	past recent perfect	bare	H
toá	imperative	A/O	H
toá-m-ù	imperfective 3Sg	A/O	Н
toá-m	imperfective before AUX	A/O	H
$t \circ \acute{a} - m = b \circ \acute{e} - m = b \circ $	past imperfective	A/O	Н
tọâ: = bá-lì-	past imperfective negative	A/O	HL
tạá-lì-	perfective negative	A/O	H
tò-nán-	imperfective negative	bare	L
tó-là	prohibitive	bare	Н
tó-mà	hortative	bare	Н

The sample paradigm for the $\{H\}/\{L\}$ set is $n\delta$ 'hear' (324). As with other monomoraic stems, $\{H\}/\{L\}$ is here a proxy for $\{LH\}/\{L\}$.

(324) Paradigm of $n\delta$ 'hear' {H}/{L}

form	category	stem	stem tones
ηρέ-	perfective	E	Н
nó	bare stem	bare	H
nà-zó-	perfective-2	bare	L
nà-téré-bè-	experiential perfect	bare	L
nó-zè-	recent perfect	bare	Н
$n\grave{\partial} = b\acute{\varepsilon}$ -	past perfect	bare	L
nò-zá-lì-	recent perfect negative	bare	L
$n\partial -z\acute{\varepsilon} = b\grave{\varepsilon}$ -	past recent perfect	bare	L
ngá	imperative	A/O	Н
nɔá-m-ù	imperfective 3Sg	A/O	Н
nɔà-m	imperfective before AUX	A/O	L
$n \circ \hat{a} - \hat{m} = b \hat{\varepsilon} - \hat{a}$	past imperfective	A/O	L
nɔâ: = bá-lì-	past imperfective negative	A/O	HL
ngà-lí-	perfective negative	A/O	L
nò-nán-	imperfective negative	bare	L
nó-là	prohibitive	bare	H (L)
nó-mà	hortative	bare	H (L)

One informant gave L-toned stems in $n\partial$ -lá (prohibitive) and $n\partial$ -má (hortative).

The forms of 'go in' that are tonally distinct from those of 'hear' are the following: $n\delta$ - $z\delta$ -, $n\delta$ - $t\acute{e}r\acute{e}$ - $b\grave{e}$ -, $n\delta$ - $b\grave{e}$ -, $n\delta$ - $z\grave{a}$ - $l\grave{i}$ -, $n\delta$ - $z\grave{e}$ = $b\acute{e}$ -, $n\Delta$ - $l\grave{a}$ -, $n\delta$ - $l\grave{a}$, and $n\delta$ - $m\grave{a}$. Other categories require H-tone, or in one case each HL-tone or L-tone, for both Cv tone-contour classes, so in these categories 'go in' and 'hear' are homophonous. Perhaps to avoid confusion, 'hear' is often accompanied by the noun $s\acute{u}n$ 'ear'.

The tonally diagnostic forms for 'send' and 'hear' are juxtaposed in (325). experiential perfect (235a) -téré-bè- is tonally unaffected by the tonal difference between 'send' and 'hear'. This is the most chain-like combination in the relevant data. By contrast, the forms in (325b) show a rhythmical tonal pattern beginning HL... for 'send' and LH... for 'hear', as the suffixal tones polarize to the stem tones.

(325) Tonally diagnostic forms

'send' $\{H\}/\{H\}$ 'hear' $\{H\}/\{L\}$ category

a.	tó-téré-bè-	nò-téré-bè-	experiential perfect
b.	tó-zò- tó = bè- tó-zà-lì- tó-zè = bè-	nò-zó- nò = bέ- nò-zá-lì- nò-zé = bè-	perfective-2 past perfect recent perfect negative past recent perfect
	tọá-lì-	noà-lí-	perfective negative

10.2.1.8 **zó** (imperative **zô**:) 'bring'

Cognates of this verb are irregular in several Dogon languages, in some cases showing a tone-contour {HL} that is otherwise highly unusual for verbs. In Yanda Dom, the verb is irregular in several respects.

Most forms are based on a short-voweled form ($z\acute{o}$ -), but the imperative has a long vowel ($z\acute{o}$:, compare imperative $t\acute{o}$: from $t\acute{o}$: 'spit'). Most forms of 'bring' have H-toned stem, pointing to a mostly {H}/{H} tone-contour class. This is very odd for a stem with initial voiced consonant. The verb is also unorthodox within the {H}/{H} class in shifting the stem to L-tone in $z\acute{o}$ - $t\acute{m}$ (imperfective before AUX) and $z\acute{o}$ - $t\acute{m}$ = $b\acute{e}$ - (past imperfective). On the other hand, we get a H-toned stem in imperfective negative $z\acute{o}$ - $n\grave{a}$ n- $\sim z\acute{o}$ - $r\grave{a}$ n-; this tonal peculiarity is shared only with the antonym $z\check{t}$ n 'take away' (§10.2.1.12), below. These two verbs also have this aberrant H-toned stem in the purposive form with $n\acute{a}$ (§17.6.1).

In (326), the irregular forms are highlighted by an exclamation point in the rightmost column.

(326) Paradigm of zó 'bring', mostly {H}/{H}

form	category	stem	stem tones
zoé-	perfective	E	Н
zó	bare stem	bare	Н
zó-zò-	perfective-2	bare	Н
zó-téré-bè-	experiential perfect	bare	Н
zó-zè-	recent perfect	bare	Н
$z\acute{o} = b\grave{\varepsilon}$ -	past perfect	bare	Н
zó-zà-lì-	recent perfect negative	bare	Н
$z\acute{o}$ - $z\grave{\varepsilon}$ = $b\grave{\varepsilon}$ -	past recent perfect	bare	Н
zô:	imperative	A/O	HL [!]
zó-m-ù	imperfective 3Sg	A/O	Н

zò-ḿ	imperfective before AUX	A/O	L [!]
$z\grave{o}$ - $\acute{m} = b\grave{\varepsilon}$ -	past imperfective	A/O	L [!]
$z\hat{o}$: = $b\acute{a}$ - $l\hat{i}$ - \varnothing	past imperfective negative	A/O	HL
zó-lì-	perfective negative	A/O	Н
zó-nàn-	imperfective negative	bare	H [!]
zó-là	prohibitive	bare	Н
zó-mà	hortative	bare	Н

10.2.1.9 Regular {H} toned Ca:, Co:, and Cé: stems

Because of the long vowel, which permits audible expression of a rising tone, the primary opposition for Cv: (as opposed to Cv) verbs is now between $\{H\}/\{H\}$ and $\{LH\}/\{L\}$. There is also one case of $\{LH\}/\{LH\}$, associated with initial n. The $\{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ stems are treated in the following sections.

All known Ca:, Co:, and Ce: verbs of $\{H\}/\{H\}$ tone-contour class are listed in (327). Stems with nasalized vowels are included.

(327) {H}/{H} toned *Ca:*, *Co:*, and *Cé:* verbs

	stem	perfective negative	gloss
a.	ká:	ká:-lì-	'shave'
	tá:	tá:-lì-	'shoot'; 'snap fingers against'
	tá:	tá:-lì-	'avoid (taboo)'
	pá:	pá:-lì-	'put up against'
	há:	há:-lì-	'rent'
	sá:	sá:-lì-	'answer'
	sá:	sá:-lì-	'(seedling) grow'
	sá:	sá:-lì-	'scoop (from water)'
	á:	á:-lì-	'uproot by hand'
	tá: ⁿ	tá: ⁿ -lì-	'spread (legs)'
	pá: ⁿ	pá: ⁿ -lì-	'intersperse (crops)'
b.	tó:	tó:-lì-	'spit' (with sùmzú 'saliva')
	tó:	tó:-lì-	'take, pick up' (variant of <i>tógó</i>)
	kó:	kó:-lì-	'roll up (ends of pants)'
	só:	só:-lì-	'dip'
c.	cé:	cé:-lì-	'(mouse) nibble'

The notable peculiarity of $C\acute{a}$: verbs is the perfective $C\acute{a}y\acute{e}$ -, based on an E-stem arguably from /Ca:e-/ or /Cae-/ with a (faint) epenthetic y (see end of §3.3.7). The 3Pl perfective is $C\acute{a}$:- \emptyset from /Ca:-a/.

The paradigm of 'shave' (328) is representative. In comparison with $\{H\}/\{H\}$ verbs of the monomoraic Cv shape, a $\{H\}/\{H\}$ Cv: verb like 'shave' has HL stem tone in four additional AMN categories. Aside from this, the stem tones for the two shapes are the same, with L-toned stems only in the imperfective negative.

(328) Paradigm of $k\acute{a}$: 'shave' {H}/{H}

form	category	stem	stem tones
káyé-	perfective	E	Н
ká:	bare stem	bare	H
ká:-zò-	perfective-2	bare	Н
ká:-téré-bè-	experiential perfect	bare	Н
ká:-zè-	recent perfect	bare	Н
$k\acute{a}$: = $b\grave{\varepsilon}$ -	past perfect	bare	Н
ká:-zà-lì-	recent perfect negative	bare	Н
$k\acute{a}$:- $z\grave{e}$ = $b\grave{e}$ -	past recent perfect	bare	Н
ká:	imperative	A/O	Н
kâ:-m-ù	imperfective 3Sg	A/O	HL
ká:-m	imperfective before AUX	A/O	Н
$k\acute{a}$:- $m = b\grave{\varepsilon}$ -	past imperfective	A/O	Н
$k\hat{a}$: = $b\acute{a}$ - $l\hat{i}$ - \varnothing	past imperfective negative	A/O	HL
ká:-lì-	perfective negative	A/O	Н
kà:-nán-	imperfective negative	bare	L
ká:-là	prohibitive	bare	Н
ká:-mà	hortative	bare	Н

Có: verbs are represented here by tó: 'spit', which takes noun sùmzú 'saliva' as direct object (329). The forms of Có: verbs are similar to those of Cá: verbs except for the perfective Coe:-.

(329) Paradigm of *tó*: 'spit' $\{H\}/\{H\}$

form	category	stem	stem tones
tọć:-	perfective	E	Н
tó:	bare stem	bare	Н
tó:-zò-	perfective-2	bare	Н

tó:-téré-bè-	experiential perfect	bare	Н
tó:-zὲ-	recent perfect	bare	Н
$t\acute{o}$: = $b\grave{\varepsilon}$ -	past perfect	bare	Н
tó:-zà-lì-	recent perfect negative	bare	Н
$t\acute{o}$:- $z\grave{e}$ = $b\grave{e}$ -	past recent perfect	bare	Н
tó:	imperative	A/O	Н
tô:-m-ù	imperfective 3Sg	A/O	HL
tó:-m	imperfective before AUX	A/O	Н
$t\acute{o}$:- $m = b\grave{\varepsilon}$ -	past imperfective	A/O	Н
$t\hat{o}$: = $b\acute{a}$ - $l\hat{i}$ - \varnothing	past imperfective negative	A/O	HL
tó:-lì-	perfective negative	A/O	Н
tò:-nán-	imperfective negative	bare	L
tó:-là	prohibitive	bare	Н
tó:-mà	hortative	bare	Н

The long e: in t o e:- can be heard in isolation, and (more easily) before 'since' subordinator -n a, hence t o e:- n a 'since (someone) spit', contrast t o e:- n a 'since (someone) went out' (t o e:- n a 'since (someone) went out' (t o e:- n a 'since (someone)

cé: 'nibble', the only Cé: verb, has a straightforward paradigm since the E-stem requires no juggling.

(330) Paradigm of cé: 'nibble' {H}/{H}

form	category	stem	stem tones
cé:-	perfective	E	Н
cé:	bare stem	bare	Н
cé:-zò-	perfective-2	bare	Н
cé:-téré-bè-	experiential perfect	bare	Н
cé:-zè-	recent perfect	bare	Н
$c\acute{e}:=b\grave{e}$ -	past perfect	bare	Н
cé:-zà-lì-	recent perfect negative	bare	Н
$c\acute{e}:-z\grave{e}=b\grave{e}-$	past recent perfect	bare	Н
cé:	imperative	A/O	Н
cé:-m-ù	imperfective 3Sg	A/O	HL
cé:-m	imperfective before AUX	A/O	Н
$c\acute{e}$:- $m = b\grave{e}$ -	past imperfective	A/O	Н
$c\hat{e}$: = $b\acute{a}$ - $l\grave{i}$ - \varnothing	past imperfective negative	A/O	HL
cé:-lì-	perfective negative	A/O	Н
cè:-nán-	imperfective negative	bare	L
cé:-là	prohibitive	bare	Н
cé:-mà	hortative	bare	Н

$10.2.1.10 \{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ toned *Ca:* stems

There are no *Cŏ*: or *Cĕ*: verbs with {LH} features.

Verbs like $m\check{a}$: 'make (bricks)' and $n\check{a}$: 'spend night' have the same paradigm segmentally as the {H}/{H} toned $C\acute{a}$: verbs described just above (e.g. $k\acute{a}$: 'shave'). They differ tonally in several inflected forms from those verbs. However, 'make (bricks)' and 'spend day' also differ from each other in certain forms, where 'make (bricks)' is low-toned while 'spend night' has a rising tone. The known verbs of the two types are in (331). 'Spend day' is the only Cv: exemplar of the {LH}/{LH} class. Since no other Cv: verb stem begins with n or I, and since these two initial consonants are elsewhere strongly associated with {LH}/{LH}, 'spend day' is not aberrant.

(331) $\{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ toned $C\check{a}$: verbs

```
stem
               perfective negative
                                       gloss
a. \{LH\}/\{L\}
                                       'pull up (boubou)'
    wă:
               wà:-lí-
    mă:
               mà:-lí-
                                       'make (bricks)'
    dă:
               dà:-lí-
                                       'cover (mouth)'
    dă:
               dà:-lí-
                                       'endure (e.g. heat)'
                                       'be enough', 'be equal to'
    bă:
               bà:-lí-
    vă:
               yà:-lí-
                                       'hold over fire'
                                       'sow in manure pile'
               zà:-lí-
    ză:
    ză:
               zà:-lí-
                                       'carve'
    gă:
               gà:-lí-
                                       'harvest (rice) with sickle'
                                       'harvest (secondary millet)'
    gă:
               gà:-lí-
b. {LH}/{LH}
                                       'spend night'
               nă:-lì-
    nă:
```

The paradigms are in (332) and (333), respectively. The forms whose tones differentiate the $\{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ tone-contour classes are highlighted by exclamation points (!).

```
(332) Paradigm of mă: 'make (bricks)', {LH}/{L}

form category stem stem tones
```

```
perfective
                                                    E
màyé-
                                                                 LH
                bare stem
                                                                  LH
mă:
                                                   bare
mă:-zò-
                perfective-2
                                                   bare
                                                                 LH
mà:-téré-bè-
                experiential perfect
                                                                 L
                                                   bare
mă:-zὲ-
                recent perfect
                                                   bare
                                                                  LH
m\grave{a}: = b\acute{\varepsilon}-
                past perfect
                                                   bare
                                                                  L [!]
mà:-zá-lì-
                recent perfect negative
                                                                  L
                                                   bare
m\grave{a}:-z\acute{\varepsilon} = b\grave{\varepsilon}-
                past recent perfect
                                                   bare
                                                                  L
mă:
                imperative
                                                    A/O
                                                                 LH
                imperfective 3Sg
                                                                 LH
mă:-m-ù
                                                   A/O
                imperfective before AUX
mà:-ḿ
                                                    A/O
                                                                  L (< LH)
                                                                  L (< LH)
m\grave{a}:-\acute{m} = b\grave{\varepsilon}-
                past imperfective
                                                    A/O
m\ddot{a}: = b\acute{a}-l\grave{i}-
                past imperfective negative
                                                    A/O
                                                                 LHL
mà:-lí-
                perfective negative
                                                   A/O
                                                                 L [!]
mà:-nán-
                imperfective negative
                                                                  L
                                                   bare
mà:-lá
                prohibitive
                                                                  L [!]
                                                   bare
mà:-má
                hortative
                                                                  L [!]
                                                   bare
```

(333) Paradigm of *nă*: 'spend night', {LH}/{LH}

form	category	stem	stem tones
nàyé-	perfective	E	LH
nă:	bare stem	bare	LH
nă:-zò-	perfective-2	bare	LH
nà:-téré-bè-	experiential perfect	bare	L
nă:-zè-	recent perfect	bare	LH
$n\check{a}:=b\grave{\varepsilon}$ -	past perfect	bare	LH [!]
nà:-zá-lì-	recent perfect negative	bare	L
$n\grave{a}$:- $z\acute{\varepsilon}=b\grave{\varepsilon}$ -	past recent perfect	bare	L
nă:	imperative	A/O	LH
nă:-m-ù	imperfective 3Sg	A/O	LH
nà:-ṁ	imperfective before AUX	A/O	L (< LH)
$n\grave{a}$:- $\acute{m}=b\grave{\varepsilon}$ -	past imperfective	A/O	L (< LH)
nầ: = bá-lì-	past imperfective negative	A/O	LHL
nă:-lì-	perfective negative	A/O	LH [!]
nà:-nán-	imperfective negative	bare	L
nă:-là	prohibitive	bare	LH [!]
nă:-mà	hortative	bare	LH [!]

The $\langle LHL \rangle$ tone of the first syllable in past imperfective negative $m\ddot{a} := b\acute{a} - l\ddot{i}$ and $n\ddot{a} := b\acute{a} - l\ddot{i}$ results regularly from the combination of the lexical

{LH} tone of the stem plus the final low-toned segment imposed on the stem by the AMN category.

10.2.1.11 $C\varepsilon$: and $C\circ$: stems

These verbs differ slightly from the Ca: and Co: verbs described above in that the long mid-height vowel breaks into a form containing a medial semivowel in the A/O-stems. $C\varepsilon$: becomes $C\varepsilon ya$ - and $C\delta$: becomes $C \circ wa$ - in these forms. The E-stems are respectively $C\varepsilon$:- (in some cases < * $C\varepsilon y\varepsilon$ -) and $Cw\varepsilon$ - (phonetic $[C \circ \varepsilon]$).

The known verbs of these shapes are in (334). Some of them derive from original bisyllabic stems by loss of a medial consonant (usually a semivowel), while others are reconstructible as monosyllabics. Stems with nasalized vowels show the same vocalic alternations as those with oral vowels.

```
(334)
              stem
                           gloss
                                               selected cognates
         a. \{H\}/\{H\} toned
         with &
                                               Jamsay p \varepsilon:<sup>n</sup>, Nanga p \varepsilon:
                           'get old'
              pέ:
                           'tap; squash'
                                               Jamsay and Nanga pέ:
              pέ:
              tέ:
                           'sprout'
                                               Bey Tey and Bankan Tey tíyé, Jamsay
                                               tóyó
                           'delouse'
                                               Jamsay cé:
              cέ:
              sέ:
                           'trim (hair)'
                                               Jamsav sé:
                                               Jamsay \varepsilon: " ~ \varepsilon y^n \varepsilon
              \dot{\varepsilon}."
                           'be tight'
         with o
                           'let ferment'
              pś:
                                               Nanga pó:
                           'be worm-eaten' Jamsay kóyó
              kź:
              sź:
                           'peck'
                                               Bey Tey sógó
                                               Bey Tey só, Jamsay só:
              sź:
                           'shovel, scoop'
              sź:n
                           'douse (fire)'
                                               Nanga sóyí
         b. {LH}/{L} toned
         with 2
              bă:
                           'unsheathe'
                                               Najamba bàyé
              dž:n
                           'put under'
                                               Najamba dòηέ
```

The paradigm of $t\acute{\epsilon}$: 'sprout' (perhaps < *t\acute{\epsilon}y\acute{\epsilon}) is in (335). The other verbs in (334a) have the same paradigm, in spite of their different historical origins.

(335) Paradigm of $t\acute{\epsilon}$: 'sprout' {H}/{H}

form	category	stem	stem tones
tέ:-	perfective	E	Н
té:	bare stem	bare	Н
té:-zò-	perfective-2	bare	Н
té:-téré-bè-	experiential perfect	bare	Н
té:-zè-	recent perfect	bare	Н
$t\acute{\epsilon}:=b\grave{\epsilon}-$	past perfect	bare	Н
té:-zà-lì-	recent perfect negative	bare	Н
$t\acute{\varepsilon}$:- $z\grave{\varepsilon}$ = $b\grave{\varepsilon}$ -	past recent perfect	bare	Н
téyá	imperative	A/O	Н
téyà-m-ù	imperfective 3Sg	A/O	HL
téyá-m	imperfective before AUX	A/O	Н
$t \dot{\varepsilon} y \dot{a} - \dot{m} = b \dot{\varepsilon} - c$	past imperfective	A/O	Н
téyà: = bá-lì-	past imperfective negative	A/O	HL
téyá-lì-	perfective negative	A/O	Н
tè:-nán-	imperfective negative	bare	L
té:-là	prohibitive	bare	Н
té:-mà	hortative	bare	Н

One informant gave variants *téyá-là* (prohibitive) and *téyá-mà* (hortative). The paradigm of *só*: 'peck' is (336).

(336) Paradigm of s5: 'peck' {H}/{H}

form	category	stem	stem tones
soé:-	perfective	E	Н
sź:	bare stem	bare	Н
sź:-zò-	perfective-2	bare	Н
sớ:-téré-bè-	experiential perfect	bare	Н
sź:-zè-	recent perfect	bare	Н
$s \acute{\sigma} := b \grave{\varepsilon}$ -	past perfect	bare	Н
sớ:-zà-lì-	recent perfect negative	bare	Н
$s \delta : -z \grave{\varepsilon} = b \grave{\varepsilon} -$	past recent perfect	bare	Н
saá:	imperative	A/O	Н
sɔ̯â:-m-ù	imperfective 3Sg	A/O	HL
sɔ̯á:-ḿ	imperfective before AUX	A/O	Н
$s \circ \acute{a} : -\acute{m} = b \grave{\varepsilon} -$	past imperfective	A/O	Н
$s \circ \hat{a} := b \acute{a} - l \grave{i} -$	past imperfective negative	A/O	HL

səá:-lì-	perfective negative	A/O	Н
sà:-nán-	imperfective negative	bare	L
sź:-là	prohibitive	bare	Н
só:-mà	hortative	bare	Н

One informant also gave variants soá:-là (prohibitive) and soá:-mà (hortative).

The verb $s5:^n$ 'douse (fire)' has perfective $s5:^n$, imperative $s5w^n \hat{a}$, perfective negative $s5w^n \hat{a}-\hat{h}$, and imperfective negative $s5:^n$ -nán-.

There is nothing newsworthy about the paradigms of the $\{LH\}/\{L\}$ stems $b\check{s}$: 'unsheathe' and $d\check{s}$: 'put under' (334b), so they are omitted. Segmentally, they are like that of $s\check{s}$: 'peck'. Tonally, they are like that of $m\check{a}$: 'make bricks' (preceding section). 'Put under' has perfective negative $d\grave{o}$:"-Ii-.

The verb 'know' is $z\dot{u}w\delta$ (bisyllabic). The A/O-stem is therefore zuwa. The bare stem $z\dot{u}w\delta$ optionally contracts to $z\delta$. Jamsay cognate $j\dot{u}g\delta$ similarly contracts to $j\delta$:- in some suffixal combinations.

10.2.1.12 *n*-final verbs ($\acute{u}n < /\acute{u}r^n / `go', z\check{i}n'$ take away')

The known verbs of this shape (monosyllabic with final consonant) that have complete paradigms are un 'go' and u 'take away, convey (away from here or to some location)' (French *emmener*). There is also a defective verb u 'call (something, by a name)' used in the imperfective, on which see §11.3.2. These are the only true consonant-final verbs in the language, although the apocope/syncope of /u/ creates secondary C-final shapes in the bare stem and some other forms of many u-final verbs.

The perfective stems of 'go' and of 'take away' have the obligatory final $\{e \ \varepsilon\}$ vowel. Their other forms are based on the *n*-final stem. The imperfective negative suffix $-n\acute{a}n$ - (variant $-n\grave{a}n$ - with 'take away') does not allow its usual allomorph $-r\acute{a}n$ -, since r occurs only in intervocalic position.

The paradigm of 'go' is (337). The lexical tone-contour class is $\{H\}/\{H\}$ with no irregularities. The stem consonant is realized as r^n whenever intervocalic within the word, and as n when syllable-final. This suggests a lexically basic form $/\text{úr}^n$ -/ that appears as ún- when the stem consonant is not intervocalic within the word.

(337) Paradigm of $\acute{u}n$ 'go' {H}/{H}

form	category	stem	stem tones
úr ⁿ έ-	perfective	E	Н
ún	bare stem	bare	Н

ún-zò-	perfective-2	bare	Н
ún-téré-bè-	experiential perfect	bare	Н
ún-zè-	recent perfect	bare	Н
$ u n = b \hat{\varepsilon} $	past perfect	bare	Н
ún-zà-lì-	recent perfect negative	bare	Н
$ ún-z\grave{\varepsilon} = b\grave{\varepsilon} $	past recent perfect	bare	Н
ún	imperative	A/O	Н
ûn-m-ù	imperfective 3Sg	A/O	HL
úr ⁿ ú-m	imperfective before AUX	A/O	Н
$ u r^n u - m = b \dot{\varepsilon} $	past imperfective	A/O	Н
$ u r^n \grave{o} := b \acute{a} - l \grave{i} - l \acute{a} $	past imperfective negative	A/O	HL
ún-lì-	perfective negative	A/O	Н
ùn-nán-	imperfective negative	bare	L
ún-là	prohibitive	bare	Н
ún-mà	hortative	bare	Н

The paradigm of 'take away' is (338). For one assistant, the medial stem consonant is consistently n, in intervocalic as well as in other positions. For another, it becomes r^n intervocalically. The stem tones, taken as a whole, are irregular. Many of the forms have rising-toned stem, but the imperative has falling tone. The perfective negative has a rare combination of H-toned stem and L-toned suffix; the only other verb with this pattern is the other basic verb of conveyance, zo 'bring' (\$10.2.1.8, above). In (338), the most irregular forms are highlighted by exclamation points.

(338) Paradigm of zin 'take away' (tonally irregular)

form	category	stem	stem tones
$zir^n \acute{\varepsilon} - \sim zin \acute{\varepsilon} -$	perfective	Е	LH
zĭn	bare stem	bare	LH
zĭn-zò-	perfective-2	bare	LH
zĭn-téré-bè-	experiential perfect	bare	LH
(∼zîn-téré-bè	-)		(HL)
zĭn-zè-	recent perfect	bare	LH
$z\check{i}n = b\hat{\varepsilon}$ -	past perfect	bare	LH
zĭn-zà-lì-	recent perfect negative	bare	LH
$z\check{i}n-z\grave{\varepsilon}=b\grave{\varepsilon}-$	past recent perfect	bare	LH
zîn	imperative	A/O	HL [!]
zĭn-m-ù	imperfective 3Sg	A/O	LH
zìnú-m	imperfective before AUX	A/O	LH
~ zìr ⁿ ú-ḿ	_		

zinú- $m = b$ è-	past imperfective	A/O	LH
zìnô:=bá-lì-	past imperfective negative	A/O	LHL
zín-lì-	perfective negative	A/O	H [!]
zín-nàn-	imperfective negative	bare	H [!]
zín-là	prohibitive	bare	H [!]
zín-mà	hortative	bare	H [!]

'Go' and 'take away' each end in a (nasal) consonant, so when a suffix complex consisting only of a consonant is added we risk a disallowed word-final CC cluster. In this situation, a functionally epenthetic vowel is conjured up (339). In (339a), this is achieved by using a -Cv allomorph of the suffix. In (339b), a more purely epenthetic vowel u is inserted between the stem-final and suffixal consonants.

(339) Epenthetic vowels with *n*-final verbs

```
'go'
                        'take away'
        ún-nì
                                          plural imperative (-\dot{n})
                       zín-nì
а
                                          perfective negative 3Pl (-\dot{n}-\varnothing)
        ún-nù
                       zín-nù
                                          imperfective negative relative (-n)
        ùn-nú
                       zín-nù
b.
        úr<sup>n</sup>-ùm
                       zìn-úm-Ø
                                          imperfective 1Sg (-\dot{m}-\varnothing)
        úr<sup>n</sup>-úŋ
                       zìn-úŋ
                                          imperfective relative InanSg (-n)
                       (variants zir^n-u\dot{m}-\varnothing, zir^n-u\eta)
```

There are numerous verbs like $n \check{a} m$ 'grind (into flour)' that are best analysed as u-final bisyllabic verbs, in this case $/n \grave{a} m \acute{u}$. The bisyllabic pattern is visible in e.g. imperative $n \grave{a} m \acute{a}$ 'grind!' and perfective negative $n \grave{a} m \grave{a} - l \acute{l}$. The apocope of the final u in the bare stem $(n \check{a} m)$ creates a superficial CvC stem shape. For more on the phonology, see §3.6.3.2, above.

10.2.2 Bisyllabic verbs

All bisyllabic verb stems end in a short vowel. The primary bisyllabic verb-stem shapes are CvCv-, Cv:Cv-, and CvCCv-, rarely Cv:CCv-, with the possibility of the initial C being absent. The tone-contour classes are $\{H\}/\{H\}$ associated with initial voiceless consonant, $\{LH\}/\{LH\}$ associated with initial I or n, $\{LH\}/\{L\}$ associated with initial voiced consonant, and $\{H\}/\{L\}$ generally favoring the heaviest shapes. Stems with no initial consonant have a lexical choice of

 $\{H\}/\{H\}$ or $\{LH\}/\{L\}$. For more on these tone-contour classes, see §3.8.1.2, above.

There is one nCv verb, two ? > Cv verbs that begin with a glottal stop plus schwa, and a fairly large number of vCv verbs with no initial consonant. This collection of verbs can be described as **marginally bisyllabic**. They differ from CvCv stems (and to some extent among each other) in some details of tone-contour distribution. The $\{H\}/\{H\}$ tone-contour class works the same for all bisyllabic shapes. However, the other tone-contour class for the marginally bisyllabic stems is $\{H\}/\{L\}$, whereas CvCv stems have $\{LH\}/\{L\}$ or $\{LH\}/\{LH\}$, i.e. with at least some rising contours. CvCCv stems behave like CvCv, except that the $\{LH\}$ contour has two variants. Cv:Cv stems are mostly $\{H\}/\{H\}$ or $\{H\}/\{L\}$, with no rising contours.

The possible vowel-quality sequences (disregarding length and nasalization) in bisyllabic stems are those in (340). The formulae do not apply to the single *nCv* stem or to the two glottal-initial stems.

(340) Vocalic sequences (bisyllabic verbs)

```
a. identical vowels at least in part of paradigm

e...e [with a tendency to fluctuate with e...o]
e...e
o...o
o...o
a...a (converts to a...u in the bare stem and related forms)

b. high vowel plus mid-height vowel with same back/round value

u...o
u...o
i...e [with a tendency to fluctuate with i...o]
i...e

c. mixed-ATR with same back/round value, medial nasal

eNe
oNo
```

The verbs that alternate between CaCa- in the A/O-stem and CaCu-(including surface CaC-) verbs are called u-final stems.

For the mixed-ATR verbs, see §3.5.1.4.

I begin with the marginally bisyllabic stems of shape nCv, ? > Cv, and vCv, then move to CvCv, CvCCv, and Cv:Cv.

10.2.2.1 *nCv* verb (*ńdέ* 'give')

For this stem shape I can cite only $\acute{n}d\acute{\epsilon}$ 'give'. The paradigm is (341). Except for the imperative, the forms are segmentally regular. The stem-final ϵ changes regularly to a in the A/O-stem. The E-stem is not segmentally distinct since the stem already ends in ϵ . The tones are split into H and L, suggesting the {H}/{L} tone-contour class. The LH-toned imperative $\grave{n}d\acute{l}$ stands out as irregular, tonally as well as segmentally.

(341) Paradigm of $\acute{n}d\acute{\epsilon}$ 'give' {H}/{L}

form	category	stem	tones
ńdé-	perfective	E	Н
ńdέ	bare stem	bare	Н
ńdέ-zò-	perfective-2	bare	Н
ńdé-téré-bè-	experiential perfect	bare	Н
ńdé-zè-	recent perfect	bare	Н
$nd\hat{\epsilon} = b\hat{\epsilon}$ -	past perfect	bare	Н
ǹdὲ-zá-lì-	recent perfect negative	bare	L
$ \dot{n}d\dot{\varepsilon}-z\dot{\varepsilon}=b\dot{\varepsilon}- $	past recent perfect	bare	L
'ndí	imperative	A/O	LH [!]
ńdà-m-ù	imperfective 3Sg	A/O	HL
ńdá-m	imperfective before AUX	A/O	Н
$\acute{n}d\acute{a}-m=b\grave{\varepsilon}-$	past imperfective	A/O	Н
$\dot{n}d\dot{a}$: = $b\acute{a}$ - $l\dot{i}$ -	past imperfective negative	A/O	HL
ǹdà-lí-	perfective negative	A/O	L
ǹdὲ-nán-	imperfective negative	bare	L
ǹdè-lá	prohibitive	bare	L
ǹdὲ-má	hortative	bare	L

Similar $\{H\}/\{L\}$ tone-contour patterns occur in one of the two $\ensuremath{\textit{PoCv}}$ stems, and in some $\ensuremath{\textit{vCv}}$ stems, the alternative type being $\{H\}/\{H\}$ for both of these stem shapes. This suggests that $\{H\}/\{H\}$ and $\{H\}/\{L\}$ are the viable tone-contour classes for **marginally bisyllabic** stems, i.e. those slightly briefer than $\ensuremath{\textit{CvCv}}$. However, there are slight differences in tone-contour behavior among the various $\{H\}/\{L\}$ marginally bisyllabic stems, involving the perfective-2, the experiential perfect, and the past perfect.

10.2.2.2 Glottal-initial verbs (?ápé 'eat meal', ?álé 'go up')

The verb 'eat (meal)' takes the noun $z\acute{a}$ 'meal' as default object (though several more specific terms for foods can also be used). This verb is $\{H\}/\{H\}$ toned and its paradigm is regular in all respects (342). In the grammatical categories that call for $\{HL\}$ stem tone, e.g. perfective-2, the initial high tone is on the glottal (quasi-)syllable.

(342) Paradigm of ?ópé 'eat (meal)' {H}/{H}

form	category	stem	tones
<i>?ອຸກ</i> ຂ໌-	perfective	E	Н
<i>?ຈຸກέ</i>	bare stem	bare	Н
?áɲέ-zò-	perfective-2	bare	Н
?áné-téré-bè-	experiential perfect	bare	Н
?ອຸກ∉-zὲ-	recent perfect	bare	Н
?á́nέ = bὲ-	past perfect	bare	Н
?áné-zà-lì-	recent perfect negative	bare	Н
?áné-zè=bè-	past recent perfect	bare	Н
?ə́ná	imperative	A/O	Н
?ə́ɲà-m-ù	imperfective 3Sg	A/O	HL
?ອຸກá-m	imperfective before AUX	A/O	Н
?áná- $m = b$ è-	past imperfective	A/O	Н
?ə́nà: = bá-lì-	past imperfective negative	A/O	HL
?ə́ná-lì-	perfective negative	A/O	Н
?èɲè-nán-	imperfective negative	bare	L
?áɲέ-là	prohibitive	bare	Н
?ອຸກέ-mà	hortative	bare	Н

The paradigm of 'go up' is similar to that of 'eat (meal)', but there are some tonal differences. While 'eat (meal)' is classically $\{H\}/\{H\}$, 'go up' has a mix of H and L tones. The tonal pattern of 'go up' is similar to that for 'give' ($\{10.2.2.1, above\}$, though they differ tonally in the past perfect, which is

therefore marked here with an exclamation point. Both 'go up' and 'give' can be assigned to the $\{H\}/\{L\}$ tone-contour class.

(343) Paradigm of $\frac{23l\epsilon}{6}$ 'go up' $\frac{H}{L}$

form	category	stem	tones
?ઇક્-	perfective	E	Н
<i>?કીર્દ</i>	bare stem	bare	Н
?álé-zò-	perfective-2	bare	Н
?álé-téré-bè-	experiential perfect	bare	Н
?álé-zè-	recent perfect	bare	Н
$2\partial l\hat{\epsilon} = b\hat{\epsilon}$ -	past perfect	bare	L [!]
?əlè-zá-lì-	recent perfect negative	bare	L
$? \partial l \hat{\varepsilon} - z \hat{\varepsilon} = b \hat{\varepsilon} - c$	past recent perfect	bare	L
?ślá	imperative	A/O	Н
?ə́là-m-ù	imperfective 3Sg	A/O	HL
?álá-m	imperfective before AUX	A/O	Н
$?\acute{a}l\acute{a}-m=b\grave{\varepsilon}-$	past imperfective	A/O	Н
<i>?álà: = bá-lì-</i>	past imperfective negative	A/O	HL
?ə̀là-lí-	perfective negative	A/O	L
?əlè-nán-	imperfective negative	bare	L
?∂Iὲ-Iá	prohibitive	bare	L
?ə̀lè-mà	hortative	bare	L

There is a segmentally identical stem $2\delta l\dot{\epsilon}$ 'ripen, become ripe' with $\{H\}/\{H\}$ tones. In those cases where 'go up' has a $\{H\}$ or $\{HL\}$ stem-tone, there is no audible difference between the two verbs. Where 'go up' has a $\{L\}$ stem-tone, the two are tonally distinct, except in the imperfective negative $2\delta l\dot{\epsilon}-n\dot{\epsilon}$, which forces $\{L\}$ contour on both stems (as usual). The perfective negative is one of the differentiating categories: $2\delta l\dot{\epsilon}-l\dot{\epsilon}$ 'did not ripen' versus $2\delta l\dot{\epsilon}-l\dot{\epsilon}$ 'did not go up'.

10.2.2.3 *vCv* stems

The verbs considered here are special cases of CvCv stems (see immediately following section) with empty C_l . Because the tone-contour classes of verbs are elsewhere dependent in part on their C_l (mainly its voicing feature), the absence of a C_l creates an interesting situation.

The majority of vCv stems are lexically $\{H\}/\{H\}$ -toned. Only the imperfective negative drops tones to all-low. This suggests that $[+voiced] C_I$ is

the active ingredient affecting stem tone-contours, so that absence of C_1 is treated like presence of unvoiced C_1 , in contrast to voiced C_1 .

A sample {H}/{H}-toned paradigm is that of 'buy' (344). Since the bare stem ends in ε , the E-stem and the bare stem are indistinguishable, and the A/O-stem ends in a.

(344) Paradigm of $\epsilon b \epsilon$ 'buy' {H}/{H}

form	category	stem	stem tones
έbέ-	perfective	E	Н
έbέ	bare stem	bare	H
έbέ-zò-	perfective-2	bare	Н
ébé-téré-bè-	experiential perfect	bare	Н
έbέ-zὲ-	recent perfect	bare	Н
$ \epsilon b \epsilon = b \epsilon $	past perfect	bare	Н
έbέ-zà-lì-	recent perfect negative	bare	Н
	past recent perfect	bare	Н
<i>ébá</i>	imperative	A/O	Н
<i>έbà-m-ù</i>	imperfective 3Sg	A/O	HL
έbá-m	imperfective before AUX	A/O	Н
$\varepsilon b \acute{a} - m = b \grave{\varepsilon} -$	past imperfective	A/O	Н
$\epsilon b \dot{a} := b \acute{a} - l \dot{i} - b \acute{a} = b \acute{a} - b \acute{a} - b \acute{a} = b \acute{a} = b \acute{a} - b \acute{a} = b \acute{a} = b \acute{a} - b \acute{a} = b \acute{a} $	past imperfective negative	A/O	HL
έbá-lì-	perfective negative	A/O	Н
èbè-nán-	imperfective negative	bare	L
έbέ-là	prohibitive	bare	Н
ébé-mà	hortative	bare	Н

Among the other vCv stems with these tone contours are 5n5 'be(come) tired', $\ell\ell$ 'take away (confiscate)', and $5r^n5$ 'give an enema (suppository) to', with perfective negatives 5n4-li-, $\ell\ell$ -li-, and $5r^n4-li$ -.

However, the correlation of $\{H\}/\{H\}$ tone-contour class with vCv stems is far from perfect. There are a number of such stems with $\{H\}/\{L\}$ contours. We have seen $\{H\}/\{L\}$ with $\acute{n}d\acute{e}$ 'give' and $?\acute{o}l\acute{e}$ 'go up', but there are some differences in the tonal details within this set of $\{H\}/\{L\}$ -toned marginally bisyllabic stems. The relevant vCv stems, such as $\acute{u}b\acute{o}$ 'pour' (345), have $\{L\}$ stem tone in the perfective-2 and the experiential perfect, which have $\{H\}$ or $\{HL\}$ for both 'give' and 'go up'. In the past perfect, the $\{L\}$ stem-tone for 'pour' matches that of 'go up', not not the $\{H\}$ -tone of 'give'. These three categories are highlighted by an exclamation point after the tone label in the rightmost colum in (345). Because this verb ends lexically in \emph{o} , its E-stem is distinct from its bare stem, and its A/O-stem ends in \emph{a} .

(345) Paradigm of $\acute{u}b\acute{o}$ 'pour' {H}/{L}

form	category	stem	tones
úbé-	perfective	E	Н
úbś	bare stem	bare	Н
ùbà-zó-	perfective-2	bare	L [!]
ùbà-téré-bè-	experiential perfect	bare	L [!]
úbó-zè-	recent perfect	bare	Н
$\dot{u}b\dot{\partial} = b\acute{\varepsilon}$ -	past perfect	bare	L [!]
ùbà-zá-lì-	recent perfect negative	bare	L
$\dot{u}b\dot{\partial}$ - $z\acute{\varepsilon} = b\grave{\varepsilon}$ -	past recent perfect	bare	L
úbá	imperative	A/O	Н
úbà-m-ù	imperfective 3Sg	A/O	HL
úbá-m	imperfective before AUX	A/O	Н
$\acute{u}b\acute{a}-m=b\grave{\varepsilon}-$	past imperfective	A/O	Н
úbà:=bá-lì-	past imperfective negative	A/O	HL
ùbà-lí-	perfective negative	A/O	L
ùbò-nán-	imperfective negative	bare	L
ùbò-lá	prohibitive	bare	L
ùbò-má	hortative	bare	L

The paradigm of 'catch' (346) is tonally similar to that of 'pour', except in the recent perfect. Segmentally, in the bare stem and before suffixes, final o tends to fluctuates with e. However, it is consistently o: when lengthened (in the past imperfective negative), and usually e in the perfective negative. A suffix-initial labial consonant appears to favor o quality.

(346) Paradigm of *ibó* (or *ibé*) 'catch' {H}/{L}

form	category	stem	tones
íbé-	perfective	E	Н
íbó, íbé	bare stem	bare	Н
ìbè-zó-	perfective-2	bare	L [!]
ìbò-téré-bè-	experiential perfect	bare	L [!]
ìbò-zέ-	recent perfect	bare	L [!]
$ib\grave{o} = b\acute{\varepsilon}$ -	past perfect	bare	L [!]
ìbò-zá-lì-	recent perfect negative	bare	L
$ib\dot{e}$ - $z\acute{e}$ = $b\dot{e}$ -	past recent perfect	bare	L
íbó	imperative	A/O	Н

íbò-m-ù	imperfective 3Sg	A/O	HL
íbó-m	imperfective before AUX	A/O	Н
$ib\acute{o}-m=b\grave{\varepsilon}-$	past imperfective	A/O	Н
$ib\grave{o}$: = $b\acute{a}$ - $l\grave{i}$ -	past imperfective negative	A/O	HL
ìbè-lí-	perfective negative	A/O	L
ìbè-nán-	imperfective negative	bare	L
ìbè-lá	prohibitive	bare	L
ìbò-mà	hortative	bare	L

Further verbs treated tonally like *úbó* 'pour' and *íbé* 'catch' include: *úmó* 'crush (tobacco) in hand', *úzó* 'heal, recover', *ídé* 'set out to dry (in the sun)', and *íjé* 'be finished (depleted)', with respective perfective negatives *ùmà-lí-*, *ùzò-lí-*, *ìbè-lí-*, and *ìjè-lí-*.

The *u*-final verb $\acute{a}b\acute{u}$ 'take (receive)' (cf. $\acute{a}b\acute{t}-y\acute{e}$ 'accept') also belongs in this tone-contour set. It has the same tones as $\acute{u}b\acute{o}$ 'pour'. Like other *u*-final verbs, its stem ends in u in forms based on the bare stem. The E-stem ends in $\{+ATR\}$ e, and the A/O-stem ends in a. The paradigm is (347).

(347) Paradigm of ábú 'take, receive'

form	category	stem	stem tones
ábé-	perfective	E	Н
ábú	bare stem	bare	Н
àbù-zó-	perfective-2	bare	L [!]
àbù-téré-bè-	experiential perfect	bare	L [!]
ábú-zè-	recent perfect	bare	Н
$abu = b\epsilon$ -	past perfect	bare	L [!]
àbù-zá-lì-	recent perfect negative	bare	L
$abu-z \epsilon = b\epsilon$ -	past recent perfect	bare	L
ábá	imperative	A/O	Н
ábà-m-ù	imperfective 3Sg	A/O	HL
ábá-m	imperfective before AUX	A/O	Н
$\dot{a}\dot{b}\dot{a}-m=b\grave{\varepsilon}-$	past imperfective	A/O	Н
ábà:=bá-lì-	past imperfective negative	A/O	HL
àbà-lí-	perfective negative	A/O	L
àbù-nán-	imperfective negative	bare	L
àbù-lá	prohibitive	bare	L
àbù-má	hortative	bare	L

10.2.2.4 *CvCv* stems

Note that some stems with bare stem and therefore citation form *CaC* (from /CaCu/) are bisyllabic, as is shown by A/O-stem *CaCa-* and E-stem *Cace-*.

For *CvCv* with true initial consonant (not glottal stop), the tone-contour classes are those in (348).

```
(348) stem begins with voiceless consonant: \{H\}/\{H\} stem begins with voiced consonant: one stem with medial j from *jj: \{H\}/\{L\} most stems beginning in \{n\ l\}: \{LH\}/\{LH\} all others: \{LH\}/\{L\}
```

For $\{H\}/\{L\}$ in one *Cvjv* verb from *Cvjjv, see discussion of *wéjé* 'give change' preceding (58) in §3.8.1.2, above. Otherwise the tone-contour class is more or less predictable from the initial consonant.

The choice between $\{LH\}/\{LH\}$ and $\{LH\}/\{L\}$ is almost predictable. The majority of stems with initial $\{In\}$ belong to the $\{LH\}/\{LH\}$ tone-contour class, as shown by $\hat{CvCv-li}$ in the perfective negative (349). No \hat{CvCv} stem beginning with any other consonant has this tonal profile.

(349) *CvCv* verbs with {LH}/{LH} contour

stem	PerfNeg	gloss
a. initial <i>1</i>		
<i>lèlé</i>	lèlé-lí-	'err, make a mistake'
lèzé	lèzá-lí-	'press against'
lèbé	lèbá-lí-	'cauterize'
lègé	lègá-lí-	'slip (sth) under'
lìgé	lìgé-lí-	'mix'
làdá	làdá-lí-	'slide in'
làgá	l∂gá-lí-	'do a lot, do too much'
<i>lèdó</i>	lèdé-lí-	'make (noise)'
lèbé	lèbé-lí-	'cut off, sever'
lùgó	lùgó-lí-	'rinse out (mouth)'
lùgó	lùgó-lí-	'calculate'
b. initial <i>n</i>		
năŋ	nàŋá-lí-	'pass'
nàmú	nàmá-lí-	'step on'
nèmé	nèmá-lí-	'taste'

```
nèmέ
             nèmá-lí-
                                'hit (with thrown object)'
             nèr<sup>n</sup>á-lí-
n e^{n} \epsilon
                                'hone, whet (blade)'
nìnέ
             nìná-lí-
                                'trip (sb)'
                                'sleep'
nìyé
             nìvé-lí-
             nòmá-lí-
                                'sag (under a weight)'
nòmź
             nùzá-lí-
                                'push with butt of hand'
nùzś
```

However, there are some stems with the same initial consonants with tonal patterns of the $\{LH\}/\{L\}$ tone-contour class, with perfective negative $\ref{CvCv-li-}$. My assistant showed some variability in tonal pronunciations in this respect, suggesting that the tendency is to convert remaining \ref{CvCv} stems with these initial consonants into $\{LH\}/\{LH\}$ stems. 'Give birth', 'drink', and 'grind' were most consistently $\{LH\}/\{L\}$ in his pronunciations (350). Further study of other speakers and dialects is called for.

(350) CvCv verbs with initial $\{1 n\}$ and $\{LH\}/\{L\}$ contour

stem	PerfNeg	gloss
a. initial <i>l</i> <i>lăl</i>	làlà-lí-	'give birth'
b. initial <i>n</i>		
nìy ⁿ é	nìy ⁿ à-lí-	'drink'
năm	nàmà-lí-	'grind'
nùŋś	nùŋà-lí-	'sing (a song)'

Except for the handful of Cvjv stems from original *Cvjjv, all CvCv verbs beginning with a voiced consonant other than $\{ln\}$, namely $\{bdgjzwymn\}$, belong to the $\{LH\}/\{L\}$ tone-contour class.

(351) presents paradigms of representative {H}/{H} and {LH}/{L} stems. The stems are tonally distinct in all forms except the imperfective negative, which controls {L} tone contour on all verb stems (except 'bring' and 'take, convey'). 'Pound' also illustrates [+ATR] *CoCo* vocalism, while 'leave' illustrates [-ATR] *CoCo* vocalism. In the A/O-stem, only 'leave' shifts its stemfinal vowel to a.

(351) $\{H\}/\{H\}$ and $\{LH\}/\{L\}$ *CvCv* verbs

'pound'	'leave'	category	stem
${H}/{H}$	$\{LH\}/\{L\}$		

tólé-	dògέ-	perfective	E
tóló	dògó	bare stem	bare
tóló-zò-	dàgó-zò-	perfective-2	bare
tóló-téré-bè-	dàgà-téré-bè-	experiential perfect	bare
tólò-zè-	d∂gó-zὲ-	recent perfect	bare
$t\acute{o}l\acute{o} = b\grave{\varepsilon}$ -	$d\partial g\partial = b\varepsilon$ -	past perfect	bare
tóló-zà-lì-	dògò-zá-lì-	recent perfect negative	bare
$t\acute{o}l\acute{o}-z\grave{e}=b\grave{e}-$	$d\partial g\partial - z\dot{\varepsilon} = b\dot{\varepsilon}$ -	past recent perfect	bare
tóló	dògá	imperative	A/O
tólò-m-ù	dògá-m-ù	imperfective 3Sg	A/O
tóló-m	dògá-m	imperfective before AUX	A/O
$t\acute{o}l\acute{o}-m=b\grave{\varepsilon}-$	$d\partial g\acute{a}-m=b\grave{\varepsilon}-$	past imperfective	A/O
<i>tólò: = bá-lì-</i>	$d\partial g\hat{a}$: = $b\acute{a}$ - $l\hat{i}$ -	past imperfective negative	A/O
tóló-lì-	dògà-lí-	perfective negative	A/O
tòlò-nán-	dògò-nán-	imperfective negative	bare
tóló-là	dògò-lá	prohibitive	bare
tóló-mà	dògò-má	hortative	bare

A representative $\{LH\}/\{LH\}$ stem is presented in (352). This class differs tonally from $\{LH\}/\{L\}$, exemplified by 'leave' in (351) above, only in the perfective negative, prohibitive, and hortative forms. The tones are similar to those for monosyllabic $\{LH\}/\{LH\}$ verb <u>nă</u>: 'spend night' (§10.2.1.10, above).

(352)Paradigm of năŋ 'pass') {LH}/{L}, u-final (/u/ deleted) form stem category stem tones nàŋéperfective Е LH LH năŋ bare stem bare LH năŋ-zòperfective-2 bare nàŋ-téré-bèexperiential perfect bare L năŋ-zὲrecent perfect bare LH past perfect LH $n\check{a}\eta = b\hat{\varepsilon}$ bare nàŋ-zá-lìrecent perfect negative L bare $n a \eta - z \varepsilon = b \epsilon$ past recent perfect L bare nàηá imperative A/O LH nàŋá-m-ù imperfective 3Sg A/O LH nàŋá-m imperfective before AUX A/O LH $n \dot{a} n \dot{a} - \dot{m} = b \dot{\epsilon}$ - past imperfective A/O L $n a n \hat{a} = b \hat{a} - l \hat{i}$ past imperfective negative A/O LHL nàŋá-lìperfective negative A/O LH imperfective negative nàη-nánbare L prohibitive LH năŋ-là bare

năŋ-mà hortative bare LH

The verb 'pass' in (352) also illustrates the stem-final vocalism of u-final verbs, which always have a in the first syllable. The CvC shape nay in several forms, including the bare stem, reflects deletion of the final u. For more on Stem-Final u-Deletion, see §3.6.3.2, above. The A/O-stem of u-final verbs has final a, and the E-stem has final e (not e) except as specified below. Verbs like sal 'grind (coarsely)' have the same kind of paradigm segmentally, again with deleted final u-final verbs, but with u-final verbs has final u-final verbs has final u-final verbs has final u-final verbs, and u-final verbs has final u-final verbs, and u-final verbs, u-f

For another u-final verb that does not delete its final u, see the paradigm of $\acute{a}b\acute{u}$ 'take, receive' in §10.2.2.3, above. A verb of this type with true CvCv shape is 'touch' (353).

(353) Paradigm of $t\acute{a}b\acute{u}$ 'touch' {H}/{H}, u-final (u not deleted)

form	category	stem	stem tones
tábé-	perfective	Е	Н
tábú	bare stem	U	Н
tábú-zò-	perfective-2	U	Н
tábú-téré-bè-	experiential perfect	U	Н
tábú-zè-	recent perfect	U	Н
$t\acute{a}b\acute{u} = b\grave{\varepsilon}$ -	past perfect	U	Н
tábú-zà-lì-	recent perfect negative	U	Н
$t\acute{a}b\acute{u}-z\grave{\varepsilon}=b\grave{\varepsilon}-$	past recent perfect	U	Н
tábá	imperative	A/O	Н
tábà-m-ù	imperfective 3Sg	A/O	HL
tábá-m	imperfective before AUX	A/O	Н
$t\acute{a}b\acute{a}-m=b\grave{\varepsilon}-$	past imperfective	A/O	Н
tábà: = bá-lì-	past imperfective negative	A/O	HL
tábá-lì-	perfective negative	A/O	Н
tàbù-nán-	imperfective negative	bare	L
tábú-là	prohibitive	bare	Н
tábú-mà	hortative	bare	Н

While CaCv verbs of the u-final class normally have [+ATR] e in the E-stem, an exception is $k\acute{a}n$ 'do' (perfective $k\acute{a}r^n\acute{\varepsilon}$ -). r^n is also associated with [-ATR] E-stems in two high-frequency CuCv verbs with u-final class features: $g\check{u}n$ 'say' (perfective $(g\grave{u}r^n\acute{\varepsilon}$ -), $\acute{u}n$ 'go' (perfective $\acute{u}r^n\acute{\varepsilon}$ -).

10.2.2.5 *CvCCv* verbs

Verbs of CvCCv shape are very close in vocalic-sequence constraints and in tone contours to CvCv stems. The $\{H\}/\{H\}$, $\{LH\}/\{L\}$, and $\{LH\}/\{LH\}$ tone-contour classes again are present in both, and have the same associations with initial consonants.

However, there are some differences. The $\{H\}/\{L\}$ tone-contour class, which is very rare for CvCv (one *Cvjjv stem shortened to Cvjv), is slightly better represented in CvCCv stems with initial voiced consonant.

Examples of vocalism of *CvCCv* stems are in (354).

(354) *CvCCv* stem vocalism

```
a. same mid-height vowels (in bare stem)
```

```
témdé 'knock together'
pémbé 'prune (onion flower)'
tónzó 'flex (joint)'
```

pómbó 'collect (last bit of food)

```
b. a...u in bare stem (u-final verbs)

támbú 'kick'
```

c. high vowel plus mid-height vowel

```
símbé 'roast, grill'
ninjé 'cook (sauce)'
túmbó 'crush' or 'punch'
búlló 'disinter'
```

e-final *CvCCv* verbs like *pémbé* and *símbé* show variation between final *e* and *o* in some forms, as for *CvCv* stems.

In (354), the stems beginning in t, p, and s (i.e. voiceless obstruents) have $\{H\}/\{H\}$ tones. When the initial consonant is voiced, there are tone-class choices. As with CvCv, the majority of CvCCv stems with initial $\{ln\}$ have $\{LH\}/\{LH\}$ tones. Other CvCCv stems with initial voiced consonant are $\{LH\}/\{L\}$ or $\{H\}/\{L\}$. The latter includes some derived CvC-Cv stems due to syncope from *CvCv-Cv, and some Fulfulde loanwords.

Examples of the tone-contour classes other than $\{H\}/\{H\}$ are in (355).

```
(355) CvCCv verbs with at least some {LH} or {L} features
```

```
bare stem perfective perfective Neg gloss
```

```
a. \{LH\}/\{L\}
                                             'pick out'
    yèmbé
                yèmbé-
                              yèmbà-lí-
    màndú
                màndé-
                              màndà-lí-
                                             'laugh'
                                             'take out'
    gò-ndó
                gò-ndé-
                              gò-ndò-lí-
                                             'cook sauce'
    nìnjé
                nìnjέ-
                              nìnjà-lí-
    dònzó
                dònzέ-
                              dònzà-lí-
                                             're-open (wound)'
    yàndú
                yàndέ-
                              yàndà-lí-
                                             'call (summon)'
                dàmbέ-
                              dàmbà-lí-
                                             'push'
    dàmbú
b. \{LH\}/\{LH\} with initial \{1 n\}
    nòmbó
                nòmbé-
                              nòmbó-lì-
                                             'pound (fruit pits)'
    nàndú
                nàndé-
                              nàndá-lì-
                                             'greet (in morning)'
c. \{H\}/\{L\}
   jáyrέ
                jáyré-
                              jàyrà-lí-
                                             'mock'
                              zìb-dò-lí
    zíb-dé
                zíb-dé-
                                             'gird (sb) with a wrap'
    dómdó
                dómdέ-
                              dòmdà-lí-
                                             'console'
    dámdέ
                dámdé-
                              dàmdà-lí-
                                             'inform'
    bám-dέ
                bám-dέ
                                            'have (sb) carry on back'
                              bàm-dà-lí-
    bán-jέ
                bán-jέ-
                              bàn-jà-lí
                                             'hide'
    yámzέ
                yámzέ-
                              yàmzà-lí-
                                             'rub (hands) together'
                              yàm-dà-lí-
                                             'cover (sb)'
    yám-dέ
                yám-dé-
```

10.2.2.6 Bisyllabics with long vowel (Cv:Cv, Cv:CCv)

Among the set of verbs of the shape Cv:Cv (including v:Cv) are suffixal derivatives of Cv: or (contracted) CvCv stems. The presence of a long vowel has more dramatic consequences for the phonology than that of a medial cluster. The major effects are summarized in (356).

(356) Features of *Cv:Cv* verbs

```
a. no u-final verbs: Ca:(C)C\varepsilon occurs instead of \#Ca:(C)Cu) b. tone-contour classes reduce to \{H\}/\{H\} and \{H\}/\{L\}
```

These features are most striking in suffixal derivatives of stems that are *u*-final and/or that belong to $\{LH\}/\{L\}$ or $\{LH\}/\{LH\}$ tone-contour class. A good example is $n \check{a} \check{n}$ (underlying $/n \grave{a} \check{n} \check{u}$) 'pass', a *u*-final verb of the $\{LH\}/\{LH\}$ class (hence perfective negative $n \grave{a} \check{n} \check{a} - l \check{i}$ -). The suffixal derivative $n \acute{a} : -n d \acute{\epsilon}$ 'cause to go past, lay across' ends in ϵ , and has $\{H\}/\{H\}$ tones (perfective negative $n \acute{a} : -n d \acute{a} - l \check{i}$ -).

(357) *Cv:Cv* verbs

```
bare stem PerfNeg
                              gloss
                                                  comment
a. underived and not obviously borrowed
                              'think'
    má:nέ
                mà:nà-lí-
    dú:dź
                 dù:dà-lí-
                              'heave (spear)'
    wá:zé
                 wà:zà-lí-
                              'reel in (rope)'
                              'rat on'
    zá:ndέ
                 zà:ndà-lí-
                                                  Jamsay jà:rá etc.
    lé:ré
                 lé:ré-lì-
                              'tap (sth soft)'
    tó:dó
                 tó:dó-lì-
                              'tap (can)'
    dí:zé
                 dì:zè-lí-
                              'file, scrape (with a file)'
    bú:bɔ́
                 bù:bò-lí-
                              'rub (e.g. with stone)'
b. suffixal derivatives (§9.3.1.3)
                              'hang (calabash)'
    gó:-dó
                 gò:-dò-lí-
                                                  Jamsay gògòró, etc.
    lέ:-dέ
                 lέ:-dá-lì-
                              'insert (as mark)'
c. borrowings
                                                  Fulfulde or Songhay
    pá:bέ
                 pá:bá-lì-
                              'protect, save'
                                                  ('help')
```

All Cv:CCv stems known to me are of the form Cv:NCv with a medial homorganic nasal-stop cluster. Most are Cv:-ndv suffixal derivatives, often resulting from contraction of CvCv- stems before transitive suffix allomorph -ndv, such as $s\acute{u}:-nd\acute{o}$ 'take down'. A full list is given in (305) in §9.3.1.3, above. There are also a few unsegmentable stems like $n\acute{t}:nd\acute{e}$ 'accompany (to the door)'. mb is attested in $b\acute{u}:mb\acute{o}$ 'drag' (cognates in other Dogon languages have a short u for this stem) and $m\acute{u}:mb\acute{o}$ 'assemble'. I know of no such stem with ng.

The restrictions on vocalism and tone contours are the same for Cv:CCv as for Cv:Cv.

10.2.3 Trisyllabic and longer verbs

Many trisyllabic verbs (and all of the much less common quadrisyllabic verbs) are synchronically composite (*CvCv-Cv-* with derivational suffix), are suspected of being etymologically composite although the relevant underived stem is now missing, or behave in some way like suffixally derived verbs. It is

therefore not feasible to sharply distinguish derived from underived verbs of these shapes.

Like other verbs, these long stems may be lexically {H} or {LH}. The {H} stems have stem-wide high tone in the bare stem and in the perfective. For the {LH} verbs, the tone break is after the first syllable in these forms, hence trisyllabic LHH and quadrisyllabic LHHH.

10.2.3.1 Trisyllabic verbs with medial $\{i \ u\}$ and full initial syllable

The common trisyllabic pattern is that the medial syllabic has a short high vowel. In CvCvCv-, the medial syllable is generally in a weak metrical position in Dogon languages, and the high vowel can be thought of as reflecting this. The relationship between the first and third vowels is subject to certain harmonic considerations, disregarding the intervening high vowel, although some (original) suffixes like $-y\varepsilon$ do not always harmonize with the vocalism of the base stem.

Examples of trisyllabic verbs are in (358). There are three tonal types distinguishable in the perfective negative in the speech of my first informant. My second informant merges the second and third tonal types. For him, verbs in (358c) have perfective negatives like *lùgùzò-lì*- in contrast to the first informant's *lùgúzó-lì*-.

```
(358)
            bare stem
                           PerfNeg
                                             gloss
        a. {H}/{H}
            óbí-yó
                           óbí-yó-lì-
                                              'sit'
            íbí-yέ
                           íbí-ya-lì-
                                              'fear'
            sízílé
                           sízílí-lì-
                                              'roll (dough) into rolls'
        b. {LH}/{L}, see (55) in §3.8.1.2
                           bàmbì-yà-lí-
                                              'carry on back'
            bàmbí-yé
                                              'listen'
            nìndíyó
                           nìndìyò-lí-
            gànúlé
                           gànùlà-lí-
                                              'rub off (sweat)'
            yìmbíré
                           yìmbìrà-lí-
                                              '(beggar) sing verses'
                                              'borrow'
            yòdí-yó
                           yòdì-yò-lí-
            yòdú-ró
                           yòdù-rò-lí-
                                              'lend'
                                              'roll into a ball'
            mèŋgíré
                           mèngìrè-lí-
            dùnúló
                           dùnùlò-lí-
                                              'roll (barrel) on ground'
        c. {LH}/{LH} varying with {LH}/{L}, see (57) in §3.8.1.2
            lùgúzó
                           lùgúzó-lì-
                                              'poke around'
```

```
làgúzá
                làgúzá-lì-
                                    'nick'
làgúsá
               làgúsá-lì-
                                    'remove (earwax)'
nìŋír<sup>n</sup>é
               nìŋír<sup>n</sup>é-lì-
                                    '(pebble under mat) hurt (sb)'
                                    'plead, beg'
nèmílé
               nèmílé-lì-
nìndúgó
               nìndúgó-lì
                                     'breathe'
nìní-yέ
               nìní-yá-lì
                                    'trip (over a rope)'
```

The paradigm of obi-yo 'sit' is (359). Before nonzero inflectional suffixes and clitics, there was some phonetic fluctuation between stem-final e and o in my transcriptions, as in imperfective negative obi-yo-nan, which was sometimes heard as (close to) obi-yo-nan. The preceding segments (iy) and some suffixal segments (initial labial consonants, front or back vowels) appeared to influence the articulation of the stem-final vowel. My impression after lengthy elicitation is that stem-final o is basic in these suffixed forms.

(359) Paradigm of {H} toned *óbí-yó* 'sit'

form	category	stem
óbí-yé-	perfective	E
óbí-yó	bare stem	bare
óbí-yó-zò-	perfective-2	bare
óbí-yó-téré-bè-	experiential perfect	bare
óbí-yó-zè-	recent perfect	bare
óbí-yó = bὲ-	past perfect	bare
óbí-yó-zà-lì-	recent perfect negative	bare
	past recent perfect	bare
óbí-yó	imperative	A/O
óbì-yò-m-ù	imperfective 3Sg	A/O
óbí-yó-m	imperfective before AUX	A/O
$\delta b i - y \delta - m = b \hat{\varepsilon}$	past imperfective	A/O
óbì-yò: = bá-lì-	past imperfective negative	A/O
óbí-yó-lì-	perfective negative	A/O
òbì-yò-nán-	imperfective negative	bare
óbí-yó-là	prohibitive	bare
óbí-yó-mà	hortative	bare

A trisyllabic with {LH} tone is *nìndíyó* 'listen'. Its paradigm is (360), as given by my first informant. Note that the imperative has LHH rather than LHL tone, showing that this form extends the H-tone component of {LH} stems to the end of the word.

(360) Paradigm of {LH} toned *nindíyó* 'listen'

form	category	stem
nìndíyé-	perfective	Е
nìndíyó	bare stem	bare
nìndìyò-zó-	perfective-2	bare
nìndìyò-téré-bè-	experiential perfect	bare
nìndíyó-zè-	recent perfect	bare
$nindiy\hat{o} = b\hat{\varepsilon}$ -	past perfect	bare
nìndìyò-zá-lì-	recent perfect negative	bare
$nindiy\hat{o}$ - $z\hat{\varepsilon} = b\hat{\varepsilon}$ -	past recent perfect	bare
nìndíyó	imperative	A/O
nìndíyò-m-ù	imperfective 3Sg	A/O
nìndíyó-m	imperfective before AUX	A/O
n indíyó- $m = b$ $\hat{\varepsilon}$ -	past imperfective	A/O
nìndíyò: = bá-lì-	past imperfective negative	A/O
nìndìyò-lí-	perfective negative	A/O
nìndìyò-nán-	imperfective negative	bare
nìndìyò-lá	prohibitive	bare
nìndìyò-má	hortative	bare

The third tonal type in (358c), above, e.g. nèmilé 'plead', differs from the nìndíyó paradigm in having LHH rather than all-L stem followed by and L-toned suffix in the perfective negative (nèmilé-lì-), in the prohibitive (nèmilé-là), and in the hortative (nèmilé-mà).

Trisyllabic causatives (from bisyllabic input stems) like *zòbó-mé* 'cause to run, drive (vehicle)' have a different vocalic pattern, whereby a non-high V2 is carried over into the causative. These causatives carry over the tone-contour properties of the corresponding simple verb, as best seen in the perfective negative, in which the stem can be {L}-toned ('cause to run', 'cause to go up'), {LH}-toned ('cause to do a lot'), or {H}-toned ('cause to be plump').

(361) Paradigm of causative zòbó-mέ

```
'cause to ...
'... run' '... go up' '... do a lot' '... be plump'

Perf z \frac{\partial b}{\partial -m} \epsilon \frac{\partial b}{\partial -m} \epsilon
```

Quadrisyllabic verbs are, to my knowledge, all suffixal derivatives of trisyllabic verbs. The paradigms are similar to trisyllabics, with the tone of the second syllable spread to the third syllable. An example is $b \epsilon \eta g i l i - y \epsilon$ 'rub lightly against'.

10.2.3.2 *nCvCv* and *?∂CvCv* verbs

Just as nCv exists as a defective bisyllabic pattern ($\acute{nd\acute{e}}$ 'give'), there is a verb $\acute{ngil\acute{e}}$ 'get up' that can be considered a defective trisyllabic; indeed, there is a dialectal variant $\acute{ngil\acute{e}}$. The tonal pattern in 3Sg imperfective $\acute{ngil\acute{e}}$ - $m-\grave{u}$ 'he/she will stand' shows that the initial nasal is capable of taking the initial-syllable high tone associated with {H} toned trisyllabics in this category, cf. $\acute{obi-y\acute{e}-m-\grave{u}}$ 'he/she will sit'. The imperative is $\acute{ngil\acute{e}}$.

A glottal-initial trisyllabic is intransitive $\frac{2 \sin i - y \epsilon}{2} \sim \frac{2 i \sin i - y \epsilon}{2}$ 'stop, come to a stop'. Even in the shorter variant, the glottal syllable is capable of bearing a distinct tone, as in 3Sg imperfective $\frac{2 \sin i k}{2} - m - \hat{u}$ 'he/she will stop'.

10.2.4 Quadrisyllabic and longer verb stems

Verb stems of four or more syllables are probably all suffixal derivatives. A fairly extreme example is factitive *élé-ndí-yé-mé* 'sweeten (sth)', cf. *ěl* 'sweet', inchoative verb *élé-ndí-yé* 'become sweet'.

In some cases the morphology is less transparent due to the absence of a substantial set of related forms. For example, in $t\acute{e}g\acute{l}b\acute{l}-y\acute{e}$ 'tremble' I take the final syllable to be the mediopassive suffix, but no simplex is attested.

10.2.5 ε-final verbs borrowed from Fulfulde and other languages

A number of verbs in Yanda Dom and other neighboring Dogon languages, including Jamsay (which may be the direct source for Yanda Dom in some cases) are borrowings from Fulfulde verbs. All of these borrowings have at least two syllables. The Fulfulde origin can often be inferred from one or another segmental feature: a long vowel in the first syllable (Cv:Cv), a non-Dogon consonant such as $\{fh\}$ or a preglottalized obstruent, or a medial cluster other than the few common Yanda Dom clusters such as $\{nd mb ng ll\}$.

With regard to vocalism, the distinctive feature of Fulfulde verb borrowings is a stem-final /ɛ/, regardless of whether this vowel combines with preceding vowels to constitute a regular Yanda Dom vocalism type.

(362) Verbs borrowed from Fulfulde with final ε

bare stem gloss comment

a. compatible with Yanda Dom vocalism norms *wéjé* 'give change'

b. not compatible with Yanda Dom vocalism norms

má:né 'think' cf. Arabic masnaa- 'meaning' pá:bé 'protect' cf. Songhay faaba 'help'

Although such sequences as $a...\varepsilon$ are aberrant in Yanda Dom, these verbs are easily processed in the verbal morphology. Stem-final ε is readily converted to a in the A/O-stem.

Paradigms of two of the Fulfulde borrowings are given in (363). Note the stem-final ε in the bare stem (and its derivatives) and in the [+ATR] stem, versus final a in the A/O-stem.

(363) Paradigms of *Cv:Cv* verbs (< Fulfulde)

'protect'	'think'	category	stem
{H}	$\{H\}/\{L\}$		
pá:bέ-	má:nέ-	perfective	E
pá:bέ	má:nέ	bare stem	bare
pá:bέ-zò-	mà:nè-zó-	perfective-2	bare
pá:bé-téré-bè-	mà:nè-téré-bè-	experiential perfect	bare
pá:bé-zè-	má:nέ-zὲ-	recent perfect	bare
$p\acute{a}:b\acute{\varepsilon}=b\grave{\varepsilon}$ -	$m\grave{a}:n\grave{\varepsilon}=b\acute{\varepsilon}-$	past perfect	bare
pá:bé-zà-lì-	mà:nè-zá-lì-	recent perfect negative	bare
$p\acute{a}:b\acute{\varepsilon}-z\grave{\varepsilon}=b\grave{\varepsilon}-$	$m\grave{a}:n\grave{\varepsilon}-z\acute{\varepsilon}=b\grave{\varepsilon}-$	past recent perfect	bare
pá:bá	má:ná	imperative	A/O
pá:bà-m-ù	má:nà-m-ù	imperfective 3Sg	A/O
pá:bá-m	má:ná-m	imperfective before AUX	A/O
$p\acute{a}$: $b\acute{a}$ - m = $b\grave{\varepsilon}$ -	$m\acute{a}$: $n\acute{a}$ - m = $b\grave{\varepsilon}$ -	past imperfective	A/O
pá:bà: = bá-lì-	má:nà: = bá-lì-	past imperfective negative	A/O
pá:bá-lì-	mà:nà-lí-	perfective negative	A/O
pà:bè-nán-	mà:nè-nán-	imperfective negative	bare
pá:bέ-là	mà:nè-lá	prohibitive	bare
pá:bέ-mà	mà:nè-má	hortative	bare

French *gagner* 'win', especially 'win (match, election)', belongs to the *u*-final class: $g \grave{a} p \acute{u}$. It may have been merged with the inherited verb $g \grave{a} p \acute{u}$ 'prevent'.

A more typical French loan is $p\acute{a}:s\acute{e}$ 'advance to the next level (in school, in a sports tournament)' (passer). This has final e, and with its lengthened first-syllable vowel it seems to have been nativized on the model of Fulfulde verb loans such as $p\acute{a}:b\acute{e}$ 'protect'.

Another way to nativize a French verb is in a noun-verb combination with a semantically light Yanda Dom verb, usually *kán* 'do, make'. An example is *bìpê: kán* 'do a beep', referring to the practice of telephoning another person and hanging up after the telephone rings briefly (as a signal). In local French the verb is *biper* (*il m'a bipé* 'he beeped me').

10.3 Positive indicative AN categories

10.3.1 Perfective positive system (including perfect)

10.3.1.1 The (simple) perfective

The (simple) perfective form, used in positive clauses, is normally accompanied by the preverbal realis particle $y\hat{a}$. Unlike other AMN inflectional categories, there is no transparently segmentable suffix for the perfective. The perfective stem always ends in $\{e \in E\}$, which is arguably a suffix, but in view of the frequent alternations of stem-final vowels in verbal inflection I prefer to take it as the **E-stem** of the verb.

The tone of the perfective verb depends on whether $y\hat{a}$ is present immediately to the left of the verb. $y\hat{a}$ is obligatory when no other preverbal constituent occurs, but in the presence of another preverbal constituent it is optional. In addition, if two or more verbs are tightly chained (only the final one being inflected), $y\hat{a}$ precedes the first verb in the chain and is therefore not left-adjacent to the perfective verb (§11.2.2.1).

When $y\hat{a}$ is left-adjacent, perfective verbs have the same tone contours as in the bare stem. Short-voweled monosyllabics have high-toned form. Longer stems respect the lexical choice between $\{H\}$ and $\{LH\}$ tone contours. $\{H\}$ stems are all-high toned, while $\{LH\}$ verbs begin with a low tone.

Perfectives differ audibly from bare stems in most cases since perfectives end in $\{e\ e\}$, i.e. they take the E-stem (§3.5.1.2). The choice between e and e depends on the ATR-harmonic class of the stem (for the 3Pl form, see below). e and e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e as in e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e as in e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e as in e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e as in e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e and e are a trace of the rounding in the form of a nonsyllabic semivowel e or e and e are a trace of the rounding in the form of a nonsyllabic semivowel e are e and e are a trace of the rounding in the form of a nonsyllabic semivowel e are e and e are e are e and e are e and e are e and e are e are e and e are e and e are e are

Lexically Ca: stems have a perfective Caye-, arguably a realization of /Ca:e/ (364e). u-final verbs with a vowels in nonfinal syllables have final e (364j).

Examples of the perfective stem are in (364), shown alongside the bare stem (as in verb chains) for comparison.

(364)		bare stem	perfective	gloss
	a.	wó	wé-	'come'
		wź	w€-	'see'
		yέ	yέ-	'weep'
	b.	gó	gọé-	'go out'
		nớ	ηχέ-	'go in'
		zó	zoé-	'bring'
	c.	tó:	toé:-	'spit'
	d.	té:	té:-	'sprout'
	e.	mă:	màyé-	'make (bricks)'
		nă:	nàyé-	'spend night' {LH}/{LH}
		ká:	káyé-	'shave'
	f.	ún	úr ⁿ é-	ʻgo'
	g.	ńdέ	ńdé-	'give'
	h.	<i>?ချေး</i>	?ә́πέ-	'eat (meal)'
		<i>?ઇોર્દ</i>	<i>?ઇાંદ-</i>	'go up'
	i.	dèr ⁿ é	dèr ⁿ €-	'spend day'
		gàlá	gὸlέ-	'do farm work'
		dìyέ	dìyέ-	'carry on head'
		tóló	tólé-	'pound (in mortar)'
		úbś	úbέ-	'pour'
	j.	tábú	tábé-	'touch'
		mànú	màné-	'cook'
	k.	óbí-yó	óbí-yé-	'sit'
		nìndíyó	nìndíyé-	'listen'

 $m\acute{a}:n\acute{\epsilon}$ $m\acute{a}:n\acute{\epsilon}$ 'think' {H}/{L}

When separated from realis $y\hat{a}$ by another chained verb (365a), or when $y\hat{a}$ is optionally omitted (365b), the perfective verb takes **all-low toned form**. This is indicated by a superscript at the left edge of the word. If $y\hat{a}$ were immediately adjacent, the perfective stems in (365) would be $b\hat{e}l\hat{e}$ - (365a), $t\hat{l}b\hat{e}$ - (365b), $l\hat{e}l\hat{e}$ - (365c), and $l\hat{e}l\hat{e}$ - (365d).

- (365) a. *yà* óbí-yó ^Lbèlè-Ø
 Real sit-MP ^Lget.Perf-3SgS
 'He/She was able to sit down.'
 - b. [bàmbà †ná] Ltìbè-⊘
 [B Loc] Ldie.Perf-3SgS
 'He/She died in Bamba.'
 - c. *ó* zá àmbá: L?ðnè-ẃ
 2Sg meal where? Leat.meal.Perf-2SgS
 'Where did you-Sg eat?'
 - d. [6 dé:] à:rⁿà-gá ^Lwè-Ø [2SgP father.H] when? ^Lcome.Perf-3SgS 'When did your-Sg father come?'

The pronominal-subject paradigm is in (366). The suffixes are atonal (the tone of the final vowel of the stem is carried forward to the end of the syllable, where relevant. The 3Pl form replaces final ε by a, and final e by o. 1Pl and 2Pl are identical, requiring fairly frequent use of the corresponding independent pronouns. 3Sg includes inanimates (singular or plural reference).

(366)	category	suffix	'come'	'carry on head'
	1Sg	-m	wé-m	dìyέ-m
	2Sg	-W	wé-w	dìyέ-w
	1Pl	- <i>y</i>	wé-y	dìyέ-y
	2P1	- y	wé-y	dìyέ-y
	3Sg	-Ø	wé-Ø	dìyέ-Ø
	3P1	-a, -o	w-ó	dìy-á
	[for 3Pl s	ee closer ana	lysis below]	

When the stem-final $\{e \ \varepsilon\}$ is followed by w, which is frequently the case (cf. $2 \operatorname{Sg} - w$), or when it is preceded by w or a desyllabified ϱ or ϱ , and followed by $\{y \ w\}$, the vowel often backs and rounds to $\{o \ o\}$. For example, $w \varepsilon - w$ 'you-Sg came' is heard variably as $[w \varepsilon w]$ and $[w \varepsilon w]$, and $n \varrho \varepsilon - y$ 'we/you-Pl went in' is heard as $[n \varrho \varepsilon j]$ or $[n \varepsilon j]$. Because stem-final vowel shifts are common in the verbal morphology, these variations, though seemingly low-level, may already be in the process of being morphologized.

The 3Pl requires more morphophonological analysis. Consider the data in (367).

(367)		3Sg	3P1	gloss
	a.	bèlé-Ø dògé-Ø	bèl-á dòg-á	'obtain' 'leave'
	b.	káyé-Ø nàyé-Ø	ká:-Ø nă:-Ø	'shave' 'spend night' {LH}/{LH}
	c.	wέ-Ø wé-Ø	w-á w-ó	'see' 'come'
	d.	nọć-Ø gọć-Ø	nọ-á g-ó	'go in' 'go out'
	e.	$\acute{u}r^n\acute{arepsilon}-arnothing$	ún-Ø	'go' (bare stem ún)

The 3Pl is based on the A/O-stem, rather than on the E-stem that occurs in the remainder of the paradigm. We therefore have stem-final ε replaced by a, o replaced by o, and no final vowel added to 'go'.

(367b) shows that the *y* increment in the perfective of lexical *Ca*: verbs does not appear in the 3Pl form.

In $n \not a$ (367d) there is little audible differentiation between the $\not a$ and the syllabic nucleus a. In casual pronunciation it can be heard as [n5] but in careful pronunciation an informant gives [n2a] with a barely audible semivowel-like [2]

Simple sentence examples are in (368). Note the presence of realis yà.

```
(368) a. nò-mó yà w-ó
person-AnPl Real come.Perf-3PlS
'The people came.' (or: 'The people have come.')

b. [mì Hdé:] bú:dù mì-ý yà ńdé-Ø
```

[1SgP Hather] money 1Sg-Acc Real give.Perf-3SgS 'My father gave me (some) money.'

- c. yé [bàmàkό nà] yà dọε-y
 1Pl [B Loc] Real arrive.Perf-1PlS
 'We arrived in Bamako.'
- d. ó zá yà ?óné-w mà
 2Sg meal Real eat.meal.Perf-2SgS Q
 'Did you-Sg eat?' (or: 'Have you-Sg eaten?')

When there is a **focalized constituent**, such as a WH question word, the perfective shifts to low or falling tone melody, and there are other changes. See §13.1.2.1 for subject focalization forms, and §13.1.3 for nonsubject focalization.

With perception verbs $w\delta$ 'see' and $n\mathfrak{Z}\varepsilon$ 'hear', the simple perfective stem is dispreferred, though elicitable. Instead, a form with $-b\varepsilon$ - is preferred: $w\mathfrak{Z}-b\varepsilon$ - 'saw', $n\mathfrak{Z}-b\varepsilon$ - 'heard'.

10.3.1.2 Perfective-2 (-zo-)

Another positive perfective form is formed with inflectable -zo- (of variable tone). The ending can be identified morphemically with zó- 'have' (§11.5.1). This combination is very common in Dogon languages, and since I have called it "perfective-2" in other grammars I will retain this term for ease of comparison (abbreviation in interlinears: "Perf2").

Forms of verbs before the perfective-2 suffix are in (369). Segmentally they are identical to the **bare stem**, even with *u*-final verbs (369e). However, the stem tones may diverge from those of the bare stem. In (369a-b) we have the usual split into high-toned and low-toned monosyllabic stems as e.g. before the perfective negative suffix. For lexically $\{H\}$ stems of two or more moras, before -zo- we get $\{H\}$ contour (369c). Lexically $\{LH\}/\{L\}$ and $\{LH\}/\{LH\}$ stems of two or more moras have $\{LH\}$ before -zo- (369d). $\{H\}/\{L\}$ stems have $\{L\}$ -toned stem (369e).

(369)		bare stem	perfective-2	gloss
	a.	wó	wò-zó-	'come'
		wź	w∂-zó-	'see'
		gó	gò-zó-	'go out'
		nó	nà-zó-	'hear'

```
b. yέ
                       yέ-zò-
                                            'weep'
                       dź-zò-
                                            'arrive, reach, approach'
     d5
     tś
                       tó-zò-
                                            'slash earth (to sow)'
                       nó-zò-
                                            'go in'
     nś
                       zó-zò-
                                            'bring'
     zó
                                            'insult'
     dź
                       dó-zò-
c. tó:
                       tó:-zò-
                                            'spit'
                                            'sprout'
     tέ:
                       tέ:-zò-
                                            'shave'
                       ká:-zò-
     ká:
                                            ʻgoʻ
     ún
                       ún-zò-
                       ?≼ρέ-zò-
                                            'eat (meal)'
     ? έριέ
     ?έΙέ
                       ?álέ-zò-
                                            'go up'
     úbś
                       úbó-zò-
                                            'pour'
     ńdέ
                       ńdέ-zò-
                                            'give'
     tóló
                       tóló-zò-
                                            'pound (in mortar)'
     óbí-yó
                       óbí-yó-zò-
                                            'sit'
d. mă:
                       mă:-zò-
                                            'make (bricks)'
    nă:
                       nă:-zò-
                                            'spend night' {LH}/{LH}
     d\grave{e}r^n\acute{\varepsilon}
                       d \grave{e} r^n \acute{\varepsilon} - z \grave{o} -
                                            'spend day'
    gàlá
                       gàló-zò-
                                            'do farm work'
                       dìyέ-zò-
                                            'carry on head'
     dìyέ
     năŋ
                       năŋ-zò-
                                            'pass' {LH}/{LH}
     nìŋír<sup>n</sup>é
                       nìŋír<sup>n</sup>é-zò-
                                            '(pebble) hurt (sb) {LH}/{LH}
                                            'think' \{H\}/\{L\}
e. má:nέ
                       mà:nè-zó-
f.
    tábú
                       tábú-zò-
                                            'touch'
                                            'cook'
     mànú
                       mànú-zò-
```

The paradigm is (370).

(370) Perfective-2 paradigm

category	perfective-2 low-toned	high-toned
1Sg 2Sg	-zò-m -zò-w	-zó-m -zó-w
1Pl	-zò-y	-zó-y

An informant explained (on different occasions) two aspects of the semantic difference between the regular perfective and the perfective-2. Both are suggestive of categories called "perfect" in various languages.

One element is that the perfective-2 can be resultative. (371a) reports a simple event, while perfective-2 (371b) can suggest that the cows remain in fallen position or are otherwise still the worse for the fall.

```
(371) a. n\grave{a}:-m=\check{o}: ya píl-\acute{o} cow-AnPl=Def.AnPl Real fall.Perf-3PlS 'The cows fell.'

b. n\grave{a}:-m=\check{o}: pílé-z-\grave{e}: cow-AnPl=Def.AnPl fall-Perf2-3PlS 'The cows have fallen.'
```

The other ingredient arose in comparing perfective $y\hat{a}$ $\delta b\hat{i}$ - $y\hat{e}$ - \emptyset 'he/she sat' and perfective-2 $\delta b\hat{i}$ - $y\hat{e}$ - $z\hat{o}$ - \emptyset . The latter was said to have an inferential modal element: 'he/she must have sat down (that's why he/she is late coming here)'.

The perfect component of this category might explain why realis $y\hat{a}$ is not used with it. That the perfect nuances do not erase the perfective aspectual element is suggested by the fact that perfective-2 -z \hat{o} - and the simple perfective are neutralized under negation as perfective negative -li- (§10.3.3.1).

10.3.1.3 Experiential perfect 'have ever VP-ed' (-téré-bè-/-zò-)

The experiential perfect is expressed by the pronominally inflected form $-t\acute{e}r\acute{e}-b\grave{e}$ - or $-t\acute{e}r\acute{e}-z\grave{o}$ -, following the semantically primary verb (372a-b), which is segmentally in the **bare stem**. The realis particle $y\grave{a}$ is absent, even in positive examples (370a-b). $-z\grave{o}$ - is the perfective-2 morpheme. $-b\grave{e}$ - is presumably related historically to the past clitic =be- (§10.6.1), but $-t\acute{e}r\acute{e}-b\grave{e}$ - switches interchangeably between present and past time frames ('I have ever...', versus 'I had ever...' with respect to a previous temporal reference point). There is also no trace of $-b\grave{e}$ - in the experiential perfect negative ('have never VP-ed') $t\acute{e}r\acute{a}-l\grave{i}$ - (§10.1.3.3.2).

(372) a. săydù
$$g \grave{o} y^n \grave{e}$$
 $\dagger w \acute{o} - t \grave{e} r \grave{e} - b \grave{e} - \varnothing$ $m \grave{a}$

```
S elephant see-ExpPf-Past-3SgS Q 'Has Seydou ever seen an elephant?'
```

```
b. [bàmàkó nà] bìdé bìdè-téré-zò-m
[Bamako Loc] work(n) work-ExpPf-Perf2-1SgS
'I have (once) worked in Bamako.'
```

Short-voweled monosyllabic verbs are low-toned (373a) or high-toned (373b) before the experiential perfective suffix (in both positive and negative forms). The choice of stem tone correlates broadly with the lexically unpredictable tones the same verbs have in the perfective negative, but 'arrive' and 'weep' are in (373a) though they have high-toned stems before the perfective negative suffix. Monosyllabic verbs with a long vowel retain a lexical {H} tone (373c), but those with lexical {LH} split into two tonal types, one of which drops tones to low and one of which retains the {LH} (373d). (C)vC and nCv stems retain their lexical tone contour (373e).

(373) Experiential perfective forms (monosyllabic)

```
bare stem
                   ExpPerf
                                       gloss
a. short voweled, {H} dropping to {L}
    wś
                   wò-téré-bè-
                                       'see'
    wó
                   wò-téré-bè-
                                       'come'
                   gò-téré-bè-
    gó
                                       'go out'
    dś
                   dò-téré-bè-
                                       'insult'
                   dò-téré-bè-
                                       'arrive'
    dś
    пэ́
                   nò-téré-bè-
                                       'hear'
    yέ
                   yè-téré-bè-
                                       'weep'
b. short voweled, {H} remaining {H}
                   nó-téré-bè-
                                       'go in'
    пэ́
    tś
                   tó-téré-bè-
                                       'slash earth (to sow)'
                   tó-téré-bè-
                                       'send'
    tś
                   zó-téré-bè-
                                       'bring'
    zó
c. long voweled, {H} remaining {H}
    ká:
                   ká:-téré-bè-
                                       'shave'
    tó:
                   tó:-téré-bè-
                                       'spit'
    tέ:
                   té:-téré-bè-
                                       'sprout'
```

d. long voweled, {LH} dropping to {L}

```
    mă: mà:-téré-bè- 'make (bricks)'
nă: nă:-téré-bè- 'spend night' {LH}/{LH}
    e. ún ún-téré-bè- 'go'
ńdé ńdé-téré-bè- 'give'
```

For bisyllabic and longer stems, lexical $\{H\}$ tone contour is preserved (374a), while $\{LH\}$ flattens to $\{L\}$ before the experiential perfect suffix (374b).

(374) Experiential perfect forms (non-monosyllabic)

bare stem	ExpPerf	gloss
a. {H}		
ે રેંગેર્દ	?álé-téré-bè-	'go up'
tóló	tóló-téré-bè-	'pound (in mortar)
úbó	úbó-téré-bè-	'pour'
tábú	tábú-téré-bè-	'touch'
cézó	cézé-téré-bè-	'cut (slice)'
símbé	símbé-téré-bè-	'roast, grill'
óbí-yó	óbí-yó-téré-bè-	'sit'
bé:líyé	bé:líyé-téré-bè-	'belch'
b. {LH}		
dògó	dògò-téré-bè-	'leave'
dìyέ	dìyè-téré-bè-	'carry on head'
mànú	mànù-téré-bè-	'cook'
c. {H}/{L}		
má:né	mà:nè-téré-bè-	'think'
<i>bármé</i>	bàrmè-téré-bè-	'be wounded'
d. {LH}/{LH}		
năŋ	năŋ-téré-bè-	'pass'
lìgé	lìgé-téré-bè-	'mix by stirring'

The pronominal-suffix paradigms are automatically derived from those of the final suffix $(-b\hat{e}_{-}, -z\hat{o}_{-}, -l\hat{i}_{-})$ and need not be detailed here.

10.3.1.4 Recent perfect (or completive) $(-z\hat{\epsilon}-)$

The suffix -zè- can often be translated as 'have (recently, just) VP-ed', especially with verbs like 'eat' and 'drink' denoting activities of relatively short time span. In comparison to English 'have just VP-ed', there is somewhat less emphasis on temporal immediacy vis-à-vis the present and somewhat more on the completion of an activity. It is not commonly used with non-activity telic verbs like 'die' or 'arrive' that focus on a temporal moment. A textual example is in (839) in Text 4.

-zè- requires realis particle yà preceding the verb (375).

- (375) a. yà ká:-zè-Ø Real shave-RecPf-3SgS 'He/She has (recently) finished shaving.'
 - b. bìdé yà bìdé-zè-m work(n) Real work-RecPf-1SgS 'I have (recently) finished working.'

-zè- is added to what is segmentally the **bare stem** form of the semantically primary verb. *u*-final verbs do not delete their final *u*, e.g. $t\acute{a}b\acute{u}-z\grave{e}-$ 'have finished touching'. All short-voweled monosyllabic verb stems have high tone before the low-toned suffix (376a-b). Lexically {H}- and {H}/{L}- toned verbs have {H} contour i (376c). Lexically {LH} verbs other than short-voweled monosyllabics have {LH} contour (376d).

(376)		bare stem	recent perfect	gloss
	a.	wó	wó-zè-	'come'
		wó	wó-zè-	'see'
		gó	gó-zè-	'go out'
		nó	nó-zὲ-	'hear'
	b.	yέ	yé-zè-	'weep'
		d5	dó-zè-	'arrive, reach, approach'
		tś	tó-zè-	'slash earth (to sow)'
		nó	nó-zὲ-	'go in'
		zó	zó-zè-	'bring'
		d5	dó-zὲ-	'insult'
	c.	tó:	tó:-zè-	'spit'
		té:	té:-zè-	'sprout'

```
ká:
                      ká:-zè-
                                           'shave'
                      ún-zè-
                                           'go'
    ún
    ?၃΄ριέ
                      ?áμέ-zè-
                                           'eat (meal)'
                      ?álέ-zὲ-
                                           'go up'
    ?έΙέ
    úbś
                      úbó-zè-
                                           'pour'
    ńdέ
                      ńdέ-zὲ-
                                           'give'
    tábú
                      tábú-zè-
                                           'touch'
    tóló
                      tóló-zè-
                                           'pound (in mortar)'
    óbí-yó
                      óbí-yó-zè-
                                           'sit'
    má:nέ
                      má:né-zè-
                                           'think' {H}/{L}
d. mă:
                                           'make (bricks)'
                      mă:-zὲ-
                                           'spend night' {LH}/{LH}
    nă:
                      nă:-zὲ-
    d\grave{e}r^n\acute{\varepsilon}
                      d \hat{e} r^n \hat{\epsilon} - z \hat{\epsilon} -
                                           'spend day'
                                           'do farm work'
    gàlá
                      gàló-zè-
    dìyέ
                      dìyέ-zὲ-
                                           'carry on head'
    mànú
                      mànú-zè-
                                           'cook'
                      năη-zè-
                                           'pass' \{LH\}/\{LH\}
    năŋ
    nìndíyó
                      nìndíyó-zè-
                                           'listen'
    bármέ
                      bármé-zè-
                                           'be wounded'
```

The pronominal-suffix paradigm is regular (377). The 3Pl form is -z-à.

(377) Recent perfect paradigm

category	recent perfect
1Sg	-zè-m
2Sg	-zè-w
1Pl	-zè-y
2Pl	-zè-y
3Sg	-zè-∅
3Pl	-z-à

The negative counterpart is $-z\acute{a}-l\grave{i}-$ or $-z\grave{a}-l\grave{i}-$ with different tonal patterns; see §10.3.3.3, below.

10.3.1.5 Reduplicated perfective absent

I have not observed a reduplicated form of the perfective stem.

10.3.2 Imperfective positive system

In addition to the basic imperfective forms discussed in the following subsections, there are several progressive constructions that are included in the section on statives since they pattern with (other) statives in their negation; see §10.5.3.2.

10.3.2.1 Imperfective (positive) (-m-)

This basic imperfective verb form is used with realis particle $y\hat{a}$ with present-time reference, and without the particle with future time reference. It is characterized morphologically by a suffix -m- on the verb, with a somewhat unusual paradigm.

Segmentally, the verb takes the **A/O-stem**. Perhaps influenced by the suffixal m, stem-final o is found instead of e for verbs like simbe 'roast, grill' whose A/O-stem in other AMN categories is inconsistent. For short-voweled monosyllabics, the stem has high tone (378a-b). Bimoraic and longer {H}- and {H}- toned stems have {HL} tone in the imperfective. Heavy {LH}-toned stems have the {LHL} contour, though if the stem has only two moras the final L merges with the suffixal L-tone. The forms shown in (378) are for 3Sg subject.

(378)	bare stem	imperfective 3Sg	gloss
a.	wó	wó-m-ù	'come'
	wź	wá-m-ù	'see'
	gó	gó-m-ù	'go out'
	nó	nọá-m-ù	'hear'
	d5	doá-m-ù	'arrive, reach'
b.	yέ	yá-m-ù	'weep'
	tó	toá-m-ù	'slash earth (to sow)'
	nớ	nɔá-m-ù	'go in'
	zó	zó-m-ù	'bring'
	d5	dɔ̯á-m-ù	'insult'

```
tô:-m-ù
                                          'spit'
c.
   tó:
    tέ:
                     tê:-m-ù
                                          'sprout'
                     kâ:-m-ù
                                          'shave'
    ká:
                     ûn-m-ù
                                          'go'
    ún
                                          'eat (meal)'
    ?όρε
                     ?ápà-m-ù
    ?έΙέ
                     ?álá-m-ù
                                          'go up'
    úbś
                     úbà-m-ù
                                          'pour'
    cédé
                     cédà-m-ù
                                          'gather (firewood)'
    ńdέ
                     ńdà-m-ù
                                          'give'
                                          'pound (in mortar)'
    tóló
                     tólò-m-ù
    símbé
                     símbò-m-ù
                                          'roast, grill'
    óbí-yó
                     óbì-yò-m-ù
                                          'sit'
    má:nέ
                     má:nà-m-ù
                                          'think' \{H\}/\{L\}
                                          'make (bricks)'
d. mă:
                     mă:-m-ù
                     nă:-m-ù
                                          'spend night' {LH}/{LH}
    nă:
    dèr<sup>n</sup>€
                     dèr<sup>n</sup>á-m-ù
                                          'spend day'
                                          'do farm work'
    gàlá
                     gòlá-m-ù
    dìyέ
                     dìyá-m-ù
                                          'carry on head'
                     nàŋá-m-ù
                                          'pass' {LH}/{LH}
    năη
                                          'listen'
    nìndíyó
                     nìndíyò-m-ù
   tábú
                     tábà-m-ù
                                          'touch'
e.
    mànú
                     màná-m-ù
                                          'cook'
```

The high tones on the imperfective stem are subject to **tone-dropping** in the presence of preverbal constituents, especially focalized constituents (§13.1). This is indicated in interlinears by a superscripted ^L at the left edge of the word

The pronominal-subject paradigm is (379). Note the alternation between e and o in the stem-final vowel of 'roast, grill', which here represents the set of verbs with lexical ... CiCe vowel sequence. I would normally assign the stemshape simbo to the A/O-stem and the shape simbo to the A-stem. However, in this paradigm the choice between stem-final o and e correlates with suffixal vowel qualities, i.e. stem-final o with suffixal e and stem-final e with suffixal e i, so one can argue whether the stem-final alternation is phonological or morphophonological. The 1Sg has no suffixal vowel (-e could be taken as the fusion of /-e-e), or conceivably as an apocopated realization of /-e-e-e).

(379) Imperfective paradigm

category Impf 'come' 'hit' 'roast, grill'

1Sg	-ṁ-Ø	wó-ṁ-∅	dèmá-ṁ-Ø	símbó-m-ùw
2Sg	-m-ùw	wó-m-ùw	dèmá-m-ùw	
1Pl	-m-ìy	wó-m-ìy	dèmá-m-ìy	símbe-m-ìy
2Pl	-m-ìy	wó-m-ìy	dèmá-m-ìy	símbé-m-ìy
3Sg	-m-ù	wó-m-ù	dèmá-m-ù	símbó-m-ù
3Pl	-m-è	wó-m-è	dèmá-m-ὲ	símbé-m-ù

C-final verbs like un 'go' have regular forms when the suffix complex contains a vowel, e.g. un-m-u 'he/she goes' = 'you-Sg go'. In the 1Sg, an epenthetic vowel is inserted to avoid a disallowed word-final consonant cluster, and the falling tone divides into its components: $unu-m-\varnothing$ 'I go'.

The use of realis $y\hat{a}$ with the imperfective verb form is illustrated in (380). In (380a), the referent is observed arriving at the moment of speech and the realis particle is present. In (380b-c), the action is either habitual (having occurred before the moment of speaking and expected to recur) or future.

```
(380) a. yà wó-m-ù

Real come-Impf-3SgS

'He/She is coming.' (e.g. entering the doorway now)
```

b. wó-m-ù come-Impf-3SgS 'He/She comes (regularly) 'He/She will come.'

c. wà: wó-m-ù morning come-Impf-3SgS 'He/She comes (regularly) in the morning' or: 'He/She will come in the morning.'

10.3.2.2 Reduplicated imperfective absent

I have not observed a reduplicated form of the imperfective.

10.3.2.3 Immediate future -zà- (-zè-)

A form with -zà- was discovered relatively late in the fieldwork on verbal morphology. It appears to be a kind of immediate future. My assistant explained

that the context for this form is that the event in question should precede some other impending event.

The immediate future can be indicative or imperative. The suffixal paradigm is (381), using the verb 'go past'. The indicative forms make use of regular imperfective suffixes added to $-z\hat{a}$. The imperative also uses regular endings. In the hortative, $-z\hat{a}$ - shifts to $-z\hat{c}$ -. It was not possible to elicit negative forms.

```
(381)
        a. indicative
                                              'I will go past (before ...)'
            1Sg
                         năŋ-zà-m
            1P1
                                              'we will go past (before ...)'
                         năη-zà-m-ì
                                              'you-Sg will go past (before ...)'
            2Sg
                         năη-zà-m-ù
                                              'you-Pl will go past (before ...)'
            2P1
                         năŋ-zà-m-ì
                                              'he/she/it will go past (before ...)'
            3Sg
                         năη-zà-m-ù
                                              'they will go past (before ...)'
            3P1
                         năη-zà-m-ὲ
        b. imperative
                         năŋ-zà
                                              'go past (before ...)!'
            Sg
            P1
                         năŋ-zà-n
                                              'go past (before ...)!'
        c. hortative
            Sg
                         năŋ-zè-mà
                                              'let's (you-Sg and I) go past
                                              (before ...)!'
            P1
                         năŋ-zè-mà-n
                                              'let's (all) go past (before ...)!'
```

The form taken by the stem before -zà- is illustrated in (382). Segmentally and tonally, this is the bare-stem form.

(382)		bare stem	immediate future	gloss
	a.	wó	wó-zà-	'come'
		gó	gó-zà-	'go out'
		nớ	nó-zà-	'go in'
		tớ	tó-zà-	'slash earth (to sow)'
	b.	zó	zó-zà-	'bring'
		zĭn	zĭn-zà-	'take away'
	c.	ká:	ká:-zà-	'shave'
		mă:	mă:-zà-	'make (bricks)'
		nă:	nă:-zà-	'spend night' {LH}/{LH}

```
ún-zà-
d. un
                                              'go'
                                              'eat'
    Páné
                 ?áné-zà-
    ńdέ
                 ńdé-zà-
                                             'give'
                 năη-zà-
                                              'go past'
    năη
                                              'touch'
    tábú
                 tábú-zà-
                                              'think'
                 má:né-zà-
    má:nέ
                                              'do farm work'
   gàlá
                 gòló-zà-
                 nìndíyó-zà-
                                             'listen'
   nìndíyó
```

10.3.3 Negation of indicative verbs

10.3.3.1 Perfective negative -*li*- (-y-, 3P1 -n)

Perfective negative *-li-* is added directly to the **A/O-stem** of the verb. Stem-final $\{\varepsilon \circ u\}$ shift to a. However, there is no shift (optional or otherwise) of stem-final e to o. This is unusual, since other AN categories requiring the A/O-stem either require (imperative) this shift or allow it as an option for e-final verbs. The 3Pl-subject combination is irregular $-\hat{n}$ - \emptyset , and does shift stem-final e to o. For example, $p\acute{e}l\acute{e}$ '(trap) spring' has 3Sg $p\acute{e}l\acute{e}$ - $l\grave{i}$ - \emptyset , 1Sg $p\acute{e}l\acute{e}$ - $l\grave{u}$ -m, and so forth, but 3Pl $p\acute{e}l\acute{o}$ - $n\acute{e}$.

The perfective negative is the common negation of semantically perfective verbs. However, -*li*- may also be added to the experiential perfect and to the recent perfect, resulting in suffix complexes (see the immediately following sections).

In the A-stem, final underlying $\{\varepsilon \ o\}$ are realized as *a. u*-final verbs also shift the final vowel to *a* $(t\acute{a}b\acute{a}-l)$ - 'did not touch' from $t\acute{a}b\acute{u}$.

The suffix -*li*- is L-toned following an entirely {H}-toned stem, and is H-toned otherwise (i.e. after {L}- ot {LH}-toned stem). Short-voweled monosyllabics split on a lexical basis into two tonal sets (383). As usual with this vestigial tonal distinction, there is some tonal variation in the data, but the data in (383a-b) appear to be regular. Note that the two $n\delta$ verbs ('hear' and 'go in'), and the two $d\delta$ verbs ('insult' and 'arrive') are tonally distinguished in the perfective negative. However, for the $d\delta$ verbs the tonal distinction seems less consistent, and my informant sometimes repeats the same form with different tones.

(383) Perfective negative (short-voweled monosyllabics)

	bare stem	perfective negative	gloss
a.	wó	wò-lí-	'come'

```
wà-lí-
    wź
                                           'see'
                   gò-lí-
                                           'go out'
    gó
                   ngà-lí-
                                           'hear'
    пэ́
                                           'insult'
                   doà-lí-
    d5
b. yέ
                   yá-lì-
                                           'weep'
                   zó-lì-
                                           'bring'
    zó
    dź
                   doá-lì-
                                           'arrive, reach, approach'
    tś
                   toá-lì-
                                           'slash earth (to sow)'
                                           'go in'
                   noá-lì-
    nś
```

For longer stems, i.e. those with at least two moras, lexically {H} toned stems have a fully high-toned stem before low-toned -li- (384a), except that the few nCv and vCv stems are low-toned (384b). Lexically {LH} tone stems have a low-toned stem before high-toned -li- (384c), except that one type of Cv: monosyllabic keeps its lexical {LH} tone on the stem and has a low-toned suffix (384d). The three glottal-initial verbs split also split tonally (384e).

(384) Perfective negative (stems of at least two moras)

	bare stem	perfective negative	gloss
a.	tó:	tó:-lì-	'spit'
	té:	téyá-lì-	'sprout'
	ká:	ká:-lì-	'sĥave'
	ún	ún-lì-	ʻgo'
	tóló	tóló-lì-	'pound (in mortar)'
	óbí-yó	óbí-yó-lì-	'sit'
b.	ńdέ	ǹdà-lí-	'give'
	úbś	ùbà-lí-	'pour'
	ábú	àbà-lí-	'accept, receive'
c.	mă:	mà:-lí-	'make (bricks)'
	dèr ⁿ €	dèr ⁿ à-lí-	'spend day'
	gòló	gòlà-lí-	'do farm work'
	dìyέ	dìyà-lí-	'carry on head'
	nìndíyó	nìndìyò-lí-	'listen'
d.	{LH}/{LH} v	verbs	
	nă:	nă-:lí-	'spend night'
	năŋ	nàŋá-lí-	'pass'

```
?ápá-lì-
e. ?áné
                                          'eat (meal)'
    ?όΙέ
                   ?àlà-lí-
                                          'go up'
                   ?álá-lì-
                                          'ripen'
    ?έΙέ
   tábú
                   tábá-lì-
                                          'touch'
    mànú
                   mànà-lí-
                                          'cook'
                                          'roast, grill'
g. símbé
                   símbé-lì-
                   cézé-lì-
    cézó
                                          'cut (slice)'
                   mà:nà-lí-
                                          'think' \{H\}/\{L\}
    má:nέ
```

While (383-4) are organized by tonal categories (and syllabic shape), it is also useful to reorganize the data (with some repetitions) focusing on stem-vocalism (385).

(385) Perfective negative (vocalism)

```
bare stem
                   perfective negative
                                          gloss
a. monosyllabics
                                          'come'
    wó
                   wò-lí-
    gó
                   gò-lí-
                                          'go out'
    zó
                   zó-lì-
                                          'bring'
                                          'spit'
    tó:
                   tó:-lì-
                                          'shave'
    ká:
                   ká:-lì-
    nă:
                   nă:-lì-
                                          'spend night' {LH}/{LH}
b. final {e o} unchanged
                                          'fall'
    pílé
                   pílé-lì-
    nìyé
                   nìyé-lí-
                                          'sleep'
    gùló
                   gùlò-lí-
                                          'dig'
    súwó
                   sùwò-lí-
                                          'go down'
    cézó
                   cézó-lì-
                                          'cut (slice)'
                   óbí-yó-lì-
                                          'sit'
    óbí-yó
c. no change to vowel in n-final stem
    ún
                   ún-lì-
                                          'go'
    zĭn
                   zín-lì-
                                          'take away'
```

d. CoCo unchanged

```
tóló
                      tóló-lì-
                                                'pound (in mortar)'
e. stem-final \varepsilon \rightarrow a
    vέ
                     yá-lì-
                                                 'weep'
                                                 'die'
     tíbέ
                      tíbá-lì-
     dèr<sup>n</sup>€
                      dèr<sup>n</sup>à-lí-
                                                 'spend day'
                                                'hit (with stick)'
     dèmέ
                      dèmà-lí-
     cédé
                      cédá-lì-
                                                 'gather firewood'
     tέgέ
                      tégá-lì-
                                                 '(rain) fall'
f. stem-final 3 \rightarrow a
                                                 'leave'
     dàgá
                      dògà-lí-
                      dòdà-lí-
     dàdá
                                                'roast (on fire)'
                                                 'do farm work'
     gàlá
                     gòlà-lí-
g. w \rightarrow w a-, otherwise monosyllabic C \rightarrow C w a- [Coa-]
     wź
                      wà-lí-
                                                 'see'
                     noà-lí-
     пэ́
                                                 'hear'
     d5
                      doà-lí-
                                                'insult'
     dź
                      doá-lì-
                                                'arrive, reach, approach'
                                                'slash earth (to sow)'
     tś
                      tọá-lì-
     пэ́
                     noá-lì-
                                                 'go in'
h. té: 'sprout'
     tέ:
                      téyá-lì-
                                                 'sprout'
i. CaCu → CaCa-
     tábú
                      tábá-lì-
                                                 'touch'
```

The irregular pronominal paradigm of *-li-* is in (386). The lateral *I* appears in the 1Sg and 3Sg, but we get *-y-* followed by a mid-height vowel $\{e \ o\}$ in the 2Sg and merged 1P1/2P1 forms. The 3P1 is phonologically consistent with an underlying /-nu/ whose vowel initially gets a tone (parallel to that of 3Sg *-li-\omega*. The 3P1 suffix then apocopates its vowel, resulting in a contour tone expressed on the word-final syllable. We do get surface 3P1 *-nu* with C-final stems like un 'go' (un-un' they did not go'). This 3P1 *-n* should be distinguished from plural imperative un' (after un').

(386) Perfective negative paradigm

category perfective negative 'come' 'shave'

1Sg	-lu-m ~ -li-m	wò-lú-m	ká:-lù-m
2Sg	-y-0	wò-y-ó	ká:-y-ò
1Pl	- <i>y-e</i>	wò-y-é	ká:-y-è
2Pl	- <i>y-e</i>	wò-y-é	ká:-y-è
3Sg	-li-∅	wò-lí-∅	ká:-lì-∅
3Pl	-n-∅	wò-ń-∅	ká:-ń-∅

10.3.3.2 Experiential perfect negative (-térá-lì-)

The negation of experiential perfect -téré-bè- or -téré-zò- 'have (ever/once) VP-ed', see §10.3.1.3 above, is -térá-lì- ('have never VP-ed'). This contains perfective negative -lì-. The vocalic change from -téré- to -térá- shows that this stem-like suffix, like true stems, takes the A/O-stem before the perfective negative suffix. The pronominal-suffix paradigm is the usual one for -lì-. There is no trace of the -bè- or -zò- element in the negation.

```
(387) [bàmàkó nà] ún-térá-lù-m
[Bamako Loc] go-ExpPf-PerfNeg-1SgS
'I have never gone to Bamako.'
```

10.3.3.3 Recent perfect negative (-za-lì-)

Recent perfect $-z\varepsilon$, which often has completive sense 'have (recently) finished VP-ing' (§10.3.1.4), is negated as $-z\acute{a}-l\grave{i}$ - or $-z\grave{a}-l\grave{i}$ -. This contains perfective negative $-l\acute{i}$ -, and follows the latter's pronominal-subject paradigm. Therefore 3Sg $-z\acute{a}-l\grave{i}-\varnothing$ is complemented by 3Pl $-z\acute{a}-\grave{n}-\varnothing$, 1Sg $-z\acute{a}-l\grave{u}-m$, 2Sg $-z\acute{a}-y-\grave{u}$, etc.

The sense is usually 'have not finished VP-ing'. As with other negatives, realis particle $y\hat{a}$ is absent.

```
(388) bìdé bìdè-zá-lù-m
work(n) work-RecPf-PerfNeg-1SgS
'I have not finished working.'
```

While the positive form -zè- is always low-toned, the negative suffix complex is variably -zá-lì- or -zà-lì- depending on the tone contour of the stem (388). Short-voweled monosyllabic stems are either low-toned before -zá-lì- (388a) or high-toned before -zà-lì- (388b), resulting in rhythmic alternations of high- and low-toned syllables. Longer {H} toned stems maintain the high tone to the

stem-suffix boundary, followed by -zà-lì- (388c-d). Longer {LH} toned stems drop to all-low stem tones, followed by -zá-lì- (388e). 'Give' has a low-toned stem in this combination (388f), and the three glottal-initial bisyllabics diverge tonally (388g).

(389)		bare stem	RecPerf Neg	gloss
	a.	yέ	yè-zá-lì-	'weep'
		wó	wò-zá-lì-	'come'
		gó	gò-zá-lì-	'go out'
		wś	wò-zá-lì-	'see'
		nớ	nò-zá-lì-	'hear'
		d ó	dò-zá-lì-	'arrive, reach, approach'
		d5	dò-zá-lì-	'insult'
	b.	tớ	tó-zà-lì-	'slash earth (to sow)'
		nố	nó-zà-lì-	'go in'
		zó	zó-zà-lì-	'bring'
	c.	tó:	tó:-zà-lì-	'spit'
		té:	té:-zà-lì-	'sprout'
		ká:	ká:-zà-lì-	'shave'
		nă:	nă:-zà-lì-	'spend night' {LH}/{LH}
		ún	ún-zà-lì-	'go'
	d.	tóló	tóló-zà-lì-	'pound (in mortar)'
		óbí-yó	óbí-yó-zà-lì-	'sit'
	e.	mă:	mà:-zá-lì-	'make (bricks)'
		dèr ⁿ €	dèr ⁿ è-zá-lì-	'spend day'
		gàlá	gòlò-zá-lì-	'do farm work'
		dìyέ	dìyè-zá-lì-	'carry on head'
		năŋ	nàŋ-zá-lì-	'pass' {LH}/{LH}
		nìŋírªé	nìŋìr ⁿ è-zá-lì-	'(pebble) hurt (sb)' {LH}/{LH}
		bármé	bàrmê-zá-lì-	'be wounded'
	f.	ńdé	ndè-zá-lì-	'give'
		úbś	ùbò-zá-lì-	'pour'
	g.	<i>?ວຸກ</i> ຂ໌	?ǝ́μέ-zà-lì-	'eat (meal)'
		<i>?ઠીર્દ</i>	?èlè-zá-lì-	'go up'
		<i>?ślé</i>	?álé-zà-lì-	'ripen'

```
h. tábú tábú-zà-lì- 'touch'
mànú mànù-zá-lì- 'cook'

i. símbé símbé-zà-lì- 'roast, grill'
cézó cézó-zà-lì- 'cut (slice)'

má:né mà:nè-zá-lì- 'think' {H}/{L}
```

10.3.3.4 Imperfective negative -nán-, -rán-

The basic imperfective negative form contains a suffix that appears variably as $-n\acute{a}n$ -, $-r\acute{a}n$ -, or (with final velar nasal) $-n\acute{a}n$ -, $-r\acute{a}n$ -. Only the n-initial variants occur after the few n-final verbs such as $\acute{u}n$ 'go' ($\grave{u}n$ - $n\acute{a}n$ -). The vast majority of verb stems are vowel-final, and for them there is much fluctuation among the variants, for one assistant even when repeating the same verb form. Although n usually alternates with r^n rather than with oral r, the r in the r-initial variants is not nasalized (the preceding vowel shows no sign of phonetic nasalization).

Two verbs of conveyance that form an antonymic pair, viz. $z\delta$ 'bring' and zin 'take away', have tonally irregular imperfective negative forms with the lexical tone on the stem and with low-toned suffix, instead of the regular pattern with all-low toned stem and high-toned suffix. For $z\delta$ 'bring' the imperfective negative is $z\delta$ -nan- $\sim z\delta$ -ran-. For zin 'take away' the form is z(n-nan)-.

For all other verbs, the suffix is H-toned when clause-final. However, it becomes $\langle HL \rangle$ -toned before a clause-final particle: $d\grave{e}$ 'if', $w\grave{a}$ (quotative), $m\grave{a} \rightarrow$ (interrogative).

The stem vocalism in the imperfective negative is that of the **bare stem** (§3.5.1).

There is one notable irregularity in the tonal contours: the two antonymic verbs of conveyance 'bring' and 'take away' (390b) have **high-toned stem** and low-toned suffix. All other stems have all-low toned stem before high-toned suffix.

(390)		bare stem	imperfective negative	gloss
	a.	yέ	yè-nán-	'weep'
		wó	wò-nán-	'come'
		wź	wò-nán-	'see'
		gó	gò-nán-	'go out'
		nó	nò-nán-	'hear'

```
nś
                   nò-nán-
                                           'go in'
                                           'arrive, reach'
                   dò-nán-
    dź
    d5
                   dò-nán-
                                           'insult'
                                           'slash earth (to sow)'
    tś
                   tò-nán-
b. zó
                   zó-nàn-
                                           'bring'
                                           'take away'
    zĭn
                   zín-nàn-
c. tó:
                   tò:-nán-
                                           'spit'
                                           'sprout'
    tέ:
                   tè:-nán-
                                           'shave'
    ká:
                   kà:-nán-
                                           'make (bricks)'
    mă:
                   mà:-nán-
    nă:
                   nà:-nán-
                                           'spend night' {LH}/{LH}
                                           'go'
d. ún
                   ùn-nán-
    ?၃ρέ
                   ?ànè-nán-
                                           'eat (meal)'
    ?έΙέ
                   ?èlè-nán-
                                           'go up'
    ńdέ
                   ǹdὲ-nán-
                                           'give'
e.
    úbś
                   ùbò-nán-
                                           'pour'
                                           'gather (firewood)'
    cédé
                   cèdè-nán-
    tóló
                   tòlò-nán-
                                           'pound (in mortar)'
                                           'spend day'
    d\grave{e}r^n\acute{\varepsilon}
                   dèr<sup>n</sup>è-nán-
    gàlá
                   gòlò-nán-
                                           'do farm work'
    dìyέ
                   dìyè-nán-
                                           'carry on head'
    năη
                   nàŋ-nán-
                                           'pass' {LH}/{LH}
    óbí-yó
                   òbì-yò-nán-
                                           'sit'
    bármέ
                   bàrmè-nán-
                                           'be wounded'
  irregular contraction
    bὲlέ
                   bè:-nán-
                                           'get', (819), (832), (843)
                   [alongside regular bèlè-nán-, (679b)]
f.
    tábú
                   tàbù-nán-
                                           'touch'
    mànú
                   mànù-nán-
                                           'cook'
g. símbé
                   sìmbè-nán-
                                           'roast, grill'
    cézó
                   cèzè-nán-
                                           'pour'
    má:nέ
                   mà:nè-nán-
                                           'think' \{H\}/\{L\}
```

The pronominal-subject paradigm is (391).

(391) Imperfective negative paradigm

The alternation of H-toned and (before a particle) <HL>-toned suffixes is illustrated in (392).

```
a. wò-ráŋ-Ø (wò-ráŋ-ɛ́, wò-rá-m)
come-ImpfNeg-3SgS (-3PIS, -1SgS)
'He/She (they, I) won't come'
b. wò-râŋ-Ø (wò-ráŋ-ɛ̂, wò-rá-m)
come-ImpfNeg-3SgS
'Won't he/she (they, I) come?'
```

10.4 Pronominal paradigms for indicative verbal categories

10.4.1 Subject pronominal suffixes

There are some differences in the form of pronominal-subject suffixes depending on the particular inflectional category. The most common forms for indicative categories (i.e. excluding imperatives and hortatives) are in (393). The 3Sg is zero. The 1Pl and 2Pl are not distinguished in the verb.

(393) Most common pronominal-subject suffixes

```
category suffix

1 \text{Sg} - m
2 \text{Sg} - w \sim -u
```

1Pl
$$-y \sim -i$$

2Pl $-y \sim -i$
3Sg $-\varnothing$
3Pl $-\varepsilon$

Pronominal-suffix paradigms for specific verb stems are given in the relevant sections in this chapter.

10.4.2 Inanimate versus 3Sg subject

The 3Sg form is used when the subject is a third person animate singular referent, or any inanimate referent (singular or plural). The examples (394a-c) therefore have the same (zero-suffix) 3Sg verb form.

```
(394) a. [èné
                      gè]
                                      yà
                                                pílé-Ø
                                                fall.Perf-3SgS
            [child
                     Def.AnSg]
                                      Real
             'The child fell.'
        b. [cìn
                                                pílé-Ø
                      †wó]
                                      yà
            stone
                      Def.AnSg]
                                      Real
                                                fall.Perf-3SgS
             'The stone fell.'
                                                pílé-Ø
        c. [cin
                      ^{\dagger}g\epsilon
                                      yà
            Stone
                      Def.AnSg]
                                      Real
                                                fall.Perf-3SgS
             'The stones fell.'
```

10.4.3 Logophoric use of (pseudo-)1Sg suffix

The suffix -m, morphologically indistinguishable from the 1Sg subject suffix, is used in (singular or plural) logophoric subject function for any pronominal person-number combination, as in 3Sg 'she_x told me [that she_x had fallen]', 3Pl 'they_x told me [that they_x had fallen]', and 2Sg 'you-Sg_x told me [that you-Sg_x had fallen]'. These appear as e.g. [they_x told me [fall.Perfective-1SgS_x], though I will use the interlinear gloss "-LogoS" rather than "1SgS." See §18.2.1.2 for a fuller discussion.

A distinct construction (with a quotative-subject form preceding the verb) is used in nonlogophoric sentences like 'they told me that I had fallen', see §17.1.1-2.

10.4.4 Tones of subject pronominal suffixes

The pronominal-subject suffixes do not have intrinsic tones. They combine tonally with the final vowel of the stem or of a preceding suffix.

10.5 Stative (non-aspect-marking) derivatives of verbs

The chief distinction between active (i.e. regular) verbs and stative verbs (in the broad sense) is that the former distinguish perfective from imperfective while the latter do not. Related to this is the fact that statives have a single negative form (with a distinctive stative negative suffix), in contrast to the distinct perfective negative and imperfective negative of active verbs.

Progressive constructions are included here since, although they have clear semantic and morphological affinities to the (positive) imperfective, they are negated by the stative negative or by a related negative word.

See also 'be (somewhere)' §11.2.2 and 'have' §11.5.1. These defective quasi-verbs are stative-like in the respects indicated above.

10.5.1 Stative derived from active verb

Many verbs that can be used as active verbs also have a derived stative form. We first focus on the phonological form of the stative. The major observation is that the stative is **bisyllabic** regardless of the syllabic shape of the input stem, though $d \ge a$ 'be carrying on head' (395b) requires some stretching of the notion of bisyllabicity. In (395a), a mediopassive suffix $-y \ne e/-y \ne e/-y \ne o$ on a trisyllabic active verb is omitted to achieve bisyllabicity. In (395c), what was originally most likely the same mediopassive suffix is retained, since its omisson would result in a monosyllabic stem; this pattern makes (395b) all the more unusual. The more irregular stative in (395d) is also bisyllabic. (395e) shows that a Cv stem grows a second syllable (perhaps equatable with the mediopassive suffix, but here merely adding bulk).

The stative requires the A/O-stem of the verb, which therefore always ends in a or o. $j \ge l i - y \le l$ becoming stative $j \ge l i - l$ illustrates the fact that mediopassive suffix -yv is omitted from the stative stem unless the suffix is part of a bisyllabic stem.

Lexically {H} toned verbs appear as HL in the stative. Lexically {LH} verbs appear as LH. $d \circ a$ - 'be carrying on head' (395b) is most likely trying to be LH, but because the $w([\circ])$ is nonsyllabic I cannot clearly hear a contour tone. I

hear *?ópá*- 'be standing' (395e) as high-toned; here the initial "syllable" is reduced, as in other glottal-initial stems.

Statives in Yanda Dom are not reduplicated.

(395)		active	gloss	stative	gloss
	a.	óbí-yó tózí-yé bàmbí-yé jèlí-yé ?áŋí-yé-	'sit down' 'squat' 'put up on back' 'take hold of' '(come to a) stop'	óbò- tózò- bàmbá- jèlá- 'lápà-	'be sitting (seated)' 'be squatting' 'have on one's back' 'be holding in hand' 'be stopped'
	b.	dì-yé pá-yyé	'carry on head' 'be put together'	dọá pá:	'be carrying on head' 'be joined, associated'
	c.	bì-yó píyé	'lie down' 'become shut'	bì-yó- píyò-	'be lying down' '(door) be shut'
	d.	kódí-yố	'be hung up'	kódà-	'be hanging (suspended)'
	e.	cé	'(body part) hurt'	céyò-	'be painful'

Some statives are clearly derived from intransitive active verbs, and denote the state resulting from e.g. a change in stance ('sit down' \rightarrow 'be sitting, be in sitting position'). Other statives are derived from transitive verbs whose primary sense is of the type 'take hold of X' or 'put X in carrying position', and are still transitive syntactically though they denote the resulting state ('put [baby] up on one's back and tie it securely with a cloth' \rightarrow 'have [baby] in carrying position tied on one's back'). Stative 'be shut' (piyo-) is derived from intransitive piye '(e.g. door) become shut', rather than (directly) from transitive pide '(someone) shut (door)'.

(396)	category	stative	'be sitting'	'be holding in hand'
	1Sg	-m	óbò-m	jèlá-m
	2Sg	-W	óbò-w	jèlá-w
	1Pl	- <i>y</i>	óbò-y	jèlá-y
	2Pl	- <i>y</i>	óbò-y	jèlá-y
	3Sg	-Ø	óbò-∅	jὲlá-Ø

3Pl $-\varepsilon$ ób- $\dot{\varepsilon}$: $\dot{\beta}\dot{\epsilon}\dot{\epsilon}$ $\dot{\epsilon}$ $\dot{\epsilon}\dot{\epsilon}$

The combination of 3Pl $-\varepsilon$ with a stem-final a has been heard both as contracted ε : and as a sequence $a\varepsilon$ shading into $ay\varepsilon$.

In positive clauses, including interrogatives, a stative verb form is usually preceded by realis particle $y\hat{a}$. Especially in truncated replies to questions, the particle is often omitted. (397) is a question-answer sequence.

```
(397) Q: yà óbò-Ø mà ?ánà-Ø
Real sit.Stat-3SgS Q stand.Stat-3SgS
'Is he/she sitting or standing?'

A: óbò-Ø
sit.Stat-3SgS
'(He/She is) sitting.'
```

10.5.2 Progressive constructions

There are three progressive forms, each beginning with $-\dot{m}$ added to the A/O-stem of the verb (e.g. stem-final o in simbó-m zò- 'is roasting' from bare stem $simb\acute{e}$). These forms denote activities in progress at the moment of speaking (or at a displaced reference time). The $-\dot{m}$ form of the verb is probably related to imperfective -m- and it will be glossed accordingly, but the relationship may not be completely clear synchronically.

10.5.2.1 Progressive (-*m z***o**-)

The first of these is -m zò- (398). It is said to be common in the dialect of Yanda-Kou, but not in that of Yanda-Tourougo. The relationship of -zò- to zo- 'have' and to perfective-2 -zò- is rather unclear; in this combination I gloss it simply as progressive (abbreviation "Prog" in interlinears). I write the progressive as two words; one could alternatively take it as a single long word with a suffix complex, or as a word ending in -m followed by a cliticized auxiliary-like verb.

[children Def.AnPl] meal eat.meal-Impf Prog-3PlS 'The children are eating.'

(399)		bare stem	progressive	gloss
	a.	wó	wò-ṁ zò-	'come'
		wź	wà-ḿ zò-	'see'
		gó	gò-ḿ zò-	'go out'
		yέ	yà-ش zò-	'weep'
		zó	zò-ش zò-	'bring'
		cé	cè-m zò-	'(body part) hurt'
	b.	tś	tọà-m zò-	'slash earth (to sow)'
		kś	kɔ̯à-ḿ zò-	'eat (crushed millet)'
		nó	nọà-m zò-	'hear'
		nớ	nọà-m zò-	'go in'
		d5	dɔ̯à-ḿ zò-	'arrive, reach'
		d5	dɔ̯à-ḿ zò-	'insult'
	c.	tó:	tó:-m zò-	'spit'
		té:	téyá-m zò-	'sprout'
		ká:	ká:-m zò-	'shave'
		<i>?ချော</i> င်	?ə́ná-m zò-	'eat (meal)'
		<i>?કીર્દ</i>	?álá-m zò-	'go up'
		úbś	úbá-m zò-	'pour'
		cédé	cédá-m zò-	'gather (firewood)'
		ńdέ	ńdá-m zò-	'give'
		tóló	tóló-m zò-	'pound (in mortar)'
		óbí-yó	óbí-yó-m zò-	'sit'
	d.	mă:	mǎ:-m zò-	'make (bricks)'
		nă:	nă:-ḿ zò-	'spend night' {LH}/{LH}
		dèr ⁿ €	dèr ⁿ á-m zò-	'spend day'
		gàlá	gòlá-m zò-	'do farm work'
		dìyé	dìyá-ṁ zò-	'carry on head'

```
nàŋá-m zò-
                                         'pass' {LH}/{LH}
    năŋ
f.
    ún
                    úr<sup>n</sup>ú-m zò-
                                         'go'
                                         'roast, grill'
g. símbé
                    símbó-m zò-
                    cézó-m zò-
                                         'cut (slice)'
    cézó
h. tábú
                    tábá-m zò-
                                         'touch'
    mànú
                    màná-m zò-
                                         'cook'
    má:nέ
                    má:ná-m zò-
                                         'think' \{H\}/\{L\}
```

The pronominal-suffix paradigm is (400), with examples. 2Sg and 3Sg are homophonous. 3Pl allomorph $-\varepsilon$ combines with $-z\hat{o}$ - as $-zw-\hat{\varepsilon}$.

(400) Progressive -m zò- paradigm

categor	y Impf	'come'	'hit'	'roast, grill'
1Sg	-ṁ zò-ṁ	wò-ṁ zò-m	dèmá-m zò-m	símbó-m zò-m
2Sg	-ṁ zò-Ø	wò-ṁ zò-Ø	dèmá-m zò-Ø	símbó-m zò-Ø
1Pl	-ṁ zò-y	wò-ṁ zò-y	dèmá-m zò-y	símbó-m zò-y
2Pl	-ṁ zò-y	wò-ṁ zò-y	dèmá-m zò-y	símbó-m zò-y
3Sg	-ṁ zò-∅	wò-ṁ zò-Ø	dèmá-m zò-Ø	símbó-m zò-Ø
3Pl	-ṁ zw-ὲ	wò-ṁ zw-è	dèmá-m zw-è	símbó-m zw-è

10.5.2.2 Progressive (-m jèlà-)

A second combination with progressive sense is with -m $j\hat{e}l\hat{a}\sim -m$ $g\hat{e}l\hat{a}$. This is the preferred progressive construction at least for Yanda-Tourougo village. An assistant could make no semantic distinction between this and the other progressive constructions just described (preceding sections), but the bisyllabic form of the final element makes it look more obviously like a two-word (and two-stem) combination. $j\hat{e}l\hat{a}$ - can be equated with stative transitive $j\hat{e}l\hat{a}$ - 'be holding (something)', cf. active stem $j\hat{e}l\hat{i}-y\hat{e}$ 'take hold of'.

An example of -m jèlà- is (401).

(401) ànàsá:rá tòŋ tóŋá-m jèlà-Ø white.man writing write-Impf Prog-3SgS

'The white man is writing.'

The verb has the same segmental and tonal shape as before $-\dot{m}$ - $z\dot{o}$ - and $-\dot{m}$ $b\dot{o}$ -.

10.5.2.3 Progressive (-m bò-)

A third combination with progressive sense is $-m b \delta$. I can detect no semantic difference between $-m z \delta$, $-m j \dot{\epsilon} l \dot{a}$, or $-m b \delta$. An informant stated that $-m b \delta$ is more common but that both are used by the same speakers. Here imperfective -m is followed by $b \delta$ 'be (existential-locative)'.

- (402) a. [mi] H ní:] injú diyá-m $bò-\varnothing$ [1SgP H mother] water bathe-Impf be-3SgS 'My mother is bathing.'
 - b. *tê*: *dèŋé-m bw-è*: firewood chop-Impf be-3PIS 'They are chopping wood.'

The forms of the verb stem before -m $b\hat{o}$ - are identical, segmentally and tonally, to those with -m $z\hat{o}$ - (preceding section): $\delta biy\delta - m$ $b\hat{o}$ - 'is sitting (down)', $y\hat{a}-m$ $b\hat{o}$ - 'is weeping', etc.

10.5.3 Negation of stative verbs and progressive constructions

10.5.3.1 Stative negative $(-\acute{n}-)$

This pronominally inflectable suffix (or clitic) is used to negate stative verbs and some progressive constructions (those not based on the auxiliary verb 'be').

The pronominal-subject paradigm is (403), with 'not be sitting' as the example.

(403)	category	stative negative	'not be sitting'
	1Sg	-nú-т	òbò-nú-m
	2Sg	-ɲ-ú	òbò-ɲ-ú
	1Pl	-ɲ-í	òbò-ɲ-í
	2Pl	-ɲ-í	òbò-ɲ-í

3Sg	-ń-∅	òbò-ń-∅
3P1	-n-€	òbò-ní-yè

Stative '(door) be open' is expressed by the negation of 'be shut', rather than by a stative directly derived from the reversive verb meaning '(door) become open'. Thus $piy\hat{o}-\hat{n}-\emptyset$ 'it is open' (lit. 'it is not shut'), compare $pilli-y\hat{e}$ - 'become open'.

Another conjugated stative negative clitic = $l\check{a}$ - occurs with some defective statives ($\grave{e}b\grave{u} = l\check{a}$ - 'not want', §11.2.4) and with negative adjectival predicates (§11.4.3).

10.5.3.2 Negation of progressive constructions

For the positive progressive forms, see §10.5., above.

The forms $-m = z\hat{o}$ and $-m = j\hat{e}l\hat{a}$ are negated by adding stative negative -n. The paradigms are in (404). The stem tones and vocalism are the same as in the positive counterparts.

(404) Progressive negative -*m*-zò-ń-, -*m*-jèlà-n- paradigms

category	- <i>m</i> zò-ń-	-m jèlà-ń-
1Sg	-ṁ zò-nú-m	-m jèlà-nú-m
2Sg	-ṁ zò-ɲ-ú	-m jèlà-ɲ-ú
1Pl	-ṁ zò-ɲ-í	-m jêlà-ɲ-í
2Pl	-ṁ zò-ɲ-í	-m jêlà-ɲ-í
3Sg	-m zò-n-Ø	-m jèlà-ń-∅
3Pl	-m zò-n-£	-m jèlà-ɲ-é

The third positive progressive form is -m $b\hat{o}$, which is more readily segmentable into imperfective -m plus existential-locative quasi-verb $b\hat{o}$ - 'be (somewhere), be present'. It is negated by replacing $b\hat{o}$ - by the latter's usual suppletive negative counterpart $\partial n\hat{u}$ - 'not be (somewhere), be absent'. The combination is therefore -m $\partial n\hat{u}$ -, and the pronominal-suffix paradigm is the regular one for $\partial n\hat{u}$ - (§11.2.2.2).

10.6 Post-verbal temporal particles and clitics

10.6.1 Past clitic ($=b\varepsilon$ -)

The pronominally conjugatable past clitic $=b\varepsilon$ - (which could alternatively be transcribed as a suffix) is added to certain verb stem forms to constitute a complex inflectional category (406).

```
(406)
       =b\varepsilon- added to...
                                          composite category
        bare stem
                                          past perfect
                                          past imperfective
        imperfective -m
        (perfective-2)
                                          past perfective-2
        (experiential perfect)
                                          past experiential perfect
        (recent perfect)
                                          past recent perfect
        (stative)
                                          past of statives (including 'have')
        (progressive)
                                          past progressive
```

The pronominal-subject paradigm of $=b\varepsilon$ - is shown in (407). The clitic is variably toned depending on the particular inflectional category, and in the case of the past perfect depending on the verb stem.

(407)	category	form with $=b\varepsilon$ -		
		low toned	high toned	
	1Sg 2Sg	$= b\hat{\varepsilon} - m$ $= b\hat{\varepsilon} - w \sim = b\hat{\sigma} - w$	$= b \acute{\varepsilon} - m$ $= b \acute{\varepsilon} - w \sim = b \acute{\sigma} - w$	
	1Pl 2Pl	$= b\hat{\varepsilon} - y$ $= b\hat{\varepsilon} - y$	$= b \acute{\varepsilon} - y$ $= b \acute{\varepsilon} - y$	
	3Sg 3Pl	$=b\hat{\epsilon}-\varnothing$ $=b-\hat{a}$	= bé-∅ = b-á	

In positive inflectional categories, only the $=b\varepsilon$ - clitic is pronominally inflected. In negative versions of some of these categories, both the preceding inflected stem and the past clitic are pronominally inflected (**double conjugation**). There are also numerous unusual tonal patterns in the past combinations.

10.6.1.1 Past perfect (positive and negative)

Suffix (or clitic) = $b\varepsilon$ - is added directly to the **bare stem** (allowing for tonal changes) to form a past perfect ('had VP-ed'). Functionally, the bare stem here plays the role of the perfective. With the perception verbs 'see' and 'hear', it is used as an ordinary perfective ('saw', 'heard').

Representative forms are in (408). For short-voweled monosyllabics (408a-b), there is a tonal split essentially as with the perfective-2 and the perfective negative. The two tonal types of $C\check{v}$: verb also split tonally (408c). For {H} toned verbs of more than one mora (408d), the high tone usually extends to the stem-suffix boundary. For {LH} toned verbs of more than one mora (408e), the stem takes low-toned form before high-toned suffix.

(408)		bare stem	past perfect	gloss
	a.	wó	$w\grave{o} = b\acute{\varepsilon}$ -	'come'
		wś	$w\dot{\beta} = b\dot{\varepsilon}$ -	'see'
		gó	$g\hat{\delta} = b\hat{\epsilon}$ -	'go out'
		nố	$n\hat{\delta} = b\hat{\epsilon}$ -	'hear'
		d5	$d\hat{\sigma} = b\hat{\varepsilon}$ -	'arrive, reach, approach'
	b.	yέ	$y\acute{\varepsilon} = b\grave{\varepsilon}$ -	'weep'
		t ó	$t\delta = b\hat{\epsilon}$ -	'slash earth (to sow)'
		nś	$n\acute{\sigma} = b\grave{\varepsilon}$ -	'go in'
		zó	$z\acute{o} = b\grave{\varepsilon}$ -	'bring'
		dó	$d\beta = b\hat{\varepsilon}$ -	'insult'
		44.	44. 1.5	6 :4 ?
	c.	tó:	tó: = bὲ- té: = bὲ-	'spit'
		té:	$k\hat{a} := b\hat{\epsilon}$ -	'sprout'
		ká:		'shave'
		ún 244	$ u = b\hat{\varepsilon} $	'go'
		?ə́né	?όμέ = bὲ- úbó = bὲ-	'eat (meal)'
		úbó ádá	ubb = be- $nde = be$ -	'pour'
		ńdé tóló		'give'
			$t\acute{o}l\acute{o} = b\grave{e}$	'pound (in mortar)' 'sit'
		óbí-yó		Sit
	d.	mă:	$m\grave{a}:=b\acute{\varepsilon}-$	'make (bricks)'
		$d\grave{e}r^n\acute{\epsilon}$	$d\grave{e}r^n\grave{e} = b\acute{e}$ -	'spend day'
		gàlá	$g\partial l\partial = b\varepsilon$ -	'do farm work'
		dìyé	$diy\hat{\epsilon} = b\hat{\epsilon}$ -	'carry on head'

```
nìndíyó
                                        nìndìyò = b\acute{\varepsilon}-
                                                                             'listen'
e. {LH}/{LH}
                                         n\check{a}:=b\grave{\varepsilon}-
                                                                             'spend night'
        nă:
                                         n\check{a}\eta = b\hat{\varepsilon}-
                                                                             'pass'
        năη
f.
        ?έΙέ
                                         ? \partial l \hat{\varepsilon} = b \hat{\varepsilon}
                                                                             'go up'
                                                                             'roast, grill'
g.
       símbé
                                         simbé = b\hat{\varepsilon}-
                                         c\acute{e}z\acute{o} = b\grave{\varepsilon}-
                                                                             'cut (slice)'
        cézó
                                         t\acute{a}b\acute{u} = b\grave{\varepsilon}-
h. tábú
                                                                             'touch'
                                         m an \hat{u} = b \epsilon
        mànú
                                                                             'cook'
        má:nέ
                                         m\grave{a}:n\grave{\varepsilon}=b\acute{\varepsilon}-
                                                                             'think' \{H\}/\{L\}
```

The positive forms are not doubly conjugated. For example, the paradigm of $d \hat{e} r^n \hat{e} = b \hat{e}$ 'had spent the day' is (409). Only the clitic is conjugated.

(409)	subject	'had spent the day'
	1Sg 2Sg	$d\grave{e}r^n\grave{e} = b\acute{e} - m$ $d\grave{e}r^n\grave{e} = b\acute{e} - w$
	1Pl 2Pl	$d\grave{e}r^n\grave{e} = b\acute{e} - y$ $d\grave{e}r^n\grave{e} = b\acute{e} - y$
	3Sg 3Pl	$d\grave{e}r^n\grave{e} = b\acute{e}-\varnothing$ $d\grave{e}r^n\grave{e} = b-\acute{a}$

The corresponding **negation** is based on the perfective negative (-li- and allomorphs), which supports the view expressed above that the bare stem in the positive forms functions as a substitute for the perfective stem. The negative forms are **doubly conjugated** for pronominal subject (410). The conjugated clitic is added to the already conjugated perfective negative form. Lexically {H} toned stems like 'pound (in mortar)' have their usual all-high stem tone contour followed by low-toned perfective negative suffix. Lexically {LH} tones like 'spend day' have their usual all-low stem tone contour before the suffix, and the suffix itself is low-toned before $=b\varepsilon$ - (it is high-toned in the regular perfective negative: $d\hat{e}r^n\hat{a}-li-\varnothing$ 'he/she did not spend the day').

(410) subject 'had not spent the day' 'had not pounded (in mortar)'

```
1Sg
                                 d\hat{e}r^n\hat{a}-l\hat{i}-m=b\hat{\varepsilon}-m
                                                                                                         t \acute{o} l \acute{o} - l \acute{i} - m = b \acute{\varepsilon} - m
2Sg
                                 d e^{n} \dot{a} - y - \dot{u} = b \varepsilon - w
                                                                                                          t\acute{o}l\acute{o}-y-\grave{u} = b\acute{\varepsilon}-w
1P1
                                 d\hat{e}r^n\hat{a}-y-\hat{i}=b\hat{\epsilon}-y
                                                                                                         t \acute{o} l \acute{o} - y - \grave{i} = b \acute{\varepsilon} - y
2P1
                                 d\hat{e}r^n\hat{a}-y-\hat{\imath}=b\hat{\varepsilon}-y
                                                                                                          t\acute{o}l\acute{o}-y-\grave{i}=b\acute{\varepsilon}-y
3Sg
                                 d e^{n} - l - \emptyset = b \epsilon - \emptyset
                                                                                                         tóló-lì-\emptyset = b\varepsilon-\emptyset
                                            (usually truncated to ...-l-\emptyset = b\acute{\varepsilon}-\emptyset)
3P1
                                 d e^{n} - n - \emptyset = b - a
                                                                                                         t\acute{o}l\acute{o}-\grave{n}-\varnothing=b-\acute{a}
```

The past perfect, positive or negative, is used in the antecedent ('if') clause of counterfactual conditionals. See §16.4 for examples.

10.6.1.2 Past imperfective (positive and negative)

The past imperfective ('was VP-ing', 'used to VP', 'was about to VP') is based on adding $=b\varepsilon$ - to the high-toned word-final -m allomorph of the imperfective morpheme. This is the allomorph used in progressive constructions with a following auxiliary verb (§10.5.2). The past clitic is low-toned.

(411)		bare stem	past imperfective	gloss
	a.	wó	$w\grave{o}$ - $\acute{m} = b\grave{\varepsilon}$ -	'come'
		wź	$w\grave{a}$ - $\acute{m} = b\grave{\varepsilon}$ -	'see'
		gó	$g\grave{o}$ - $\acute{m}=b\grave{\varepsilon}$ -	'go out'
		nś	n oà- $\acute{m} = b\grave{\varepsilon}$ -	'hear'
		d5	$d\dot{\rho}\dot{a}-\dot{m}=b\dot{\epsilon}-$	'arrive, reach'
	b.	yέ	$y\grave{a}$ - $\acute{m}=b\grave{\varepsilon}$ -	'weep'
		zó	$z\grave{o}$ - $\acute{m}=b\grave{\varepsilon}$ -	'bring'
		tś	$t \circ \hat{a} - \hat{m} = b \hat{\epsilon} - \hat{a}$	'slash earth (to sow)'
		nś	n oà- $\acute{m} = b\grave{\varepsilon}$ -	'go in'
		d5	d <u>o</u> à- $\acute{m} = b\grave{\varepsilon}$ -	'insult'
	c.	tó:	$t\acute{o}$:- $m = b\grave{\varepsilon}$ -	'spit'
		té:	$t \dot{\varepsilon} y \dot{a} - m = b \dot{\varepsilon} - c$	'sprout'
		ká:	$k\acute{a}$:- $m = b\grave{\varepsilon}$ -	'shave'
		<i>າິອຸກຮ໌</i>	$?$ áɲá- $m=b$ $\hat{arepsilon}$ -	'eat (meal)'
		<i>?કીર્દ</i>	$?\acute{o}l\acute{a}-m=b\grave{\varepsilon}-$	'go up'
		úbś	$\acute{u}b\acute{a}-m=b\grave{\varepsilon}-$	'pour'

```
c \dot{\epsilon} d \dot{a} - m = b \dot{\epsilon} - c
                                                                             'gather (firewood)'
        cédé
                                      \acute{n}d\acute{a}-m=b\grave{\varepsilon}-
                                                                             'give'
        ńdέ
        tóló
                                      t \acute{o} l \acute{o} - m = b \grave{\varepsilon} -
                                                                             'pound (in mortar)'
                                      \delta b i - y \delta - m = b \hat{\varepsilon}
                                                                             'sit'
        óbí-yó
                                      m\check{a}:-m = b\grave{\varepsilon}-
                                                                             'make (bricks)'
d. mă:
                                      n\check{a}:-m = b\grave{\varepsilon}-
                                                                             'spend night' \{LH\}/\{LH\}
       nă:
        d\grave{e}r^n\acute{\varepsilon}
                                      d\grave{e}r^n\acute{a}-m=b\grave{e}-
                                                                             'spend day'
        gàlá
                                      g \partial l \acute{a} - m = b \grave{\varepsilon} -
                                                                             'do farm work'
                                      diy \hat{a} - m = b \hat{\epsilon}
        dìγέ
                                                                             'carry on head'
        năη
                                      n a \eta a - m = b \epsilon
                                                                             'pass' {LH}/{LH}
                                      nìndiy\acute{o}-m=b\grave{\varepsilon}-
                                                                             'listen'
        nìndíyó
       ún

u r^n u - m = b \hat{\varepsilon}

                                                                             'go'
e.
f.
       símbé
                                      símbó-m = b\hat{\varepsilon}-
                                                                             'roast, grill'
        cézó
                                      c\acute{e}z\acute{o}-m=b\grave{\varepsilon}-
                                                                             'cut (slice)'
      tábú
                                      t\acute{a}b\acute{a}-m=b\grave{\varepsilon}-
                                                                             'touch'
        mànú
                                      m an a - m = b e -
                                                                             'cook'
                                                                             'think' \{H\}/\{L\}
        má:nέ
                                      m\acute{a}:n\acute{a}-m = b\grave{\varepsilon}-
```

In the positive conjugation the imperfective form with -m does not vary by pronominal-subject category: $3\text{Sg }t\acute{o}l\acute{o}-m=b\grave{e}-\varnothing$ 'he/she was pounding (in a mortar)', $1\text{Sg }t\acute{o}l\acute{o}-m=b\grave{e}-m$, $2\text{Sg }t\acute{o}l\acute{o}-m=b\grave{e}-w$, $1\text{Pl}=2\text{Pl }t\acute{o}l\acute{o}-m=b\grave{e}-y$, $3\text{Pl }t\acute{o}l\acute{o}-m=b-\grave{a}$.

The corresponding **negation** is based on a version of the A/O stem of the verb (unconjugated and with no further suffixation), plus the conjugated perfective negative form of the past clitic.

(412)	subject	'was not pounding'
	1Sg 2Sg	$t\'ol\`o:=b\`a-l\`u-m$ $t\'ol\`o:=b\`a-y-\`u$
	1Pl 2Pl	$t\'ol\`o: = b\`a-y-\`e$ $t\'ol\`o: = b\`a-y-\`e$
	3Sg 3Pl	t ólò: = b á- l ì- \varnothing t ólò: = b à- n - \varnothing

The exact form taken by the A/O-stem in these negative forms calls for further comment. The tone contour of the stem is that of the (conjugated) imperfective. The stem vocalism is also that of the (conjugated) imperfective, specially that used with 3Sg -m- \mathring{u} and with 1Sg - \mathring{m} - \varnothing . A stem-final short vowel is **lengthened** (a process found, in verbal morphology, only in imperfective and stative verbs before past $=b\mathring{\varepsilon}$ -). These morphophonological details and the categorial context strongly suggest that these negative forms **originally contained imperfective** *- \mathring{m} (in low-toned form and without pronominal conjugation) preceding the past clitic. The subsequent loss of this nasal led to (compensatory) lengthening of the stem-final vowel.

The lengthening is also found in the past form of statives (§10.6.1.6, below), and the imperfective relative form (§14.1.7.2).

Further examples of stem-shapes in this construction are in (413).

(413)		bare stem	past Impf Neg (3Sg)	gloss
;	a.	wó	$w\hat{o}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	'come'
		wó	$w\hat{a}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	'see'
		yέ	$y\hat{a}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	'weep'
		gó	$g\hat{o}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	'go out'
		nó	nọâ: = bá-lì-∅	'go in'
		nó	nọâ: = bá-lì-∅	'hear'
		zó	$z\hat{o}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	'bring'
1	b.	tó:	$t\hat{o}$: = $b\hat{a}$ - $l\hat{i}$ - \varnothing	'spit'
		ká:	$k\hat{a}$: = $b\acute{a}$ - $l\grave{i}$ - \varnothing	'shave'
	c.	mǎ:	$m\ddot{a}$: = $b\acute{a}$ - $l\dot{i}$ - \varnothing	'make (bricks)'
		nă:	$n\ddot{a}$: = $b\acute{a}$ - $l\grave{i}$ - \varnothing	'spend night' {LH}/{LH}
	d.	ún	$ ur^n \delta := b\acute{a} - l\grave{i} - \emptyset $	ʻgo'
		ńdέ	$\acute{n}d\grave{a}:=b\acute{a}-l\grave{\imath}-\varnothing$	'give'
		té:	$t\acute{e}y\grave{a}$: = $b\acute{a}$ - $l\grave{i}$ - \varnothing	'sprout'
	e.	<i>ໃອຸ່ກຮ໌</i>	?áɲà: = bá-lì-∅	'eat (meal)'
		<i>?કીર્દ</i>	$261a$: = $ba-1i-\emptyset$	'go up'
		tóló	tólò: = bá-lì-∅	'pound (in mortar)'
		úbó	úbà: = bá-lì-∅	'pour'
		óbí-yó	$\acute{o}bì-y\grave{o}:=b\acute{a}-lì-\varnothing$	'sit'
	f.	dèr ⁿ é	$der^n \hat{a} := b\acute{a} - l\hat{\imath} - \emptyset$	'spend day'
		gàlá	$g \partial l \hat{a} := b \acute{a} - l \hat{i} - \emptyset$	'do farm work'

```
dìγέ
                           diy\hat{a}: = b\acute{a}-li-\varnothing
                                                                        'carry on head'
                           nàn\hat{a}:=b\acute{a}-lì-
                                                                        'pass' {LH}/{LH}
      năŋ
      nìndíyó
                           nìndíyò: = bá-lì-\emptyset
                                                                        'listen'
                                                                        'touch'
g. tábú
                            t\acute{a}b\grave{a}:=b\acute{a}-l\grave{\imath}-\varnothing
                           m an \hat{a} := b a - l \hat{i} - \emptyset
                                                                        'cook'
      mànú
                                                                        'roast, grill'
h. símbé
                           símbò: = bá-lì-\emptyset
                           m\acute{a}:n\grave{a}:=b\acute{a}-l\grave{i}-
                                                                        'think' {H}/{L}
      má:nέ
```

The past imperfective, positive or negative, is used in the consequent clause clause of counterfactual conditionals. See §16.4 for examples.

```
10.6.1.3 Past = b\varepsilon- with perfective-2 ... not!
```

An informant rejected combinations of $=b\varepsilon$ - with perfective-2 -zò- (§10.3.1.2).

10.6.1.4 Past = $b\varepsilon$ - is part of the experiential perfect (positive only)

Past clitic = $b\varepsilon$ - is presumably part of the experiential perfect suffix combination - $t\acute{e}r\acute{e}-b\grave{e}$ - 'have (ever/once) VP-ed' (§10.3.1.3), but it is absent from its negative counterpart - $t\acute{e}r\acute{a}-l\grave{i}$ - 'have never VP-ed' (§10.3.3.2).

10.6.1.5 Past recent perfect $-z\varepsilon = b\hat{\varepsilon}$ -

Past $=b\varepsilon$ - can combine with recent perfect $-z\dot{\varepsilon}$ - 'have just VP-ed' or 'have (just) finished VP-ing' (§10.3.1.4). The result is past recent perfect $-z\varepsilon = b\dot{\varepsilon}$ - 'had just VP-ed' or 'had (just) finished VP-ing' (i.e. recent past with respect to a prior temporal reference point).

The tone contours of the stem with simple $-z\hat{\epsilon}$ - and with $-z\epsilon = b\hat{\epsilon}$ - are distinct (414). The simple $-z\hat{\epsilon}$ - morpheme itself is always low-toned, and short-voweled monosyllabic verbs have high tone before it; by contrast, the $-z\epsilon$ - in $-z\epsilon = b\hat{\epsilon}$ - is variably high or low toned, and the short-voweled monosyllabic verbs split into high- and low-toned sets before it (414a-b). With longer stems, if the lexical tone contour is {H} we normally get $-z\hat{\epsilon} = b\hat{\epsilon}$ - after an all-high toned stem (414c). If the lexical tone contour is {LH}, and also in the case of {JH} toned vCv- and vCv- stems, we get an all-low toned stem plus $-z\hat{\epsilon} = b\hat{\epsilon}$ - (414d-e).

```
(414)
                                                       Rec Perf
                            bare stem
                                                                                        past Rec Perf
                                                                                                                                  gloss
                                                        wó-zè-
                                                                                                                                  'come'
                  a.
                           wó
                                                                                        w \grave{o} - z \acute{\varepsilon} = b \grave{\varepsilon} -
                                                        wó-zè-
                                                                                        w \partial - z \acute{\varepsilon} = b \grave{\varepsilon} -
                                                                                                                                  'see'
                            wś
                                                                                                                                  'go out'
                           gó
                                                                                        g\grave{o}-z\acute{\varepsilon} = b\grave{\varepsilon}-
                                                        gó-zè-
                                                                                                                                  'hear'
                            пэ́
                                                        nó-zè-
                                                                                        n\partial - z\hat{\varepsilon} = b\hat{\varepsilon}-
                                                        yé-zè-
                                                                                        y\hat{\varepsilon}-z\hat{\varepsilon} = b\hat{\varepsilon}-
                                                                                                                                  'weep'
                            yέ
                            d5
                                                        dó-zè-
                                                                                        d\partial -z\dot{\varepsilon} = b\dot{\varepsilon}
                                                                                                                                  'insult'
                                                        dó-zè-
                            dź
                                                                                        d\partial - z\dot{\varepsilon} = b\dot{\varepsilon}
                                                                                                                                  'arrive, reach,
                                                                                                                                  approach'
                  b.
                          tś
                                                        tó-zè-
                                                                                        t - 2 \hat{\epsilon} = b \hat{\epsilon}
                                                                                                                                  'slash earth (to sow)'
                                                                                        n\acute{o}-z\grave{\varepsilon}=b\grave{\varepsilon}-
                                                                                                                                  'go in'
                                                        nό-zὲ-
                            пэ́
                                                                                                                                  'bring'
                            zó
                                                        zó-zè-
                                                                                        z\acute{o}-z\grave{\varepsilon}=b\grave{\varepsilon}-
                                                        tô:-zè-
                                                                                        t\acute{o}:-z\grave{\varepsilon}=b\grave{\varepsilon}-
                                                                                                                                  'spit'
                  c. tó:
                            tέ:
                                                        tê:-zè-
                                                                                        t\acute{\epsilon}:-z\grave{\epsilon}=b\grave{\epsilon}-
                                                                                                                                  'sprout'
                            ká:
                                                        kâ:-zè-
                                                                                        k\acute{a}:-z\grave{\varepsilon}=b\grave{\varepsilon}-
                                                                                                                                  'shave'
                            ún
                                                        ûn-zè-

ún-z\grave{\varepsilon} = b\grave{\varepsilon}

                                                                                                                                  'go'
                            ?ఫπ€
                                                        ? έηὲ-zὲ-
                                                                                        ? \acute{a} n \acute{\epsilon} - z \grave{\epsilon} = b \grave{\epsilon} -
                                                                                                                                  'eat (meal)'
                                                                                                                                  'touch'
                            tábú
                                                        tábù-zè-
                                                                                        t\acute{a}b\acute{u}-z\grave{\varepsilon}=b\grave{\varepsilon}-
                            tóló
                                                        tólò-zè-
                                                                                        t \acute{o} l \acute{o} - z \grave{\varepsilon} = b \grave{\varepsilon}
                                                                                                                                  'pound (in mortar)'
                            símbé
                                                        símbè-zè-
                                                                                        símbé-z\grave{\varepsilon} = b\grave{\varepsilon}-
                                                                                                                                  'roast, grill'
                            óbí-yó
                                                        óbì-yò-zè-
                                                                                        \delta b i - y \delta - z \hat{\varepsilon} = b \hat{\varepsilon} - \delta \hat{\varepsilon}
                                                                                                                                  'sit'
                          ?έΙέ
                  d.
                                                        ?álè-zè-
                                                                                        ? \partial l \hat{\varepsilon} - z \hat{\varepsilon} = b \hat{\varepsilon} - c
                                                                                                                                  'go up'
                                                                                                                                  'pour'
                            úbś
                                                        úbè-zè-
                                                                                        \dot{u}b\dot{\partial}-z\dot{\varepsilon} = b\dot{\varepsilon}-
                            ńdέ
                                                        ńdè-zè-
                                                                                        nd\hat{\varepsilon}-z\hat{\varepsilon} = b\hat{\varepsilon}-
                                                                                                                                  'give'
                                                                                        m\grave{a}:-z\acute{\varepsilon} = b\grave{\varepsilon}-
                                                                                                                                  'make (bricks)'
                  e. mă:
                                                        mă:-zè-
                                                                                                                                  'spend night'
                            nă:
                                                        nă:-zὲ-
                                                                                        n\grave{a}:-z\acute{\varepsilon} = b\grave{\varepsilon}-
                                                                                                                                  \{LH\}/\{LH\}
                                                        d\grave{e}r^n\acute{\varepsilon}-z\grave{\varepsilon}-
                            dèr<sup>n</sup>€
                                                                                        d \hat{e} r^n \hat{e} - z \hat{e} = b \hat{e} -
                                                                                                                                  'spend day'
                            gàlá
                                                        gàló-zè-
                                                                                        g\partial l\partial - z\dot{\varepsilon} = b\dot{\varepsilon}
                                                                                                                                  'do farm work'
                            dìyέ
                                                        dìyέ-zὲ-
                                                                                        diy\hat{\varepsilon}-z\hat{\varepsilon} = b\hat{\varepsilon}-
                                                                                                                                  'carry on head'
                                                        năη-zè-
                                                                                        n a \eta - z \varepsilon = b \varepsilon
                                                                                                                                  'pass' \{LH\}/\{LH\}
                            năη
                                                                                        m an \hat{u} - z \hat{\varepsilon} = b \hat{\varepsilon}-
                                                                                                                                  'cook'
                            mànú
                                                        mànú-zè-
                            nìndíyó
                                                        nìndíyó-zè-
                                                                                        nìndìy\grave{o}-z\grave{\varepsilon}=b\grave{\varepsilon}-
                                                                                                                                  'listen'
                            má:nέ
                                                        má:né-zè-
                                                                                        m\grave{a}:n\grave{\varepsilon}-z\acute{\varepsilon}=b\grave{\varepsilon}-
                                                                                                                                  'think' \{H\}/\{L\}
```

The past recent perfect negative is doubly-conjugated. The verb stem itself has the relevant conjugated form of the recent perfect negative (§10.3.3.3). This is followed by the usual (positive) conjugated form of the past clitic.

(415)	subject	'had not finished pouring'	'had not finished pounding'
	1Sg	$\hat{u}b\hat{\sigma}$ - $z\hat{a}$ - $l\hat{u}$ - m = $b\hat{\varepsilon}$ - m	tóló- z à- l ù- m = b è- m
	2Sg	$\hat{u}b\hat{\sigma}$ - $z\hat{a}$ - y - \hat{u} = $b\hat{\varepsilon}$ - w	tóló- z à- y - u = b è- w
	1Pl	$\hat{u}b\hat{\partial}$ - $z\hat{a}$ - y - \hat{i} = $b\hat{e}$ - y	tóló- z à- y - i = b è- y
	2Pl	$\hat{u}b\hat{\partial}$ - $z\hat{a}$ - y - \hat{i} = $b\hat{e}$ - y	tóló- z à- y - i = b è- y
	3Sg	$\grave{u}b\grave{o}$ - $z\acute{a}$ - $l\grave{i}=b\grave{\varepsilon}$ - \varnothing	t óló-zà-lì- \emptyset = b è- \emptyset
	3Pl	$\grave{u}b\grave{o}$ - $z\acute{a}$ - n - $\varnothing=b$ - \grave{a}	t óló-zà- n - \emptyset = b - a

Final vowels preceding $=b\varepsilon$ - in this construction are often elided, especially in the 3Sg. For example, $\dot{u}b\dot{\partial}$ - $z\dot{a}$ - $l\dot{i}$ = $b\dot{\varepsilon}$ - \varnothing in the table above can be reduced to $\dot{u}b\dot{\partial}$ - $z\hat{a}$ -l- \varnothing = $b\dot{\varepsilon}$ - \varnothing . When this reduction applies to the 2Sg and to the 1Pl/2Pl forms, the result is that the clitic carries the burden of distinguishing 2Sg from 1Pl/2Pl.

10.6.1.6 Past forms of derived and underived stative verbs

Statives in the general sense are defined by their inability to distinguish perfective from imperfective. These verbs therefore make use of past $=b\varepsilon$ - to distinguish states that are currently valid from those that were valid in some time interval in the past. This includes both derived stative forms of otherwise active verbs ('sit', 'open', 'carry'), and the specialized stative quasi-verbs with senses like 'be (somewhere)' and 'have'.

(416) Past of statives

stative	past stative	gloss
a. derived stativ	re forms	
óbò-	$\delta b \delta := b \hat{\varepsilon}$ -	'was sitting'
?ა́ɲà-	?áɲà: = bὲ-	'be standing'
bìyó-	$biy\grave{o}:=b\grave{\varepsilon}-$	'was lying down'
bàmbá	$b\grave{a}mb\hat{a}$: = $b\grave{\varepsilon}$ -	'had (child) on the back'
dąá	$d\circ\hat{a}:=b\grave{\varepsilon}$ -	'had (load) on the head'
píyò	$piyò:=b\hat{\varepsilon}$ -	'(door) was shut'

b. specialized statives

```
z\acute{o}- z\acute{o}: = b\grave{e}- 'have' 

j\grave{e}l\acute{a}- j\grave{e}l\acute{a}: = b\grave{e}- 'hold, have'
```

Thus $\delta b \delta := b \hat{\epsilon} - m$ 'I was standing' (= 'I was in standing position'), $2\delta l \delta y \hat{a}$ $j \hat{\epsilon} l \hat{a} := b \hat{\epsilon} - m$ 'I had a house'.

The whole word is subject to tone-dropping to $\{L\}$ except immediately after $y\hat{a}$. The long vowel is often shortened when L-toned.

The negatives are in (417). The verb stems have the same lengthening as in (416).

(417) Past negative of statives

stative	past stative	gloss
a. derived stativ	ve forms	
óbò-	óbò: = bá-lì-	'was sitting'
?э́nà-	?ә́ɲà: = bá-lì-	'be standing'
bìyó-	bíyò:=bá-lì-	'was lying down'
bàmbá	bàmbâ: = bá-lì-	'had (child) on the back'
doá	<i>d</i> ɔ̞â: = bá-lì-	'had (load) on the head'
píyò	píyò: = bá-lì-	'(door) was shut'
b. specialized s	tatives	
zó-	zô: = bá-lì-	'have'
jèlá-	<i>jὲlâ: = bá-lì-</i>	'hold, have'

10.6.1.7 Past forms of progressive constructions

Three progressive constructions, each involving imperfective -m on the main verb followed by a conjugated auxiliary, are described (in positive forms) in $\S10.5.2$, above.

The auxiliaries $z\hat{o}$ - and $j\hat{\epsilon}l\hat{a}$ - can be combined with the conjugated past clitic. Auxiliary $b\hat{o}$ - 'be' is replaced by its past counterpart $b\hat{\epsilon}$ -, forming a combination that is identical to the past imperfective.

(418) Past of progressive constructions

```
a. -mz\hat{o} -mz\hat{o} = b\hat{e} -mj\hat{e}l\hat{a} -mj\hat{e}l\hat{a} = b\hat{e}
```

b. $-\dot{m}$ $b\grave{e}$ - $-\dot{m}$ $b\grave{e}$ -

Especially in $-m j \hat{c} l \hat{a} = b \hat{c}$, an informant occasionally lengthened the stem-final a, as is regular for true statives.

Examples are in (419).

- (419) a. $bid\acute{e}$ $bid\acute{a}$ - \acute{m} $z\grave{o} = b\grave{e}$ - \varnothing work(n) work-Impf Prog=Past-3SgS 'He/She was working.'
 - b. tòŋ tóŋá-m jèlà = bè-∅ writing write-Impf Prog=Past-3SgS 'He/She was writing.'
 - c. *ínjú dìyá-m bè-Ø* water bathe-Impf Past-3SgS 'He/She was bathing.'

negative

10.6.2 'Still', 'up to now', '(not) yet' (námbà)

Temporal adverbial phrases meaning 'still' and '(not) yet' are based on a stem *námbà* whose basic sense is 'up to now'.

Attested combinations for positive 'still' are námbà là (with là 'also, too', §19.1.3) námbà kàndà (with kàndà 'even', §16.2.1), and íyè námbà (with íyè 'today'). námbà may be a frozen combination including locative postposition bà (§8.2.3). The other part is perhaps obscurely related to the 'now' adverbs: nìmêm, ní:, and ní: gày.

námbà can be used by itself in a negative context to express '(not) yet' or 'still (not)'.

(420) námbà wò-lí-Ø
up.to.now come-PerfNeg-3SgS
'He/She hasn't come yet.'

10.7 Imperatives and hortatives

For imperative, prohibitive, and hortative verbs forms within quotations, see §17.1.5 below.

10.7.1 Imperatives and prohibitives

10.7.1.1 Positive imperatives (imperative stem, plural -n)

The imperative stem consists segmentally of the A/O-stem ($\S 3.5.1$). It therefore ends in either o or a (except for the one consonant-final verb, 'go'). Note especially the vocalism of (421b) and the stem-final o vowels in (421e-f).

The tone for the imperative stem is high for all Cv stems and for all lexically $\{H\}$ -toned stems. It is $\{LH\}$ for lexically $\{LH\}$ -toned stems. (See below for tone-dropping in verb chains.)

The bare imperative stem is used for singular addressee. A suffix $-\dot{n}$ is added to this stem to form the plural-addressee imperative.

(421)		bare stem	imperative		gloss	
			Sg	Pl		
	a.	wó	wó	wó-'n	'come'	
		gó	gó	gó-n	'go out'	
	b.	wź	wá	wá-n	'see'	
		yέ	yá	yá-n	'weep'	
		nố	n <u>o</u> á	nọá-n	'go in'	
		tố	toá	tạá-n	'slash earth (to sow)'	
	c.	tó:	tó:	tó:-'n	'spit'	
		ká:	ká:	ká:-'n	'shave'	
		<i>?ຈຸກຮ໌</i>	?ə́ná	?ə́ná-ǹ	'eat (meal)'	
		<i>?ઇકં</i>	?álá	?ślá-'n	'go up'	
		úbś	úbá	úbá-n	'pour'	
		tóló	tóló	tóló-n	'pound (in mortar)'	
		púgúzó	púgúzá	púgúzá-n	'scrub lightly'	
	d.	mă:	mă:	mă:-ǹ	'make (bricks)'	
		nă:	nă:	nă:-'n	'spend night' {LH}/{LH}	
		dèr ⁿ έ	dèr ⁿ á	dèr ⁿ á-n	'spend day'	
		gàlá	gòlá	gòlá-n	'do farm work'	
		dìyέ	dìyá	dìyá-n	'carry on head'	
		nǎŋ	nàŋá	nàŋá-n	'pass' {LH}/{LH}	
		nìndíyó	nìndíyó	nìndíyó-n	'listen'	

```
e. símbé
                    símbó
                                símbó-n
                                             'roast, grill'
                    óbí-vó
                                óbí-yó-n
                                              'sit'
    óbí-yó
    cézó
                    cézó
                                cézó-n
                                              'cut (slice)'
   tábú
                                              'touch'
                    tábá
                                tábá-n
                                              'cook'
    mànú
                    màná
                                màná-n
                                              'go'
   ún
                    ún
                                ún-nì
g.
    zó
                    zô:
                                zô:-n
                                              'bring'
                                              'give'
    ńdέ
                    'ndí
                                ndí-n
    tέ:
                    téyá
                                téyá-n
                                              'sprout'
    má:nέ
                    má:ná
                                má:ná-n
                                              'think' \{H\}/\{L\}
```

The forms in (421g) have various irregularities. 'Go' is the only consonant-final verb stem so the plural -n suffix has to grow a vowel. For 'sprout', a slightly abstract underlying $/t\acute{e}y\acute{e}/$ for the bare stem would account for the imperative. The imperative stem of 'give' is irregular both segmentally and tonally; of course this is an extremely high-frequency imperative.

In direct verb chains, where only the final verb is inflected, the imperative verb is tone-dropped. Compare $pil\acute{e}$ $s\acute{u}w\acute{o}$ 'fall down' as part of a larger chain in (422a) with imperative $pil\acute{e}$ $s\grave{u}w\acute{o}$ in (422b). The newly {L}-toned imperative verb is then subject to Rhythmic Tone-Raising, which accounts for the initial-syllable H-tone in (422c).

```
(422) a. pílé súwó bèlá-m-ù fall go.down get-Impf-3SgS 'He/She can fall down.'
```

```
b. pílé Lsùwò
fall Lgo.down.Imprt
'Fall down-2Sg!'
```

```
c. wò Ltigà come Llook.Imprt 'Come-2Sg look!'
```

In (801) in Text 2, imperative n a n - j a 'go up on' is {L}-toned after a heavy PP. So the {L}-toned imperative may be conditioned by the presence of heavy preceding material.

Imperatives of transitive verbs have their regular transitive syntax; in particular, they may take accusative pronouns as direct objects.

(423) *ná-y dèmá*3Sg-Acc hit.Imprt
'Hit-2Sg him/her!'

10.7.1.2 Prohibitives (-là-, plural -là-n)

Prohibitives are negative counterparts to imperatives. The basic prohibitive suffix is $-l\hat{a}$, which is used without further morphology for singular addressee ('don't-2Sg come!'). For plural subject the same $-\hat{n}$ suffix observed in positive imperatives (see preceding section) is added. The verb is in bare-stem form.

Short-voweled Cv stems split into low- and high-toned sets (424a-b), as in the perfective negative and some other inflectional categories. The suffix - $l\hat{a}$ - becomes H-toned after a {L}-toned stem. Longer {H} toned stems maintain the high tone to the stem-suffix boundary, followed by low-toned - $l\hat{a}$ (424c). Verbs with lexical L-tone onset drop to all {L}, except that $C\tilde{v}$: and $C\tilde{v}C$ stems split into two sets, those in (424d) dropping to {L} while those in (424e) retain the rise. The three glottal-initial verbs also split tonally (424f), while the short bisyllabics (vCv- and nCv-) take low-toned form (424g). All stems that drop to {L}-tone are followed by H-toned suffix - $l\hat{a}$ (plural - $l\hat{a}$ -n).

(424) bare stem prohibitive		bitive	gloss		
			Sg	Pl	-
	a.	wó	wò-lá	wò-lá-n	'come'
		wź	wò-lá	wò-lá-n	'see'
		gó	gò-lá	gò-lá-n	'go out'
		yέ	yè-lá	yè-lá-ǹ	'weep'
		nó	nò-lá	nò-lá-n	'hear'
		d5	dò-lá	dò-lá-n	'arrive, reach'
	b.	nó	nó-là	nó-là-n	'go in'
		tś	tó-là	tó-là-n	'slash earth (to sow)'
		d5	dó-là	dó-là-n	'insult'
		zó	zó-là	zó-là-n	'bring'
	c.	tó:	tó:-là	tó:-là-n	'spit'
		ká:	ká:-là	ká:-là-n	'shave'
		ún	ún-là	ún-là-n	'go'
		tóló	tóló-là	tóló-là-n	'pound (in mortar)'

d.	mă: dèr ⁿ é gòló dìyé nìndíyó	mà:-lá dèr ⁿ è-lá gòlò-lá dìyè-lá nìndìyò-lá	mà:-lá-n dèr ⁿ è-lá-n gòlò-lá-n dìyè-lá-n nìndìyò-lá-n	'make (bricks)' 'spend day' 'do farm work' 'carry on head' 'listen'
e. {	{LH}/{LH}			
	nă:	nă:-là	nă:-là-n	'spend night'
	năŋ	năŋ-là	năŋ-là-n	'pass'
f.	<i>ໃຈ໌ກ</i> έ	?áɲέ-là	?ຈ໌ກ∉-là-n	'eat (meal)'
	<i>?કીર્દ</i>	?ślé-là	?álé-là-ǹ	'ripen'
	<i>?ઇ1ર્દ</i>	?òlè-lá	?àlè-lá-n	'go up'
g.	úbó	ùbò-lá	ùbò-lá-n	'pour'
	ábú	àbù-lá	àbù-lá-n	'accept, receive'
	ńdé	ǹdè-lá	ǹdè-lá-ǹ	'give'
h.	símbé	símbé-là	símbé-là-n	'roast, grill'
	óbí-yó	óbí-yó-là	óbí-yó-là-n	'sit'
	cézó	cézó-là	cézó-là-n	'cut (slice)'
i.	tábú	tábú-là	tábú-là-n	'touch'
	mànú	mànù-lá	mànù-lá-n	'cook'
j.	té:	té:-là	té:-là-n	'sprout'
	má:né	mà:nê-lá	mà:nê-lá-n	'think' $\{H\}/\{L\}$

10.7.2 Positive hortatives (-mà, plural -mà-n)

Exhortations of the type 'let's go!' may be directed to one addressee or to a group of two or more addressees. Although the speaker includes himself in the projected action, the choice between morphologically singular and morphologically nonsingular hortative forms depends on the number of addressees.

For a single addressee, the hortative suffix $-m\hat{a}$ is used without further marking. This is what would usually be called a first dual inclusive hortative: 'let's (=you-Sg and I]) go!'. For multiple addressees, the plural suffix $-\hat{n}$ also found with imperatives and prohibitives is added, forming a suffix

sequence $-m\hat{a}-\hat{n}$. If the verb stem is $\{L\}$ -toned in the hortative, $-m\hat{a}$ becomes H-toned (plural $-m\hat{a}-\hat{n}$).

The hortative form with -ma- is morphophonologically very closely related to the prohibitive with -la-. (425) is therefore a copy of the corresponding table for the prohibitive with m replacing l. The verb takes the bare-stem form.

(425)		bare stem	hortative		gloss
			Sg	P1	
	a.	wó	wò-má	wò-má-n	'come'
		wź	wò-má	wò-má-n	'see'
		gó	gò-má	gò-má-n	'go out'
		yέ	yè-má	yè-má-n	'weep'
		nó	nò-má	nò-má-ǹ	'hear'
		d5	dò-má	dò-má-n	'arrive, reach'
	b.	nớ	nớ-mà	nó-mà-n	'go in'
		tớ	tó-mà	tó-mà-n	'slash earth (to sow)'
		d5	dó-mà	dó-mà-n	'insult'
	c.	tó:	tó:-mà	tó:-mà-n	'spit'
		ká:	ká:-mà	ká:-mà-n	'shave'
		ún	ún-mà	ún-mà-n	ʻgo'
		tóló	tóló-mà	tóló-mà-n	'pound (in mortar)'
		óbí-yó	óbí-yó-mà	óbí-yó-mà-n	'sit'
	d.	{LH}/{LH}			
		năŋ	năŋ-mà	năŋ-mà-n	'pass'
		nă:	nă:-mà	nă:-mà-n	'spend night'
	e.	mă:	mà:-má	mà:-má-ǹ	'make (bricks)'
		dèr ⁿ €́	dèr ⁿ è-má	dèr ⁿ è-má-ǹ	'spend day'
		gàlá	gɔ̀lɔ̀-má	gòlò-má-n	'do farm work'
		dìyé	dìyè-má	dìyè-má-n	'carry on head'
		nìndíyó	nìndìyò-má	nìndìyò-má-n	'listen'
	f.	<i>?ວຸກ</i> ຂ໌	?ອຸກέ-mà	?ချé-mà−n	'eat (meal)'
		<i>?ઇકં</i>	?èlè-má	?ə̀lè-má-n	'go up'
	g.	úbś	ùbò-má	ùbò-má-n	'pour'
		ábú	àbù-má	àbù-má-n	'accept, receive'
		ńdέ	ǹdὲ-má	ǹdὲ-má-ǹ	'give'

h.	símbé cézó	símbé-mà cézó-mà	símbé-mà-n cézó-mà-n	'roast, grill' 'cut (slice)'
i.	tábú mànú	tábú-mà mànù-má	tábú-mà-n mànù-má-n	'touch' 'cook'
j.	zó	zó-mà	zó-mà-n	'bring'
k.	té:	té:-mà	té:-mà-n	'sprout'
	má:nέ	mà:nè-má	mà:nÈ-má-ǹ	'think' {H}/{L}

nă:-mà (to singular addressee) and nă:-mà-n (to multiple addressee), literally 'let's spend the night!' (425d), are also 'good morning!' greetings (§19.6).

Forms with H-toned -má combine with following Quotative particle wà as -mà wá. As with other combinations involving otherwise L(L...)H predicates and a following particle, we can account for the tones either by reducing L(L...)H to $\{L\}$ before a particle and allowing Rhythmic Tone-Raising to affect the particle, or by transferring the final H-tone directly to the particle. Thus $g\partial l\partial -ma$ 'let's cultivate (crops)!', but $g\partial l\partial -ma$ wá 'said: 'let's cultivate!' This does not apply to plural -ma-n, hence $g\partial l\partial -ma-n$ wà.

An interesting construction consists of hortative *jí-mà* from a specialized auxiliary verb *jî-*. It encourages the addressee to do something, while implying that the speaker will join in later. See (833) in Text 4 for a good example.

10.7.3 Hortative negative (-mè-là, plural -mè-là-n)

The hortative negative form ('let's not go!') is expressed by $-m\grave{e}-l\grave{a}$ when addressed to one addressee, and by $-m\grave{e}-l\grave{a}-\grave{n}$ when addressed to more than one addressee. If the stem is {L}-toned in this form, the $-l\grave{a}$ - suffix becomes H-toned, hence $-m\grave{e}-l\acute{a}$ and $-m\grave{e}-l\acute{a}-\grave{n}$.

(426)		bare stem hortative negative			gloss
,			Sg	Pl	C
	a.	wó	wò-mè-lá	wò-mè-lá-n	'come'
		wź	wà-mè-lá	wò-mè-lá-n	'see'
		gó	gò-mè-lá	gò-mè-lá-n	'go out'
		yέ	yè-mè-lá	yè-mè-lá-n	'weep'
		nś	nò-mè-lá	nò-mè-lá-n	'hear'

	d5	dò-mè-lá	dò-mé-lá-n	'arrive, reach'
b.	nó tó dó	nó-mè-là tó-mè-là dó-mè-là	nó-mè-là-n tó-mè-là-n dó-mè-là-n	'go in' 'slash earth (to sow)' 'insult'
c.	tó: ká: ún tóló	tó:-mè-là ká:-mè-là ún-mè-là tóló-mè-là	tó:-mè-là-n ká:-mè-là-n ún-mè-là-n tóló-mè-là-n	'spit' 'shave' 'go' 'pound (in mortar)'
d.	mă: dèr ⁿ é gòló dìyé	mà:-mè-lá dèr ⁿ è-mè-lá gòlò-mè-lá dìyè-mè-lá	mà:-mè-lá-n dèr ⁿ è-mè-lá-n gòlò-mè-lá-n dìyè-mè-lá-n	'make (bricks)' 'spend day' 'do farm work' 'carry on head'
e.	nă:	nă:-mè-là	nă:-mè-là-n	'spend night'
f.	ໃຈ໌ກέ ໃຈ໌ໄέ	?ápé-mè-là ?àlè-mé-lá	7ə́né-mè-là-n 7ə̀lè-mé-lá-ǹ	'eat (meal)' 'go up'
g.	úbó ábú ńdé	ùbò-mè-lá àbù-mè-lá ìdè-mè-lá	ùbò-mè-lá-n àbù-mè-lá-n ǹdè-mè-lá-ǹ	'pour' 'accept, receive' 'give'
h.	símbé óbí-yó cézó	símbé-mè-là óbí-yó-mè-là cézó-mè-là	símbé-mè-là-n óbí-yó-mè-là-n cézó-mè-là-n	'roast, grill' 'sit' 'cut (slice)'
i.	má:nέ	mà:nè-mè-lá	mà:nè-mè-lá-n	'think' $\{H\}/\{L\}$

10.7.4 Indirect imperative with third person subject

The construction for wishes and curses of the type 'May God [verb] [NP]!' is exemplified in (427). The verb is imperative in form, but it has àmbà 'God' as logical subject. The construction has some resemblance to embedded imperatives (jussive complements) of the type 'Tell X to VP!', but the two constructions are not identical; that in (427) does not use quotative qubject particle wà after the subject NP or after the imperative verb.

(427) a. àmbà [ó ^Hbérⁿá] ùdò káná

God [2Sg ^HDat] be.better make.Imprt 'May God relieve you!' (to a sick person)

b. $\frac{\partial mb\partial}{\partial mb\partial} = \frac{\partial mb\partial}{\partial mb\partial}$ God 2Sg-Acc protect.Imprt 'May God protect you!' (e.g. on a voyage or other activity)

The imperative verb form, always singular, is used in quoted imperatives (§17.1.5.1). There is no special indirect-imperative verb form.

10.7.5 Indirect imperative with implied 1Sg subject

The imperative form can be used in polar (yes/no) question form as a response to an imperfectly heard or understood call by another speaker. There is no overt 1Sg subject marking.

(428) wó mà→
come.Imprt Q
'(Do you want) me to come?'

10.7.6 Indirect or quoted hortative

There is no special variant of the hortative used in quotations. For quoted hortatives using the regular hortative verb form for singular addressee, see §17.1.5.2.

11 VP and predicate structure

11.1 Regular verbs and VP structure

11.1.1 Verb types (valency)

As in other Dogon languages, the distinction between intransitive and transitive verbs is complicated by the frequency of cognate nominals in object-like function (§11.1.5.1-2). For example, 'weep' is normally expressed as y a y e e e e e, literally 'weep (some) weeping'. A further complication is that overt accusative marking is generally limited to animates. There are also a number of subject-verb and (noncognate) object-verb collocations with low-referentiality NPs (§11.1.4-5).

Syntactic transitivity (the ability to govern an object) is compatible with the mediopassive morphological category (§9.3.1). In particular, verbs of holding and carrying regularly take objects but are often mediopassive in form.

Perception verbs like w5 'see' are simple transitives and can take accusative objects.

Motion verbs ('go', 'go in', 'go out', etc.) are intransitive verbs that usually take a locational complement in the form of a locative PP or a demonstrative adverb. Transitive verbs with senses like 'put' and 'convey' also take locational complements.

'X give/show Y to Z' is normally expressed as a transitive 'X give/show Z', with the theme Y expressed (if at all) as a non-case-marked adjunct.

The indirect object of *dàmá* 'speak, say' is usually instrumental-comitative in form, though for other verbs indirect objects have dative form.

These points are illustrated in (429).

- (429) a. [ènè á-ynè] yà bàmbí-yé-∅ [child 3ReflSg-Poss.AnSg] Real carry.on.back-MP.Perf-3SgS 'She carried her baby (on her back).'
 - b. ó-ý wà-lí-Ø
 2Sg-Acc see-PerfNeg-3SgS
 'He/She didn't see you.'
 - c. [bàmàkó nà] ún-m-ù [Bamako Loc] go-Impf-3SgS

'He/She is going to Bamako.'

- d. mángòrò ó-ý ndê-Ø / dàmdê-Ø mango 2SgS-Acc give.Perf-3SgS 'He/She gave/showed you a mango.'
- e. [ó mí] ?ènè dàm-á
 [2Sg Inst] what? give.Perf-3PlS
 'What did they say to you-Sg?'

11.1.2 Valency of causatives

As in most languages, causatives of intransitive inputs are treated as simple transitives. The causative of a transitive has two objects. Frequently the lower-clause object is inanimate so it lacks accusative marking, but if it happens to be animate we can get two accusatives, as in (430c).

- (430) a. *mì-ý yà zòbó-mé-∅*1Sg-Acc Real run-Caus.Perf-3SgS
 'He/She made me run.'
 - b. *mángòrò mì-ý yà mìrⁿε-mε-Ø* mango 1Sg-Acc Real eat.sth.soft-Caus.Perf-3SgS 'He/She made me eat a mango.'
 - c. *mì-ý ó-ý yà bùndó-mé-Ø*1Sg-Acc 2Sg-Acc Real hit-Caus.Perf-3SgS 'He/She gave/showed you a mango.'

11.1.3 Verb Phrase

VP as a syntactic category is most evident in the syntax of VP-chains (chapter 15).

11.1.4 Fixed subject-verb combinations (including pseudo-subjects)

Certain noun-verb collocations involve a subject noun that is rarely determined or quantified and could be described as a pseudo-subject. The noun $b\acute{a}$ occurs, without a determiner, in collocations involving transitions from night to day or

from rainy season to dry season, and vice versa. The meaning of $b\acute{a}$ is therefore difficult to abstract from the collocations. Its original sense was probably '(cloudy/rainy) weather', cf. compounds $b\grave{a}-\acute{u}r^n\acute{a}$ 'mist, fog' and $b\grave{a}-z\grave{u}b\acute{u}$ 'dusty haze'. If so, the older collocations are those denoting the onset and end of the rainy season, and those relating to the day/night boundary are newer extensions. However, the subject-verb collocations with $b\acute{a}$ have close syntactic-semantic matches in other Dogon languages, even with noncognae nouns such as Jamsay $y\grave{a}r\acute{u}$.

(431) Collocations with bá

```
verb's usual sense
    collocation
                      gloss
a. time of day, season
                      'be wee hours (1-4 AM)'
                                                  'pass' or 'become'
    bá tíné
    bá nă:
                      'day break'
                                                  'spend the night'
    bá dèr<sup>n</sup>έ
                      'night fall'
                                                  'spend the day'
                      'spend the whole rainy season'
    bá gó
                                                  'go out, exit'
b. season (noun uncompounded)
    bá dó
                      'rainy season begin'
                                                  'arrive, approach'
                      'rainy season end'
    bá gó
                                                  'go out'
c. season (noun compounded with cognate nominal)
    bà-dó dó
                      'rainy season arrive'
                                                  'arrive, approach'
    bà-gòló gó
                      'rainy season end'
                                                  'go out'
```

There are many other collocations expressing time of day or seasons, but in most of them the subject is more clearly referential than with $b\acute{a}$. In (432), the subject noun by itself can denote the time or season.

(432) More time/season collocations

```
a. with motion verb

gòw nó

cold season begin'

rainy season happen'

come down'
b. with ìzùgè 'sun'

ìzùgè băn

'be (in) the hot season'

'turn red', 'beat'
```

A different type of subject-verb collocation involves a body-part term. The most common partonym is *cíndá* 'liver, liver-heart complex' as the seat of the emotions. This noun, and *kì-kíndè* 'shadow; image', are treated syntactically as possessed nouns (433). The verb takes 3Sg subject form, presumably agreeing with 'liver' or 'shade'.

- (433) a. nìnà: [cíndá ?ớmó] yà lògé-Ø yesterday [liver 1SgP.InanSg] Real overflow.Perf-3SgS 'I became furious yesterday.' (< "My liver overflowed")
 - b. nìŋà: [sǎydu ^Lcìndà] yà lògé-Ø yesterday [Seydou ^Lliver] Real overflow.Perf-3SgS 'Seydou became furious yesterday.'
 - c. [kì-kíndè ?ómó] yà gọć-Ø [shadow 1SgP.InanSg] Real go.out.Perf-3SgS 'I was startled.' (< 'My shadow/soul went out.')

The main intransitive collocations involving 'liver' are in (434a), with X as possessor and semantic experiencer. Causatives can readily be formed, making the possessed partonym into an object (434b).

```
(434) a. [X^L cinda] \acute{n}g\'{n}l\'{e} 'X feel mild nausea' (< 'stand up') 

[X^L cinda] l\grave{o}g\acute{o} 'X become furious' (< 'overflow') 

[X^L cinda] y\breve{a}m 'X be saddened, devastated)' (< 'ruin') 

[X^L cinda] c\'{e}:z\'{i}-y\'{e} 'X calm down' (< 'cool') 

[X^L cinda] \'{e}!\'{e}-nd\'{i}-y\'{e} 'X become happy' (< 'be sweet')
```

b. Y [X cìndà] élé-ndí-yé-mé 'Y make X happy'

To test whether the apparent subject NPs in the subject-verb collocations covered here are true subjects, we can see what happens when the clauses in question occur in quotations. Converting ordinary main clauses into quotative complements is instructive. In (435), we see that quotative particle wa cannot follow the apparent subject. It can only occur finally in such clauses (§17.1.3). In addition, temporal-setting adverbs 'now' and 'yesterday', which must follow true subject NPs in quotative clauses, can still precede the apparent subjects. This and other subject tests (including focalization) suggest that these are pseudo-subjects, i.e. that they do not have full subject properties.

'(X) said, "the rainy season has gone out (=ended) now."

- b. ní: gòw (#wà) yà nọć wà now cold.season (#QuotS) Real go.in.Perf Quot '(X) said, "the cold season has come in (=begun) now."
- c. nìŋà: [sǎydù ^Lcìndà (#wà)] yà lògé wà yesterday [Seydou ^Lliver (#QuotS)]Real overflow.Perf Quot '(X) said, "Seydou became furious yesterday.""

cinzà 'nose' occurs in two collocations, once by itself and once as a compound initial ('nosebleed'). Unlike the preceding examples, those with cinzà do not involve overt possession. Instead, the human referent functions independently as subject, as shown especially by the verb form. In (436b), Seydou is not the possessor of 'nose' as can be seen by comparison with (436a). Therefore 'nose' and 'nosebleed' lack even the limited subject properties of e.g. 'liver' in the preceding examples.

- (436) a. cìnzà yà úmb(")é-m nose Real blow.nose.Perf-1SgS 'I blew my nose.'
 - b. săydù cìnzà yà úmb(")é-∅
 Seydou nose Real blow.nose.Perf-3SgS
 'Seydou blew his nose.'
 - b. nìŋà: cìnzà-dèn yà gọé-m yesterday nosebleed Real go.out.Perf-1SgS 'Yesterday I had a nosebleed.'

11.1.5 Fixed verb-object combinations

Examples of verb-object collocations (other than those with cognate nominals) are in (437). The extent to which the nominal is referential varies from one combination to the next. Only the more referential objects can be focalized or pronominalized.

(437) Noncognate object/verb collocations

a. verb has no other sense <u>ómzú úmbúló</u> 'urinate' <u>ómzú</u> 'urine', arguably cognate

```
b. verb has accidental homophone
    ínjú dìyé
                     'bathe'
                                  injú 'water', homonym dì-yέ 'carry
                                  on head'
c. verb has broad or multiple senses
```

```
gì-děn nìy<sup>n</sup>é
                  'sleep'
                                gì-děn 'sleep(n)', nìyné 'freeze,
                                 solidify'
sùmzú tó:
                   'spit'
                                 sùmzú 'saliva', tó: 'take, pick up'
kòmbò tá:
                                kòmbò 'war', tá: 'shoot'
                   'wage war'
                                 mbò 'mouth' (archaic), sá: occurs in
m̀bò sá:
                   'answer'
                                 several collocations
```

11.1.5.1 Formal relationships between cognate nominal and verb

A search of the lexical reveals the cognate noun-verb collocations in (438). There is a heavy concentration in semantic domains involving processes, speech, and activities. (438) is organized around these domains. Within each division, the collocations are arranged based on the form of the nominal.

(438)Cognate nominal/verb pairings by domain and by form of nominal

```
a. bodily processes
    úló úló
                             'vomit'
                             'defecate'
    sùwà súwó
    kà:dà ká:dé
                             'clear one's throat'
    ìsìyà ísíyé
                             'sneeze'
                             'belch'
    bè:lìyà bé:líyé
    gàrádà gàrádá
                             'snore'
    à:lìyà á:líyé
                             'yawn'
 final n
                             'weep (out loud)'
    yàn yế
                             'let out a fart'
   jìŋ jé
 final <mark>u</mark>
    màndù màndú
                             'laugh'
    bùrú bùró
                              'drool'
    màzìndù màzíndí-yé
                             'have a dream'
    mă:nù má:né
                             'think a thought'
 final sonorant
    dŭl dùló
                             'groan'
    tòl tóló
                             'lay an egg'
```

b. speech, vocalization, sound 'make an insult' dà: dá 'applaud, clap' pèlà pélé jèlé jèlé 'denigrate' 'converse (pleasantly)' èlmà élmé tì:dà tí:dé '(shepherd) recount adventures' tì:ndà tí:ndé 'give formal counsel' 'kid around' gá:jè gá:jé yímbìrè yìmbíré '(beggar) sing koranic verses' final -n zèbú-n zèbé 'make a curse' final -y (monosyllabic) séyⁿ sέ:ⁿ 'tell a story or riddle' final <mark>u</mark> bògú bògó '(dog) bark' 'howl' kòdù kódó bògùrù bògúró 'roar' bò:dù bó:dó '(bull) bellow' só:dù só:dó '(sth unseen) make a sudden noise' ímìlù ímíló 'stutter' sàdù sádú 'ask a question' lèdú lèdó 'make noise, be noisy' no final vowel after sonorant dòm dăm 'speak, talk' sèn séné 'ululate, emit cries of joy' sán sán 'pray, perform a prayer' dámdú dámdé 'ask a small favor' lèl lèlé 'make a mistake verb contains frozen derivational suffix 'make a greeting, say hello' pò: pódó compound nominal bèrè-kézè kézé 'tell a lie' c. agriculture 'do farming (esp. by pulling daba)' gòlò gòló final n tòŋ tś 'sow (seeds), do the planting' nǒŋ nó 'carry out the second round of weeding' final y

'cough'

kòndùn kóndúnó

'sow (seeds) in pit (with manure)'

zăy ză:

```
final u
    wégù wègé
                             'do wet-sowing (with manure)'
    cíbù cíbé
                             'clear a new field'
 no final vowel after sonorant
                             'do the millet harvest (with a knife)'
   jèl jèlé
 compound nominal
                             'do over-sowing'
    tòŋ-zǐŋ zìŋé
    tòŋ-bìzú bìzé
                             'do dry-sowing (with manure)'
    tòŋ-dǎŋ dǎŋ
                             'do spot-sowing during weeding season'
                             'do parallel slashes (two people sowing)'
    tòn-wíl wìló
   yù:-gă: gă:
                             'do the follow-up harvest'
d. other activities
   jà: jé
                             'perform a dance'
                             'respect a taboo'
    tà: tá:
    èlè élé
                             'compete, engage in rivalry'
                             'divide (group) into subgroups'
    gòzò gòzó
                             'perform work'
    bìdé bìdé
                             'sing a song'
    nùŋà nùŋś
    dùgó dùgó
                             'cast spells'
                             'practice medicine'
    zὸηὸ zὸηό
    tóbá tóbí-yé
                             'roll a turban (on one's head)'
   pìyà píyé
                             'make a heap'
    sùmà súmó
                             'rest, take a break'
    zàŋá zǎŋ
                             'study, go to school'
    lùgò lùgó
                             'do a calculation, count'
    zàmà zàmú
                             'break a promise, betray'
    dùbà dùbá
                             'do forging, forge (tools)'
                             'go hunting'
    dàná dànú
    zàmnà zámné
                             'commit a theft'
    cèmnà cémné
                             'have fun'
                             'poke fun (at sb), mock'
   jáyrè jáyré
                             'have a quarrel'
    bàgárà bàgúrí-yé
 final <mark>u</mark>
                             'build a shed'
    tógú tógó
                             'spend the morning (half-day)'
    wógù wògó
    sìzù sízé
                             'draw lines'
    tì:dù tí:dé
                             'make bunches (units for sale)'
    nìnjù nìnjé
                             'cook sauce'
                             'forgive'
   yà:bù yá:bé
 no final vowel after sonorant
    tòŋ tóŋó
                             'do some writing'
```

```
din din \varepsilon
                             'tie a knot'
    yăl yàlí-yé
                              'take a walk'
 nominal perhaps iterated
    dùndùm dùn-dó
                             'heap up wood'
 compound nominal
    kò:-pìl pílé
                             'sneak up'
 irregular
    zăŋ zá:níy<sup>n</sup>é
                             'have a fight'
 suffix -n (§4.2.3)
    sègì-n ségé
                             'ante up, make a contribution'
e. other domains
    bùná bùná
                             'foam, froth up'
 compound nominal
    yù:-zèné zèné
                             '(millet plant) grow offshoot grain spikes'
    bà-gòló gòlí-yó
                             'be at the end of the rainy season'
```

The phonological and morphological relationship between cognate nominal and verb is variable. Some of this is due to tight general constraints in YD on vocalism and tone contour that apply to verb stems, but not nouns. Some of the nominal probably originated as deverbal nominalizations, with more or less segmentable final -n, -n, -y after monosyllabic stem, u replacing final vowel, or (from apocopated *u) instead of a vowel after a sonorant. See §4.2.2-4 for productive and semi-productive deverbal nominalizations of these types. However, the cognate nominals often have tones distinct from those of the productive nominalizations, so synchronic segmentation is probably opaque.

Several of the nominals are compounds, only the final of which is cognate to the verb.

11.1.5.2 Grammatical status of cognate nominal

may be pro forma ('dance a dance'), but may be quantified over or modified examples (with numeral, with adjectival modifier)

11.2 'Be', 'become', 'have', and other statives

11.2.1 'It is' clitics

```
11.2.1.1 Positive 'it is' (=:)
```

The symbol \therefore represents an extended "intonational" prolongation of the final vowel or sonorant of a word (§3.9.2). If the phonological tone of this vowel is high, the pitch additionally declines slowly. If the phonological tone is already low, the prolongation is clearly audible but the pitch decline is necessarily smaller. This is the **dying-quail intonation**; it is used in Jamsay in both elements of an NP conjunction (X : Y :) and in certain other functions.

For example, word-final δ : is expressed phonetically as [55 δ], with duration depending on emphasis and with a gradual decline from high to low pitch, while word-final δ : is heard as [δ ::] with audible prolongation but no particularly notable pitch change. Final sonorants are also affected; in cin = :: 'it's a stone', the prolongation applies to the final nasal rather than to the i vowel: phonetic [t[\hat{n} \hat{n} ::].

The common **identificational** 'it is X' construction, which provides identifying information for an entity whose existence is already understood, consists of the relevant **predicate nominal** (X) plus an **unconjugated** =: clitic. I use the clitic symbol = since several other Dogon languages have segmentally nonzero 'it is' clitics, and since in Yanda Dom the clitic can also be conjugated for pronominal subject (see below).

Examples of unconjugated = :: are in (439). (439a-b) might be used to explain the identity of a person who is visible, or who has been introduced as a (vaguely defined) discourse referent in preceding discourse. mi = :: 'it's me' (439b) might be uttered by someone identifying himself after knocking at a door, or answering a 'who?' question.

```
(439) X 'it is X' (full form) gloss

a. d\partial g \delta = \therefore [d\partial g \delta \bar{\partial} \delta] 'it's (a) Dogon'

b. mi mi = \therefore [miii] 'it's me'

c. n\grave{a}: n\check{a}: = \therefore [n\grave{a}\acute{a}\acute{a}\grave{a}] 'it's a cow'
```

The 'it is' clitic is **optionally omitted** (or reduced to inaudibility) after a pronoun: mi or mi = ... 'it's me', bo or bo = ... 'it's them'. It is also optionally omitted after animate plural $-m\dot{u}$ (except when the suffix shifts to H-tone).

(439c) is an example with a $\{L\}$ toned noun. In the 'it is' construction, it behaves as though it were $\{LH\}$ toned. The resulting $n \check{a} := ...$ is heard as $[n \grave{a} \check{a} \bar{a} \grave{a}]$, i.e. with a rising pitch followed by the terminally pitch decline of the dying-quail intonation. This is possible (but contestable) evidence that "low-toned" nouns have underlying $\{LH\}$ contours that are, in other contexts, phonetically realized as low-toned; see §3.8.2.2.

In (439a-c) there is no overt subject, just the predicate nominal with the clitic. However, an overt NP "subject" is possible. When present, it arguably functions as a topical NP (if so, it could be considered to be preclausal). However, in examples like (440) there is often no intonational break between the subject NP and the predicate nominal of the sort that we would associated with a preclausal topical NP.

```
(440) [m] \stackrel{H}{de:} ] d \partial g \delta = : [1SgP \stackrel{H}{father} ] Dogon=it.is 'My father is a Dogon.'
```

When the utterance is produced fluently as in (440), the prolongation and pitch drop of the = : clitic is usually less pronounced than in (439), and it may disappear entirely. In the latter case, (440) is equivalent to [mi H dé:] dògó with no audible 'it is' clitic.

In the construction with an overt subject, a 1st/2nd person or 3Pl subject is expressed by **conjugating** the 'it is' clitic. An independent pronoun is optionally present. The plurals have some complexities so we start with the singulars. The 3Sg form is the same as the unconjugated 'it is' form given above, with the dying-quail intonation.

Postvocalically the 1Sg is $= \dot{m}$ and the 2Sg is $= \dot{w}$. The tone of the clitic sonorant shifts to high if the predicate nominal is entirely {L}-toned (and in adjectival predicates ending in the extension -*i*:ⁿ or variant, §11.4.2). If both the clitic sonorant and the stem-final vowel are low-toned, it is not necessary to repeat the low-tone marking on the clitic in transcriptions. I do not hear dying-quail intonation effects in the 1Sg and 2Sg forms. Examples are in (441).

```
'you-Sg are X'
(441)
      'I am X'
                                       'he/she/it is X'
                                                      X (gloss)
       mi s \dot{a} y d \dot{u} = m
                      ná săydù = ∴
                                                       'Seydou'
       mi d g j = m
                      ná dg5 = ∴
                                                      'a Dogon'
       mi nà:=mi
                      ná nă: = ∴
                                                      'a cow'
       mi \, óy e = m
                      ná óyè = ∴
                                                      'a mouse'
```

When the 1Sg and 2Sg clitics are **postconsonantal** (the C is normally a sonorant), they become syllabic = um and = uw (indistinguishable from = ux),

respectively. An exception is that the 1Sg is = um after stem-final m, as in 'a porcupine' in (442), the two consonants fusing into one prolonged labial nasal. The tone is low except when the noun is all-low toned.

```
'you-Sg are X'
(442)
        'I am X'
                                               'he/she/it is X'
                                                                X (gloss)
                           mi tól = ùm
                                               ná tól = ∴
                                                                 'a pig'
        mi tètêw = um
                           ná tètêw = ∴
                                                                 'a hawk'
        mi no^{L} bar^{n} = \hat{u}m o no^{L} bar^{n} = \hat{u}w
                                               n\acute{a} n\grave{o}^{\rm L} b\check{a}n = :
                                                                 'a red person'
        mi tìmêm = m
                           ná tìmêm = ∴
                                                                 'a porcupine'
```

There is a difficulty interpreting such forms because some sonorant-final stems have a dialectal variant with final /u/, so the position of the stem-clitic boundary is not completely certain: $t \circ l = u m$ or $t \circ l u = m$. In the case of 'a red person' in (442), the shift from the n of b u m to the r^n of $b u m^n u m$ in the 1Sg/2Sg forms is also suggesting of a word-internal phonological alternation.

Now consider 1Pl, 2Pl, and 3Pl subjects, which are of the type 'we/you-Pl/they are X's" with some animate plural noun (recall that the morphological 3Pl category is used for animate referents only). We would expect a construction of the type [person-Pl]=(it.is-)1Pl 'we are people'. The difficulty is that the apparent plural suffix on the predicate nominal seems to function instead as part of the conjugated clitic, hence [person]=Pl-(it.is.-)1Pl. This is seen in (admittedly odd) contexts with inanimate predicate nominal, as in 'we are stones' with cin 'stone' (443b). In other contexts, inanimates like 'stone' do not allow plural -mu, so in (443b) it looks as though the -mu has fused with the clitic. With some difficulty I was able to elicit (443c), which has 1Pl = m-i: following a morphologically singular noun with collective sense.

```
(443)
        a. mí
                           cin = \hat{u}m
              1Sg
                           stone=(it.is-)1SgS
              'I am a stone.'
         b. yé
                           cin = m-i:
              1P1
                           stone=Pl-(it.is-)1PlS
              'We are stones.'
         c. yé
                       ſmùmbù<sup>L</sup>
                                         tùmá] = m-i:
                       [association<sup>L</sup>
              1P1
                                         one]=Pl-(it.is-)1PlS
              'We are one association (or: team).'
```

The data in (443) provide evidence that $= m-\hat{i}$: is (segmentally) the 1PI form of the conjugated 'it is' clitic. This is actually a falling-toned variant used after

{L} toned nouns; other predicate nominals that do contain a high tone have 1Pl $= m-\hat{i}$: with low tone. This $= m-\hat{i}$: appears to represent $/= m\hat{u}-y/$, with animate plural -mu fused to 1Pl suffix -y. The same $= m-\hat{i}$: (variant $= m-\hat{i}$:) is used for 2Pl, reflecting the usual 1Pl/2Pl suffixal syncretism. The 3Pl counterpart is identical to the nonpredicative plural with $-m\hat{u}$ (or H-toned $-m\hat{u}$). One of two assistants also allowed a lengthened, specifically predicative 3Pl form $= m-\hat{u}$: (variant $= m-\hat{u}$:), as in the second variant in (444).

```
(444) [m\hat{i}]^H d\hat{e}: m\hat{i}] [m\hat{i}]^H n\hat{i}: m\hat{i}] d\partial g\hat{o}-m\hat{u}
Dogon-AnPl
d\partial g\hat{o}=m-\hat{u}:
[1SgP Hather and] [1SgP Hmother and] Dogon=AnPl-(it.is-)3PlS
'My father and my mother are Dogon.'
```

Forms of the few irregular human nouns (445) might be used as arguments against taking the *mu* element to be part of the plural-subject forms of the clitic, as opposed to being the ordinary plural suffix -*mu*. In particular, the irregular plural èné 'children' does not have a 'they are' form containing the *mu* syllable.

Since {L}-toned nouns "grow" a final H-tone element in 'it is' forms, ènè 'child' and both yè 'woman' and its plural yè-mù 'women' have rising tones feeding into the dying-quail intonation. The entire word therefore ends up with [LHL] pitch. For example ye = \therefore 'it's (or: she is) a woman' is heard as [jèé $\bar{\epsilon}$ è]. In the 'they are' forms, prolongation and pitch decline are regularly audible after H-toned -mu (even if raised only in the 'it is' construction, as with yè-mu 'women'), but there is no pitch decline and often no detectable prolongation after L-toned -mu (as in an-mu) ~ an-mu = a: 'they are men').

 $\partial n\acute{e} = ...$ 'he/she is a child' has the same pitch contour as $\partial n\acute{e} = \emptyset$ 'they are children', but in the latter case the final vowel is not prolonged. Another informant pronounced $\partial n\acute{e} = ...$ in both singular and plural cases.

```
(446) [kà-kàl] = ∴

[falsehood]=it.is

'It's a lie' or 'It's false'
```

For 3P1 = $y\hat{\epsilon}$ in adjectival predicates after extension -i:, see §11.4.2.

```
11.2.1.2 'It is not' (= l \underline{a}-)
```

The negative counterpart of = :: 'it is' is $= l\check{a}$ - 'it is not'. Word-finally the form is $= l\check{a}$: (447). This is arguably the 3Sg subject form, hence properly $= l\check{a}$:- \emptyset , but if there is at most a pro forma subject I often omit the 3Sg suffix.

(447)		noun X	'it is not X'	gloss
	a.	dògó	$d\partial g\delta = l\check{a}$:	'it's not (a) Dogon'
	b.	mí	mí = lă:	'it's not me'
	c.	nà:	nă: = lă:	'it's not a cow'

= $l\tilde{a}$ - 'it is not' can be conjugated. The paradigm is (448).

```
(448) category (X) 'X is not'

\begin{array}{rcl}
1Sg & = l -m \\
2Sg & = l -w \\
1Pl & = l -y \\
2Pl & = l -y \\
3Sg & = l -w \\
3Sg & = l -w \\
3Pl & = l -w \\
1 & = l -w \\
2 & = l -w \\
3 & = l -w \\
4 & = l -w \\
3 & = l -w \\
3 & = l -w \\
3 & = l -w \\
4 & = l -w \\
4
```

Nouns that otherwise show up as $\{L\}$ toned "grow" a final high-tone element before $=l\check{a}$ -, as they do before its positive equivalent (preceding section). Thus $c\check{i}n = l\check{a}-m$ 'I am not a stone', $n\check{a}:=l\check{a}-m$ 'I am not a cow' (cf. $c\grave{i}n$ 'stone', $n\grave{a}:$ 'cow').

Animate plural suffix $-m\dot{u}$ is present before $=l\dot{a}$ - where relevant. In examples like $d\partial g \delta - m\dot{u} = l\ddot{a} - y$ 'we (or you-Pl) are not Dogon', the bracketing would seem to be straightforward, with plural $-m\dot{u}$ belonging with the noun stem. However, the bracketing is not quite so simple, since the plural suffix (which is elsewhere restricted to animates) is also optionally present (449a)

after an inanimate noun denoting (in context) a plurality, as is also true (and more systematically so) for the positive 'it is' paradigm (preceding section).

```
(449) a. y\acute{e} cin-m\acute{u} = l\breve{a}-y
1Pl stone-AnPl=it.is.not-1PlS
'We are not stones.'

b. y\acute{e} c\breve{i}n = l\breve{a}-y
1Pl stone=Pl-it.is.not-1PlS
'We are not stone(s).'
```

This 'it is not' clitic is distinct from stative negative $= l\check{a}$. The latter occurs in negative adjectival predicates (§11.4.3) and with the defective stative 'want' verb ($\grave{e}b\grave{u}=l\check{a}$ - 'not want', §11.2.4). While the 1st/2nd person forms of the two clitics are homophonous (e.g. 1Sg $= l\check{a}$ -m), the third person subject forms differ in vowel length and tone. The stative negative forms are 3Sg $= l\acute{a}$ - \varnothing and 3Pl $= l\acute{a}$ - $y\grave{e}$, with short a (and consequent tone-flattening).

The combination of 'it is not' with 'if' is common; 'if it is not X' can be loosely translated 'other than X', 'aside from X', or in a negative context 'only X'. See e.g. $c\acute{e}m \rightarrow = l\grave{a}$: $d\grave{e}$ in (768) in Text 1.

11.2.2 Existential and locative quasi-verbs and particles

11.2.2.1 Realis and existential (và)

The particle $y\hat{a}$ has two major functions. Both are limited to positive clauses. The particle appears immediately to the left of the verb (for verb chains, see below).

With quasi-verbs $b\acute{o}$ - 'be (somewhere)' and $z\acute{o}$ - 'have', and with stative $j\grave{e}l\acute{a}$ - 'hold, have', $y\grave{a}$ is glossed **existential** (interlinear abbreviation: Exist). It entails the existence of the referent denoted by the subject of 'be (somewhere)' or the object of 'have'.

With ordinary verbs, $y\hat{a}$ is used in the perfective, and in those imperfective contexts denoting ongoing activities. In these contexts it is glossed **realis** (interlinears: Real) Of course there is a relationship between existential and realis, but since other Dogon languages make the distinction I will use both terms in this grammar.

A perfective verb immediately following $y\hat{a}$ has its lexical tones, i.e. either $\{H\}$ or $\{LH\}$.

 $y\hat{a}$ is obligatory in positive utterances with $z\hat{o}$ - 'have' and $j\hat{e}l\hat{a}$ - 'have'. With $b\hat{o}$ -, $y\hat{a}$ is obligatory if there is no other preverbal constituent, and optional if

there is such a constituent. In realis function with regular verbs, $y\hat{a}$ is normally present in the absence of another preverbal constituent, but it is optionally omitted in polar interrogatives and in (truncated) responses to such questions. In (450), # means ungrammatical. In other words $y\hat{a}$ is obligatory in (450a-c) but optional in (450d-f). All of these (quasi-)verbs have a {H} or {LH} tone contour when immediately following $y\hat{a}$ (hence $z\hat{o}$ -, $b\hat{o}$ -, $j\hat{e}l\hat{a}$ -).

Examples of realis *yà* with various verbs and quasi-verbs are in (450).

```
(450) a. pè:
                      và
                                  zó-m
                      Ø
                                  zó-m
           #pè:
           sheep
                      Exist
                                 have-1SgS
           'I have a sheep.'
                      bó-m
       b. yà
           #Ø
                      bó-m
           Exist
                      be-1SgS
           'I am present.'
                      tíbέ-Ø
       c. yà
           #0
                      tíbέ-Ø
           Real
                      die.Perf-3SgS
           'He/She died.'
       d. ŋgí
                      yà
                                  bó-m
           ὴgí
                                  bò-m
                      Ø
           'I am here.'
       e. ènè
                      yà
                                  tíbέ-Ø
           ènè
                      Ø
                                  tíbέ-Ø
```

'A child died.'

'He/She died here.'

yà Ø

f. *ngí*

ὴgí

An example of a polar interrogative without $y\hat{a}$, and a response with optional $y\hat{a}$, is (451).

tíbέ-Ø

tíbέ-Ø

```
(451) Q: ?ólé-Ø mà→ súwé-Ø
go.up.Perf-3SgS Q go.down.Perf-3SgS
'Did he/she go up or go down?'
```

Focalization of a constituent, as in WH interrogatives, is incompatible with realis $y\hat{a}$. Subject focalization without $y\hat{a}$ is seen in (452).

```
pílè-zò-Ø
(452) a. àm
                          fall-Perf2-3SgS
           who?
           'Who fell down?'
       b. pòl
                      àm
                                  zô:
                      who?
           knife
                                 have
           'Who has a knife?' [also àm pòl zô:]
                      bô:
       c. àm
           who?
                      be
           'Who's there?'
       d. mì
                      bô:
           1Sg
                      be
```

Non-subject focalization without *yà* is exemplified in (453).

'It's I [focus] who am present (here).'

```
(453) a. àmbá: bò-ẃ
where? be-2SgS
'Where are you-Sg?'

b. cì-?ànè bèlé-w
what? get.Perf-2SgS
'What did you get?'
```

Related to this is the fact that when a short final perfective clause is prosodically grouped with a preceding subordinated clause, the final clause omits the realis particle and the perfective verb takes low-toned form. In other words, the subordinated clause functions somewhat like a focalized constituent within the clause. See discussion of the 'no sooner ..., than ...' examples in §15.3.4.

Realis $y\hat{a}$ is also absent in relative clauses (454). Compare perfective $y\hat{a}$ pilé- \emptyset 'he fell' in a main clause.

If there are two or more tightly chained verbs (only the final verb being inflected), realis $y\hat{a}$ precedes the first verb in the chain (455). The nonfinal verbs have their regular bare-stem form, either {H} or {LH} toned depending on the verb, while the final verb is all-low toned.

However, if the first verb is subordinated, $y\hat{a}$ precedes the following main verb. If the combination is somewhat tightly knit, as in (456), the subordinated verb may be treated as a preverbal constituent, in which case $y\hat{a}$ can be omitted as indicated above.

(456)
$$un-\dot{\varepsilon}$$
: ya $w\acute{e}-\varnothing$
 $un-\dot{\varepsilon}$: \varnothing $un-\dot{\varepsilon}$: $un-\dot{$

Realis-existential *yà* is not regular with imperfective positive verbs, but it is attested in a kind of **presentative** sense (French 'voilà que...'). For other presentatives see §4.4.4.

11.2.2.2 Locational quasi-verb ($b\grave{o}$ - $\sim b\acute{o}$ - negative $\grave{o}n\acute{u}$ -)

The positive existential-locative element $b\hat{o}$ - 'be (somewhere), be present, exist' is partially verb-like, as is its suppletive negative counterpart $\hat{o}n\hat{u}$ - 'not be (somewhere), be absent'. A locational expression (e.g. 'here' or 'in Douentza') may be added but is not required.

The positive form $b\dot{o}$ - (with H-tone) is regularly used with particle $y\dot{a}$, which here functions as existential. $y\dot{a}$ is required in the absence of an overt locational, and is optional if the locational is present. As a clausal particle preceding the verb, $y\dot{a}$ is the realis particle (§11.2.2.1).

The high tone of $b\acute{o}$ in the phrase $y\grave{a}$ $b\acute{o}$ - is attributable to the $y\grave{a}$. When the $y\grave{a}$ is omitted, low-toned $b\grave{o}$ - is heard unless Rhythmic Tone-Raising applies. Note also the L-tone in the progressive construction $-\acute{m}$ $b\grave{o}$ - (§10.5.2.3).

```
(458) a. ngi yà bó-∅
here Exist be-3SgS
'He/She is here.'
```

b. *ŋgí* bò-Ø here be-3SgS 'He/She is here.

The pronominal-suffix paradigms are in (459). For the positive 'be (present)', the variants with and without *yà* are shown.

(459)	category	'be (present)'		'not be, be absent'
		basic	with <i>yà</i>	
	1Sg	bò-m	yà bó-m	ònú-m
	2Sg	bò-w	yà bó-w	<i>òn-ú:</i> (ònú-w/)</td
	1Pl	bò-y	yà bó-y	<i>òn-í:</i> (ònú-y/)</td
	2P1	bò-y	yà bó-y	<i>òn-í:</i> (ònú-y/)</td
	3Sg	bò-∅	yà bó-∅	ònú-∅
	3P1	b-è∶	yà b-έ:	òní-yè

These forms can be used to translate 'there is/are...' and its negation, with a pure focus on presence/absence rather than on location. An example is (460), where the low-toned 'meat' has induced a tonal change on $\partial n\hat{u}$ - \varnothing .

```
(460) nàmà ónù-∅
meat not.be-3SgS
'There is no meat.' (i.e. 'We're out of meat.')
```

 $b\hat{o}$ - and $\hat{o}n\hat{u}$ - are aspectually inert and belong to the class of statives (in the broad sense). They usually have present-time (or timeless) reference. For past time frame, as in 'X was present/absent', see $b\hat{e}$ - (§11.2.5.1), below. Vowel-

length distinguishes 3Pl $(y\grave{a})$ $b-\acute{\epsilon}$: 'they are (present)' from 3Sg past $(y\grave{a})$ $b\acute{\epsilon}-\varnothing$ 'he/she was (present)'.

In relative clauses, H-toned **bó**- is used (§14.1.7.3).

11.2.3 'Be (put) in' (*kùn*)

The defective stative verb $k \dot{u} n$ 'be in' is used with particle $y \dot{a}$ in the positive combination $y \dot{a} k \dot{u} n$. The irregular negative form $k \dot{u} n - \dot{u}$ (1Sg $k \dot{u} n - \dot{u} - i n$, 3Pl $k \dot{u} n - i y \dot{e}$) does not allow the particle. These forms denote location of a focal object inside a container or space.

- (461) a. njê [?616 nà] yà kún-Ø dog [house Loc] Exist be.in-3SgS '(A/The) dog is in the house.'
 - b. [7516 nà] kùn-ù-m [house Loc] be.in-Neg-1SgS 'I am not in the house.'

11.2.4 'Want, like' (èbà ~ èbù, nàmà)

 $\grave{\epsilon}b\grave{a}$ combines with a conjugated cliticized form of $b\acute{o}$ - 'be' or with stative negative clitic allomorph = $l\check{a}$ -. The positive form is $\grave{\epsilon}b\grave{a}=b\acute{o}$ - 'want'. For past time, we get $\grave{\epsilon}b\grave{a}=b\acute{\epsilon}$ - 'wanted', with the usual substitution of $b\epsilon$ - for bo-(§11.2.5.1)

The negative form is $\hat{\epsilon}b\hat{u} = l\check{a}$, e.g. 1Sg $\hat{\epsilon}b\hat{u} = l\check{a}$ -m 'I do not want'. The clitic here resembles $= l\check{a}$ - 'it is not X' (where X is a NP), see §11.2.1.2. The 1st/2nd person conjugated forms are identical for the two, with short vowel and rising tone ($1\text{Sg} = l\check{a}$ -m, etc.). However, the 3Sg subject form is $= l\check{a}$:— with long vowel for 'it is not X', versus $= l\check{a}$ - \varnothing with short vowel (and consequent tone-flattening) in $\hat{\epsilon}b\hat{u} = l\acute{a}$ - \varnothing 'he/she doesn't want'. Likewise, the 3Pl subject form is $\hat{\epsilon}b\hat{u} = l\acute{a}$ - $y\hat{\epsilon}$ 'they do not want'. The 3Sg subject forms shows that $\hat{\epsilon}b\hat{u} = l\check{a}$ - has the same stative negative ending found with negative adjectival predicates (§11.4.3), not the 'it is not X' clitic used with nouns. For past time we get $\hat{\epsilon}b\hat{u} = l\hat{a} = b\hat{\epsilon}$ - (1Sg $\hat{\epsilon}b\hat{u} = l\hat{a} = b\hat{\epsilon}$ -m, 3Sg $\hat{\epsilon}b\hat{u} = l\hat{a} = b\hat{\epsilon}$ - \varnothing)

The complement may be a NP (462a-b). It may also be a subordinated clause. For the forms of this clause, under same-subject and different-subject conditions, see §17.5.2.

(462) a.
$$\epsilon m \epsilon$$
 $\epsilon b a = b - \epsilon$:

milk want=be-3PIS 'They want (or: like) milk.'

b. $s \delta l$ † $\epsilon b u = l \check{a} - m$ cream.of.millet want=it.is.not-1SgS 'I don't want (or: like) cream of millet.'

An alternative to $\hat{\epsilon}b\hat{a}$ is $n\hat{a}m\hat{a}$. The positive form is $n\hat{a}m\hat{a} = b\delta$ - 'want' (1Sg $n\hat{a}m\hat{a} = b\delta$ -m' 'I want'). The negative form is $n\hat{a}m\hat{a} = n\delta$ - (3Sg $n\hat{a}m\hat{a}-n\delta$ -, 1Sg $n\hat{a}m\hat{a} = n\omega$ -m' 'I don't want'), with a conjugated form of stative negative (§10.5.3.1). Past forms are $n\hat{a}m\hat{a} = b\delta$ - 'wanted' and its negation $n\hat{a}m\hat{a}-\hat{n} = b\delta$ - 'didn't want'.

11.2.5 Morphologically regular verbs

Among the verbs that have defective stative paradigms in some other Dogon languages, but that have regular verbal paradigms in Yanda Dom, including aspectual distinctions, are *ibi-yé* 'fear' and *zùwó* 'know'.

11.2.5.1 'Was' ($b\hat{\epsilon}$ - $\sim b\acute{\epsilon}$ -)

For past time reference, $b\hat{o} \sim b\hat{o}$ - 'be (somewhere)' is replaced by $b\hat{e} \sim b\hat{e}$ -, which has a regular perfective conjugation. The perfective negative with - $l\hat{i}$ - and allomorphs likewise replaces negative $\hat{o}n\hat{u}$ - 'not be (somewhere)' in these past time contexts. No other suffixal categories are attested. The base tone is low in the positive form, but becomes high-toned after a low-toned constituent or particle, including the very common existential $y\hat{a}$. In the perfective negative, the stem is high-toned ($b\hat{a}$ - $l\hat{i}$ -).

(463)	category	'was (p simple	resent)' with <i>yà</i>	'was not present, was absent'
	1Sg	bè-m	yà bέ-m	bá-lù-m
	2Sg	$b\grave{arepsilon}$ - W	yà bέ-w	bá-y-ò
	1Pl	bè-y	yà bé-y	bá-y-è
	2P1	bè-y	yà bέ-y	bá-y-è
	3Sg	bè-∅	yà bé-∅	bá-lì-∅
	3Pl	b-à	yà b-á	bá-ǹ-∅

No other forms of this verb are attested. However, it may be related historically to the regular active verb biyé 'remain, stay'.

Conjugated forms of $b\hat{e}$ - $/b\hat{e}$ - 'was' are common as past clitics with verbs. these combinations show some tonal peculiarities in the stems as well as in the clitic. See §10.6.1.1-7 for full discussion.

11.2.5.2 'Become' (*τίηε*)

The regular verb $tin\epsilon$ 'become' is used in the construction 'X become Y' where Y denotes some class of entity that the referent X did not previously belong to.

```
(464) ànàsá:rá yà tíŋé-w
white.person Real become.Perf-2SgS
'You-Sg have become a white person.'
```

11.3 Quotative verb

Reported quotations are often framed simply by adding uninflectable Quotative particle *wà* at the end of the quoted clause, and usually also after the subject (NP or pronoun). An overt conjugatable 'say' verb is possible but is often omitted (§17.1.3). A 'say' verb is especially useful in inflectional categories that do not simply report a completed prior event, such as imperfective positive or any negative category.

11.3.1 'Say, speak, talk' (*dăm*)

One common 'say' verb is $d\check{a}m (</d\grave{a}m\check{u}/)$ 'say, talk, speak', a u-final stem with a regular bisyllabic paradigm, e.g. perfective negative $d\grave{a}m\grave{a}-l\acute{l}-$, imperfective 3Sg $d\grave{a}m\acute{a}-m-\grave{u}$, imperative $d\grave{a}m\acute{a}$. I translate 'say' when it occurs next to a quoted segment, otherwise 'speak, talk'.

This verb is used with a range of quotative complements including jussives. It may take an overt indirect object denoting the original addressee. In the absence of quoted material, the default object is the cognate nominal $d \delta m$ 'talk, speech, language, words'.

```
(465) a. [mì Hwá→] [wó nì] dàmà-lí-Ø [1Sg HQuotS] [come Sbjnct] say-PerfNeg-3SgS 'He/She didn't tell me to come.'
```

- b. cí-?ápè [ó Hbérná] dàmè-Ø what? [2Sg HDat] say.Perf-3SgS 'What did he/she say to you-Sg?'
- c. dòm dàm-nán-Ø talk say-ImpfNeg-3SgS 'He/She doesn't talk.'

11.3.2 'Say, call (name)' (*gŭn*)

Another 'say' verb that can co-occur with a quoted segment is $g\check{u}n$, perfective $g\hat{u}r^n\acute{\varepsilon}$.

- (466) a. ?ə̀ne gùr^-á
 what? say.Perf-3PIS
 'What did they say?'
 - b. $w\acute{o}-\grave{m}-\varnothing$ $g\grave{u}r^n\grave{a}-\acute{n}-\varnothing$ come-Impf-LogoS say-PerfNeg-3PIS 'He_x didn't say that he_x was coming.'

 $\underline{g\check{u}n}$ is also used in the context 'X call Y "Z"', where Z is the name of a person, species, object type, etc. The verb is usually imperfective here, often with nonspecific 3Pl subject. The noun \acute{n} 'name' may be included in the clause. There is no indirect object.

- (467) a. $\dot{\eta}g\dot{o}$ $\dot{a}nj\ddot{a}$: $g\dot{u}n-m-\dot{\epsilon}$ Prox.InanSg how? say-Impf-3PlS
 'How (= what) do they call this?'
 - b. [in nà-ŋ] úmàrù gùn-m-è
 [name 3SgP-InanSg O say-Impf-3PlS
 'They call his name (=they call him) Oumar."

The imperfective negative is $g\dot{u}$ - $n\acute{a}p$ - $\dot{\epsilon}$ ~ $g\dot{u}$ - $r\acute{a}p$ - $\dot{\epsilon}$ 'they do not say/call'. This form is slightly irregular since one might have expected $\#g\dot{u}n$ - $n\acute{a}p$ - $\dot{\epsilon}$.

11.4 Adjectival predicates

There are three constructions that can be used to translate 'X is ADJ', denoting some current adjectival state. The first, which will not be discussed in detail here, is the perfective form of the corresponding inchoative verb. For example,

```
(468) mángòrò yà gòmé-∅
mango Real be.rotten.Perf-3SgS
'The mango has become (=is) rotten.'
```

For such adjectival inchoative verbs, see §9.5. They have full paradigms, and in the positive perfective they are preceded by realis $y\hat{a}$ as in (468).

The adjectival predicates to be considered in this section are not of this type. There are two constructions, one with a pronominally conjugated form of $b\hat{o}$ - 'be', and one where the pronominal-subject marking is added directly to the adjectival stem. Each adjective requires one or the other construction.

11.4.1 Adjectival predicate with -m bò- 'be'

In this construction, a suffix -m appears between the adjective stem and the inflected $b\hat{o}$ - 'be', except when the adjective already ends in a nasal consonant. The H-tone on the suffix is redundant if the adjective already ends in a H-tone.

The construction [ADJ-m $b\grave{o}$ -] closely resembles the progressive construction in $-\acute{m}$ $b\grave{o}$ -, where $-\acute{m}$ appears to be a word-final allomorph of the imperfective morpheme (§10.5.2.3). It is difficult to gloss $-\acute{m}$ in adjectival predicates, so I will just label it "-Adj" in interlinears.

An example is $g\grave{a}b\acute{u}$ 'tall', which occurs in $g\grave{a}b\acute{u}$ -m 'I am tall', $g\grave{a}b\acute{u}$ -m 'bò-w 'you-Sg are tall', $g\grave{a}b\acute{u}$ -m bò-y 'we/you-Pl are tall', $g\grave{a}b\acute{u}$ -m bò- \varnothing 'he/she is tall', and $g\grave{a}b\acute{u}$ -m b- \grave{e} 'they are tall'.

The adjectives that require this predicate construction are in (469). One group has audible final u in the adjective (469a-b). This group includes a handful of stems of the shape ... vmu or ... vnu ("v" = vowel) (469b). The remaining adjectives of this type end in a sonorant (469c-e), or in a long i: that could perhaps be analysed as iy^n (469f). Word-finally after an unclustered sonorant is a position favoring apocope of u, and at least some of the stems in (469c-f) may have originally ended in *u.

```
(469) Adjectives with -m bò-
adjective predicative ('be ADJ') gloss
```

```
a. audible final u after obstruent or CC cluster
    ὲsú
                  èsú-m bò-
                                              'good'
    gàbú
                  gàbú-m bò-
                                              'tall'
    tùjù
                  tùjú-m bò-
                                              'heavy'
                  yòdú-m bò-
                                              'soft'
    yàdú
                  mènzú-m bò-
    mènzù
                                              'slender'
                  kè:zú-m bò-
                                              'cold'
    kè:zù
    àr<sup>n</sup>àndú
                  òr<sup>n</sup>òndú-m bò-
                                              'smooth'
b. like (a) but with u after m or n
    èmù
                  èmú-m bò-
                                              'narrow'
    dènù
                   dènú-m bò-
                                              'short'
    dònù
                  dònú-m bò-
                                              'blunt (blade)'
c. final I, perhaps < /lu/
                                              'fast'
    tèl
                  tèl-m bò-
    dà:1
                  dà:l-m bò-
                                              'nasty'
    èl
                  èl-m bò-
                                              'sweet'
                  gàl-m bò-
                                              'bitter'
    gàl
    dèmbùl
                  dèmbŭl-m bò-
                                              'thick, massive'
d. final y^n, perhaps </y^n \acute{u}/
                   ?àynàyn-m bò-
                                              'hard'
    ?àynàyn
    tòy<sup>n</sup>
                   tòy<sup>n</sup>-m bò-
                                              'deep'
    wàyn
                   wày<sup>n</sup>-m bò-
                                              'spacious'
e. final nasal, perhaps < /nu/ and /mu/
                  bĭn bò-
    bĭn
                                              'fat'
                   dăn bò-
    dăn
                                              'sour'
                  năm bò-
                                              'difficult'
    năm
                  gšm bò-
                                              'rotten'
    gžm
                  ăm bò-
                                              'good-sized'
    àm
f. final i:<sup>n</sup>, perhaps equivalent to /iy^n/ < /iy^nu/
    sĭ:n
                  sǐ:n-m bò-
                                              'sharp'
```

For the negation, see §11.4.1.3, below.

For **past time**, $b\hat{o}$ - is replaced by $b\hat{\varepsilon}$ -, with the same conjugation as inflectable past clitic = $b\varepsilon$ - with regular verbs (§10.6).

Primary color adjectives like jèmé 'black' have predicative forms with 'it is' clitic (see just below). However, a variant predicative construction with

bò- is also attested (470). There are irregularities in the forms of 'black' and 'white' in this construction.

(470)	gloss	adjective	alternative predicate ('be ADJ')
	'black'	jèmé	jěm bò-
	'red'	băn	băn bò-
	'white'	pílέ	pìlé:-m bò-

A past-time version of this construction substitutes conjugated past clitic $=b\varepsilon$ - for $b\grave{o}$ - in the above: $j\check{e}m=b\grave{\varepsilon}-w$ 'you-Sg were black' $(j\grave{e}m\acute{\varepsilon})$, $p\grave{i}l\acute{e}:-m$ $b\grave{\varepsilon}-\varnothing$ 'he/she/it was white'.

11.4.2 Adjectival predicate with conjugated 'it is' clitic

Consider the predicative paradigms of $j \in \mathcal{E}$ 'black', with and without the adjectival extension in $-i:^n(471)$.

(471) 'be black'

category	predicative for	orms
	simple	extended
1Sg	jèmέ=m̀	$j \grave{e} m - i : ^n = \acute{m}$
2Sg	$j \grave{e} m \acute{e} = \grave{w}$	$j \grave{e} m - i : {}^{n} = \acute{w}$
1Pl	jèmέ=ỳ	$j \grave{e} m - i : ^n = \acute{y}$
2P1	$j \grave{e} m \acute{e} = \grave{y}$	j èm- i : n = \acute{y}
3Sg	jèmέ ~ jèmέ=∴	jèm-í: ⁿ =∅
3P1	jèm€=mù	$j\grave{e}m-i:^n=y\grave{e}$

At least the 1st/2nd person forms are to be identified as the relevant conjugated forms of the 'it is' clitic after a NP (§11.2.1.1). This is most easily seen in the 1Sg and 2Sg. The 1Pl/2Pl form is phonologically parallel to the 1Sg and 2Sg, but in contrast to the corresponding post-NP 'it is' clitics, the adjectival predicates do not show fusion with (animate) plural -mu.

In the 3Sg and 3Pl form, I do not consistently hear the dying-quail intonational (prolongation and pitch decline) that is associated with the corresponding post-NP conjugated 'it is' clitics. For 3Sg I have heard both simple and prolonged versions.

Adjectives attested with this predicative form are listed in (472), in the lexically basic attribute form and in the 3Sg predictive form (showing the dying-quail intonational effet). In contrast to the adjectives that regularly take -m $b\hat{o}$ - (preceding section), which end in u or in a sonorant, those in (472) typically end in a non-high vowel (472a-c). Three exceptional stems ending in final sonorant are in (472d). The adjective 'red' may have been influenced by the parallel morphology of the two other primary color adjectives 'black' and 'white' (472a).

(472) Adjectives with 'it is' clitic predicate

```
'3Sg is ADJ'
     adjective
                                                   gloss
a. stem ends in \{\varepsilon e\}
 \{LH(L)\}
                       j \approx m \epsilon = :
                                                   'black'
    jèmέ
                       bè-bélè = ∴
                                                   'small'
     bè-bélè
 {H} shifting to {HL}
                                                   'white'
    pílέ
                       pil\hat{\epsilon} = :
                       siy\hat{\varepsilon} = ::
                                                   'good'
     síyé
     sémélé
                       s \in m \in l \in = :
                                                   'worn-out'
 {L} shifting to {LH}
     ìzὲ
                       iz \varepsilon = :
                                                   'empty'
     sèrè
                       sèré = ∴
                                                   'diluted'
b. stems ends in \{o \ o\}
 {LH(L)}
    [none]
 {H} shifting to {HL}
                                                   'lean'
     kómó
                       kómò = ∴
 {L} shifting to {LH}
                                                   'bad'
    gàmà
                       gàmó = ∴
     kòlò
                       kòló = ∴
                                                   'raw, unripe, fresh'
c. stem ends in a
 {LH}
                       bà: = ∴
     bă:
                                                   'full'
                       dìyá = ∴
     dìyá
                                                   'big'
     zàlá
                       zàlá = ∴
                                                   'long'
 {H} shifting to {HL}
     sátárá
                       sátárà = ∴
                                                   'young'
     sálá
                       sálà = ∴
                                                   'bad'
```

```
\{L\} shifting to \{LH\}
                             n\grave{a}:r^n\acute{a}=:
      nà:r<sup>n</sup>à
                                                                  'easy'
      kàndà
                             kàndá = ∴
                                                                  'new'
                             àzàlấ = ∴
      àzàlà
                                                                  'half-ripe'
d. final sonorant
 {LH(L)}
      šΙ
                              ŏ1 = ∴
                                                                  'fresh'
                              băn = ∴
      băn
                                                                  'red'
                             (1 \operatorname{Sg} b \grave{a} r^n \acute{u} = \grave{m} \operatorname{etc.})
  {L} shifting to {LH}
                                                                  'old'
      pèy
                             p\check{\epsilon}y = :
```

For the negation, see §11.4.3, below.

Conjugatated past clitic $=b\acute{\epsilon}$ - can be added directly to the adjective stem $n\grave{a}:r^n\grave{a}=b\acute{\epsilon}-\varnothing$ 'it (e.g. work) was easy', $s\acute{a}l\grave{a}=b\grave{\epsilon}-\omega$ 'you-Sg were bad'.

11.4.3 Negative adjectival and stative predicates ($= l\check{a}$ -)

Both the adjectival predicate construction with -m $b\hat{o}$ - and the rival construction with just the 'it is' clitic are negated by adding a conjugated form of stative negative $= l\tilde{a}$ - to the adjective. If the adjective is $\{L\}$ -toned, the 3Sg form is $= l\tilde{a}$ - \varnothing with a short vowel and H-tone. If the adjective contains a H-tone, the 3Sg form is $= l\tilde{a}$:- \varnothing with a long vowel and rising tone.

This is partially distinct from the situation with negative NP predicates. Even a {L}-toned noun becomes {LH}, or perhaps we should say {L}+H with an incremental edge tone, before $= l\breve{a}$ -'it is not', which therefore always has 3Sg form $= l\breve{a}$:- \varnothing . Compare adjectival $g\grave{a}b\grave{u} = l\acute{a}$ - \varnothing 'he/she/it is not tall' with nominal $p\breve{e}$:= $l\breve{a}$: \varnothing 'it is not a sheep' (from $p\grave{e}$: 'sheep'). On the other hand, adjectives and nouns that contain a H-tone have the same 3Sg $= l\breve{a}$:- \varnothing , e.g. adjective $s\acute{t}y\acute{e} = l\breve{a}$:- \varnothing 'he/she/it isn't good' and noun l:-l:- \varnothing 'it isn't a goat'.

(473) Negative adjectival predicate (3Sg)

```
adj negative predicate gloss

a. corresponding to -m b\grave{o}-
g\grave{a}b\acute{u} g\grave{a}b\grave{u}=l\acute{a}-\varnothing 'be not tall'
\grave{a}m \grave{a}m=l\acute{a}-\varnothing 'be not plump'
```

b. corresponding to 'it is' predicate

nà:r ⁿ à	$n\grave{a}:r^n\grave{a}=l\acute{a}-\varnothing$	'be not easy'
bă:	$b\check{a}$: = $l\check{a}$:- \varnothing	'be not full'
síyé	$siy \hat{\epsilon} = l \check{a} : -\emptyset$	'be not good'

The pronominal-subject paradigm is (474). 'Tall' exemplifies a $\{L\}$ -toned adjective, 'good' an adjective containing a H-tone. The only difference between them is in the 3Sg form.

(474)	subject	'not be tall'	'not be good'
	1Sg	gàbù = là-m	$siy \epsilon = l \hat{a} - \hat{m}$
	2Sg	gàbù = là-ẃ	$siy \epsilon = l \hat{a} - \hat{w}$
	1Pl	gàbù = là-ý	$siy \epsilon = l \hat{a} - \hat{y}$
	2Pl	gàbù = là-ý	$siy \epsilon = l \hat{a} - \hat{y}$
	3Sg 3Pl	$gàbù = lá-\emptyset$ gàbù = lá-yè $\sim = l-ê$:	$siy \epsilon = l \dot{a}: -\emptyset$ $siy \epsilon = l \dot{a}-y \dot{\epsilon}$ $\sim = l - \hat{\epsilon}:$

For this construction in negative adjectival-predicate comparatives, see §12.1.1.

When $d\hat{e}$ 'if' is added, the clitics that end in a H-tone (i.e. all but $3Pl = l\acute{a}-y\grave{e}$) drop this final H-tone. If the adjective-clitic combination is entirely low-toned after this, $d\grave{e}$ undergoes Rhythmic Tone-Raising, otherwise it remains L-toned: $g\grave{a}b\grave{u}=l\grave{a}-\mathcal{O}^{\dagger}d\acute{e}$ 'if he/she/it is not tall', $s\acute{i}y\acute{e}=l\grave{a}:-\mathcal{O}$ $d\grave{e}$ 'if he/she/it is not good', $g\grave{a}b\grave{u}=l\grave{a}-m^{\dagger}d\acute{e}$ 'if I am not tall'. We get the same tonal behavior before past clitic $=b\varepsilon$ -. Examples are $g\grave{a}b\grave{u}=l\grave{a}=b\acute{e}$ - 'was not tall', $s\acute{i}y\acute{e}=l\grave{a}:=b\grave{e}$ - 'was not good'.

11.4.4 Extension -i:n in adjectival predicates

The extension -i: n (occasionally $-y^n$) is optionally added to many adjective stems especially in predicative function. The stem drops to $\{L\}$ -toned except for the extension itself.

In some other Dogon languages, this extension productively converts adjectives into expressive adverbials. In YD a conspicuous stem-class shift does not appear to occur, to judge by the fact that the extension does not affect the morphosyntax of adjectival predication. However, $bir^n-i:^n$ 'stout' in (834) in Text 4 seems to be a nonpredicative adverb. The extension is also subject to the unbounded intonational prolongation of its counterparts in some other languages.

The extension is allowed by most adjectives. Usually it is added to a final consonant, or replaces a final short vowel (475a). In some cases a final non-high, non-rounded vowel is preserved (475b).

```
(475)
                regular
                                  extended
                                                     gloss
           a. added to final C or replaces final vowel
                                  gàb-í:n
                                                      'tall'
                 gàbù
                gàmà
                                  gàm-í:<sup>n</sup>
                                                      'bad'
                                  nà:r<sup>n</sup>-í:<sup>n</sup>
                 nà:r<sup>n</sup>à
                                                      'easy'
                 dèmbùl
                                  dèmbùl-í:n
                                                      'thick, massive'
                                                      'red'
                 băn
                                  bàr<sup>n</sup>-í:<sup>n</sup>
                                  \hat{\varepsilon}l-\hat{\imath}^n
                 ĕΙ
                                                      'sweet'
                                                      'lean, not plump' (variant)
                 kómó
                                  kòm-í:<sup>n</sup>
           b. final vowel preserved
                                                      'lean, not plump' (variant)
                 kómó
                                  kómó-y<sup>n</sup>
                 zàlà
                                  zàlá-y<sup>n</sup>
                                                      'short'
                pílέ
                                  pìl\hat{\varepsilon}-\acute{y}^n
                                                      'white'
           c. suppletive
                 sálá
                                  sàmà-í:n
                                                      'bad'
           d. not accepted
                 bă:
                                                      'full'
                 kàndà
                                                      'new'
                 síyέ
                                                      'good'
```

The extended form of the adjective requires -m $b\hat{o}$ - as the positive predicate. The negative of -m $b\hat{o}$ - is expressed by $=l\check{a}$ -, and in this case the adjectival word including the extension is $\{L\}$ -toned, so the 3Sg form is $=l\acute{a}-\varnothing$. For past time, $b\hat{e}$ - replaces $b\hat{o}$ - in the positive, and $=b\hat{e}$ - is added to L-toned $=l\hat{a}$ - in the negative.

```
(476) a. g\grave{a}b-\acute{i}:^n-\acute{m} b\grave{o}-\varnothing tall-Adj-Impf be-3SgS 'He/she/it is tall.'

b. g\grave{a}b-\acute{i}:^n-\acute{m} b\grave{e}-\varnothing tall-Adj-Impf be.Past-3SgS 'He/she/it was tall.'
```

```
c. gàb-i:^n = lá-\emptyset
tall-Adj=StatNeg-3SgS
'He/she/it is not tall.'
```

```
d. g\grave{a}b-\grave{i}:^n=l\grave{a}=b\acute{\varepsilon}-\varnothing
tall-Adj=StatNeg-Past-3SgS
'He/she/it was not tall.'
```

For the use of the extended form in comparative adjectival predicates, where $b\hat{o}$ - is absent and -i:ⁿ is directly inflected for subject, see §12.1.1.

11.5 Possessive predicates

```
11.5.1 'Have' (z\dot{o}-), 'not have' (z\dot{o}:-\acute{n}-)
```

'X have Y' is expressed with X as subject and Y as object, as in English. The object is normally indefinite in form (i.e. without determiners). The predicate is a conjugated form of the defective stative quasi-verb zò- 'have', which does not combine with any suffixes marking aspect. The contexts range from (alienable) ownership ('I have/own a house'), to inalienable possession ('he has an ear/a sister'), to temporary possession ('do you have a lighter on you?').

Because $-z\dot{o}$ - is also the perfective-2 inflectional suffix with regular verbs (§10.3.1.2), one possible morphosyntactic analysis is that the 'have' verb is phonologically zero, but requires perfective-2 $-z\dot{o}$ -. Another is that the perfective-2 is structurally a combination of the main verb plus the 'have' quasiverb. ('Have' is also part of the progressive construction with -m $z\dot{o}$ -, §10.5.2.1).

In positive utterances, $z\hat{o}$ - requires existential particle $y\hat{a}$. In this combination we always get H-toned $z\hat{o}$ -. The H-toned form is also found in other contexts after a $\{L\}$ -toned constituent because of Rhythmic Tone-Raising.

```
(477) a. ?516 yà zó-m
house Exist have-1SgS
'I have a house.'
```

The negative ('not have') is $z\hat{o}$:- \hat{n} -. It contains a stative negative suffix also used with derived stative verbs (§10.5.3). Existential $y\hat{a}$ is not allowed in the negative

construction. With referentially nonspecific animate objects, either the singular or the plural may be used (478b). The issue does not arise for inanimates, which have no morphological plural marking.

- (478) a. *?óló* zò:-nú-m house have-StatNeg-1SgS 'I do not have a house.'
 - b. $p\hat{\epsilon}:(-m\hat{u})$ $z\hat{o}:-n\hat{i}-y\hat{\epsilon}$ sheep(-AnPl) have-StatNeg-3PlS 'They don't have any sheep.'

The positive and negative paradigms are in (479).

(479)	category	'have'		'not have'
,		basic	with <i>yà</i>	
	1Sg	zò-m	yà zó-m	zò:-nú-m
	2Sg	ZÒ-W	yà zó-w	zò:-ɲ-ú
	1Pl	zò-y	yà zó-y	zò:-ɲ-í
	2P1	zò-y	yà zó-y	zò:-ɲ-í
	3Sg	zò-Ø	yà zó-Ø	zò:-ń-∅
	3P1	zw-ὲ:	yà zw-ê:	zò:-ní-yè
		∼ zò-yὲ	∼ yà zó-yὲ	

There is an issue as to whether the lexical tone is H ($z\acute{o}$ -) or L ($z\acute{o}$ -). Existential $y\grave{a}$ is evidently the same morpheme as realis $y\grave{a}$, which brings out the lexical tone, {H} or {LH}, of a following perfective verb (§10.3.1.1). However, if 'have' is lexically L-toned $z\acute{o}$ -, it could easily become $z\acute{o}$ - after $y\grave{a}$ by Rhythmic Tone-Raising, just as happens with $b\acute{o}$ - 'be (somewhere)', which has many other similarities to $z\acute{o}$ -. To isolate $z\acute{o}$ -, we can remove $y\grave{a}$ by focalizing a constituent, as in WH-questions. In this context, we get L-toned $z\acute{o}$ - (480a), except when it follows a {L}-toned constituent, which triggers Rhythmic Tone-Raising (480b). So L-toned $z\acute{o}$ - (like L-toned $b\acute{o}$ - 'be') is lexically basic. Alternatively, we could take the L-tone in (480a) as due to defocalization of the verb, but this would fail to predict the H-tone in (480b).

(480) a.
$$\frac{\partial amba:}{\partial c} = ...$$
 $\frac{\partial c}{\partial c}$ $\frac{\partial c}{\partial c}$ where?=Foc goat have-2SgS 'Where do you-Sg have a goat?'

b. $\frac{\partial mba:}{\partial mba:} = ...$ $p\hat{e}:$ †zó-w where?=Foc sheep have-2SgS 'Where do you-Sg have a sheep?'

Like other statives, 'have' and 'not have' may be combined with conjugated past clitic $=b\varepsilon$ - ('X had Y', 'X did not have Y'). Depending on the context the forms are $z\hat{o}:=b\hat{\varepsilon}$ -. See §10.6.1.6 for the forms.

In relative clauses, 'have' takes H-toned form zó (§14.1.7.3).

11.5.2 $j \hat{\epsilon} l \hat{a} \sim g \hat{\epsilon} l \hat{a}$ 'hold, have'

An alternative to $z\acute{o}$ - 'have' is $j\grave{e}l\acute{a}$ - (variant $g\grave{e}l\acute{a}$ -) 'hold, have'. It is most often used in contexts of temporary possession or custodianship. In form it is a derived stative (§10.5.1), cf. regular active verb $j\grave{e}l\acute{l}$ - $y\acute{e}$ 'take hold of'. For the paradigm of $j\grave{e}l\acute{a}$ - see (396) in §10.5.1. As expected, the negative is formed with stative negative - \acute{n} -. Existential $y\grave{a}$ is present in positive clauses.

- (481) a. *ínjú yà jèlá-w mà* water Exist hold.Stat-2SgS Q 'Do you-Sg have any water (with you)?'
 - b. *ínjú jèlà-nú-m*water hold.Stat-StatNeg-1SgS
 '(No) I don't have any water (with me).'

11.5.3 'Belong to' predicates

The construction is exemplified in (482), with a question-answer sequence. The possessor ('who?', 'Seydou') is followed by the beneficiary suffix -ŋ and then the 'it is' clitic. The negation is similar, but with the (suppletive) 'it is not' clitic (482c).

- (482) a. [? $\partial l \partial^L$ $\dot{\eta} g \delta J$ $\dot{a} m \dot{u} \eta = :$ [house Prox.InanSg] who?-Benef=it.is 'This house is whose?' (= 'belongs to whom?)
 - b. $[?\partial l\partial^{L} \quad \mathring{\eta}g\delta]$ $s\check{a}yd\mathring{u}-\eta = ::$ [house Prox.InanSg] S-Benef=t.is 'This house is Seydou's.'

```
c. [?\partial l\partial^{L}] \mathring{\eta}g\delta J s\check{a}yd\mathring{u}-\eta = l\grave{a} [house Prox.InanSg] S-Benef=it.is.not 'This house is not Seydou's.'
```

If the predicated possessor is pronominal, its form is based on the postnominal alienable possessor forms, as in 'my/your-Sg cow' (§6.2.2), plus the 'it is' clitic. For example, in (483) the topical NP ('house') is inanimate singular, so the form of the 1Sg possessor predicate is based on $25m\delta$ 'my (inanimate singular possession)'. The 'it is' clitic = \therefore requires falling pitch, so there is a pitch break after the first syllable: $25m\delta = \therefore$, phonetic [$25m\delta\delta$].

```
(483) [?\partial lo^{L}] \mathring{n}go] ?omo = :: [house Prox.InanSg] 1SgP=it.is 'This house is mine.'
```

The full set of forms for 2Sg and 1Sg are in (484). Other pronominal possessor predicate forms can be constructed by analogy from the paradigm in §6.2.2.

```
(484)
            category of topic NP
                                                 'is/are yours-Sg'
                                                                              'is/are mine'
            InanSg
                                                 ó-η = ∴
                                                                              ?∌mò = ∴
                                                 5-y^n \hat{\varepsilon} = ::
            InanPl
                                                                              mi-y^n\grave{\varepsilon}=:
            AnSg

\acute{5}-y^n\grave{\varepsilon}=:
                                                                              mi-v^n\grave{\varepsilon}=:
                                                                              mi-y^n\grave{\varepsilon}-m\grave{u}=:
            AnPl
                                                 ó-mù = ∴
```

12 Comparatives

12.1 Asymmetrical comparatives

12.1.1 Comparative with conjugated adjectival predicate $(-i:^n-)$

In this construction, the 'more' particle siga is possible, but is often omitted. Instead, a conjugatable predicate adjective, with or without an adjectival extension -i: n - (glossed simply -Adj- in interlinears), is directly combined with a comparandum, in the form of a NP (or pronoun) plus purposive postposition dan (§8.3.2), here translated as 'than'. Suffix -i: n - is found with adjectives whose lexical stem ends in u or o, and with consonant-final adjectives (ban 'red')

- (485) a. [mì †dán] gàb-í:"-Ø [1Sg than] long-Adj-3SgS 'He/She is taller than I (am).'
 - b. [[mì H5z5] dàn] gàb-íⁿ-m [[1SgP Hyounger.sib] than] long-Adj-1SgS 'I am taller than my younger (same-sex) sibling (is).'
 - c. [gòlò-gòl-mù †wó] [kìlè-mù †dán] sèg-í-yⁿè [farmer-AnPl Def.AnPl] [herder-AnPl than] many-Adj-3PlS 'There are more farmers than herders.'

The paradigm of the conjugated adjective with suffix -i: n - is (486). The vowel is shortened except in the 3Sg. There is no audible distinction between -i-y and -i: n .

(486) Paradigm of Adjectival suffix -i:ⁿ-

category	form
1Sg 2Sg	-í-m -í-w¹
1Pl	-í-V ⁿ

2Sg
$$-i-y^n$$

3Sg $-i:^n$
3Pl $-i-y^n \in$

The **negative** counterpart has the normal negative adjectival predicate ('is not long', etc.) with 'it is not' -*la* (§11.4.3) plus the comparandum. The adjectival -*i*:" morpheme is optional for the stems that allow it; when present, it is heard as L-toned, unnasalized -*i*:- for all subject categories (the latter are marked on the suffix added to the 'it is not' clitic).

```
(487) \begin{bmatrix} n\grave{a} & {}^{\dagger}d\acute{a}n \end{bmatrix} = l\grave{a}-\acute{m}

" = g\grave{a}b-\grave{i}: = l\grave{a}-\acute{m}

[3Sg than] long(-Adj)- =it.is.not-1SgS

'I am not taller than he/she (is).'
```

The **past clitic** may be added to -i: The combination is pronounced -i: $-m = b\hat{e}$ - for all subject categories; the -m is probably the same as the imperfective -m in adjectival predicates with following $b\hat{o}$ - 'be' (§11.4.1). The subject is specified in the suffix on the past clitic (488a). The form may be negated (488b).

```
(488) a. [mi] † dán] gàb-i:-m = b\hat{\varepsilon}-w [1Sg than] long-be-Impf=Past-2SgS 'You were (=used to be) taller than I (was).'
```

```
b. [mì †dán] gàb-ì: = là = b\(\xi\)-w

[1Sg than] long-be=it.is.not=Past-2SgS

'You-Sg were not taller than I (was).'
```

12.1.2 Verbal predicate with sìgà 'more'

The 'more' particle siga can be used with any verbal predicate. The purposive postposition dan (§8.3.2) is used in optional 'than X' expressions, which specify the second comparandum. When the comparandum is expressed in this way, siga normally directly follows it and is prosodically grouped with it (489a,d); otherwise, it may follow another preverbal constituent (489c).

```
(489) a. săydù zá [mì †dán] sìgà L+ ?ánà-m-ù
S meal [1Sg than] more L eat.meal-Impf-3SgS
'Seydou eats more than I (do).'
```

- b. [nà †dán] sìgà zòbá-m-Ø [3Sg than] more run-Impf-1SgS 'I run more than he/she (does).'
- c. bìdé sìgà yà bìdé-Ø work(n) more Real work.Perf-3SgS 'He/She worked more (=did more work).'
- d. [mì †dán] sìgà bìdé Lbìdè-Ø [1Sg than] more work(n) Lwork.Perf-3SgS 'He/she did more work than I (did).'

12.1.3 'Surpass' (*năŋ*)

The verb *năŋ* 'pass by, go past' can be used in the sense 'surpass' with respect to some measurable quality. The comparandum is usually direct object.

- (490) a. *ó-ý yà nàŋé-m*2Sg-Acc Real pass.Perf-1SgS
 'I have surpassed you.'
 - b. [bèlé ná-ŋ] ó-ý yà nàŋé-∅ [wealth 3Sg-Poss.InanSg] 2Sg-Acc Real pass.Perf-3SgS 'His wealth has surpassed you-Sg.' (i.e., 'he has become wealthier than you.')

12.1.4 'Be bigger' (gòlóyⁿ-)

A conjugatable stem $g \partial l \delta y^n$ - means 'be bigger (than)', in various senses including size and (for people) age, as in $g \partial l \delta y^n$ -m 'I am bigger/older'. It can sometimes be translated as 'be more (than)' but the context is amount (size) rather than number. The negative counterpart is with the 'it is not' clitic (491b).

- (491) a. *yú:* [ɛ̀mà †dán] gòlóyʰ-Ø millet [sorghum than] bigger-3SgS 'Millet is more (abundant/important) than sorghum.'
 - b. $y\acute{u}$: [$\grave{e}m\grave{a}$ † $d\acute{a}n$] $g\grave{o}l\grave{o}y^n = l\acute{a}-\varnothing$ millet [sorghum than] bigger=it.is.not-3SgS

'Millet is not more (abundant/important) than sorghum.'

12.1.5 'Be better'

12.1.5.1 'Be better' (*ùdò*-)

'Be better' is expressed by a defective stative verb $\dot{u}d\hat{o}$. When a conjugated form of this verb is pronounced in isolation, it has a high tone (492). For 1st/2nd persons, the high tone is confined to the suffixal sonorant. In the 3rd person forms, it is on the o of the stem. In sentences with preverbal constituents, $\dot{u}d\hat{o}$ - is generally heard as all-low toned.

```
(492) 'be better'
```

```
1Sg ùdò-m
2Sg ùdò-w

1Pl ùdò-y
2Pl ùdò-y
3Sg ùdó-∅
3Pl ùdó-(y)è
```

The construction is $[X \ [Y \ dan] \ udó-]$ 'X is better than Y' (493). dan is glossed 'than' in interlinears in this construction, but it appears elsewhere as the purposive postposition (§8.3.2). After {L}-toned words it appears as dan.

- (493) a. *mí* [nà †dán] Lùdò-m 1Sg [3Sg than] Lbe.better-1SgS 'I am better than he/she (is).'
 - b. ná [mì †dán] Lùdò-Ø
 3Sg [1Sg than] Lbe.better-3SgS
 'He/She is better than I (am).'
 - c. mángòrò [kùdà †dán] Ludò-Ø mango [wild.grape than] Lbe.better-3SgS 'Mangoes are better than wild grapes (Lannea microcarpa).'

The **negation** is with $= l\hat{a}$ - 'it is not' and the same syntactic frame: 1Sg $\hat{u}d\hat{o} = l\hat{a} - \hat{m}$ 'I am not better', etc.

 $\dot{u}d\dot{o}$ - combines with past $=b\varepsilon$ - as $\dot{u}d\dot{o}=b\dot{\varepsilon}$ -.

12.1.5.2 'Be better' (*kày*)

An alternative 'be better' predicate is $k\grave{a}y$, which is uninflectable. The negative counterpart is $k\grave{a}y = l\grave{a}$ with no further inflection. If the subject is pronominal, it is expressed by a preceding clitic rather than suffixally. The data do not suffice to make a clear semantic difference between $k\grave{a}y$ and $\grave{u}d\grave{o}$ - (preceding section), but the examples I do have of $k\grave{a}y$ suggest a contextual sense 'be preferable, more highly valued'.

- (494) a. [nà:-nàmà †dán] pè:-nàmà kày
 [cow-meat than] sheep-meat be.better
 'Lamb meat (mutton) is better than beef.'
 - b. *ngó* dàn, [jà: á-ŋ wò] [hunger LogoSg-Poss.InanSg Def.InanSg] this.Inan than, á-ý kày gà] be.better Topic] LogoSg-Acc '(He said:) my hunger (=going hungry) is better than this.' [from (809) in Text 2]
 - c. $z\dot{u}w\dot{o}$ $b\dot{o}$ ${}^{\dagger}k\dot{a}y(=l\dot{a})$ knowledge 3PIS be.better(=Neg) 'They are (not) more knowledgeable.'

12.1.6 'Best' ($gid\acute{e} = :.$)

A variant of the noun *gìdé* 'front, forward (position)' can be used as a predicate in superlative sense. The construction is roughly of the form 'X is front', plural 'Xs are fronts', with a conjugated form of the 'it is' clitic (§11.2.1.1). The 'front' noun agrees with animate plural subjects, so I gloss it 'leader'. The basis of comparison may be added as an adjunct.

- - b. $d\partial g \delta m \hat{u} = w \delta$ $g \hat{i} d \hat{e} m \hat{u} = :$ Dogon-AnPl=Def.AnPl front-AnPl=it.is

'The Dogon (people) are the best.'

c. mí nùŋà-nùŋ gìdé=m̀ 1SgS song-singer front=it.is.1SgS 'I am the best singer.'

12.2 Symmetrical comparatives

12.2.1 'Be as much as, be as big as' (bă:)

The verb $b\check{a}$: 'be as much as, be as big as' is used in symmetrical (egalitarian) comparisons. The normal positive form for present time reference or for timeless statements is the perfective-2 $b\grave{a}$:- $z\acute{o}$ -. The very common negative equivalent, which converts a symmetrical comparison into an asymmetrical one, is perfective negative $b\grave{a}$:- $1\acute{t}$ -.

(496) a.
$$[m\grave{e}n\grave{e} \ ?\acute{o}m = \^{o}:]$$
 $[m\grave{e}n\grave{e} \ \acute{o}-ŋ = \grave{o}]$ [field 1SgP.InanSg=Def.InanSg] $[field \ 2SgP = Def.InanSg]$ be.as.much-Perf2-3SgS 'My field is as big as your-Sg field.'

Other inflected stems of $b\check{a}$: can be used in special contexts, for example with future time reference ('my sheep will be as big as your sheep next year'), which requires imperfective $b\check{a}$:-m- \grave{u} .

12.2.2 'Attain, equal' (kéw-ndí-yé, dó)

Verbs that can be used in the sense 'become equal to X' are $k \not\in w$ -ndí- $y \not\in$ 'become equal, become level' (inchoative) and $d \not\circ$ 'arrive at, attain, approach'.

12.3 'A fortiori'

A relevant construction is exemplified in (498).

```
(498)
        ózú
                        ún
                                  bèlè-ná-m,
                                  get-ImpfNeg-1SgS,
        walk(n)
                        go
                                      <sup>L</sup>dôm
        nà→
                      [zàbú
                                                 gay = la:-\emptyset
                                      Ltalk(n)
                                                 Top]=it.is.not-3SgS
        Advers
                      [running(n)
        'I can't (even) walk, not to mention (=much less) run.'
```

More generally, the construction is $[X^L dom] = l :-\varnothing$, $[X g y] = l :-\varnothing$, or combining the two $[X^L dom g y] = l :-\varnothing$. Here $[X^L dom g y] = l :-\varnothing$. Her

An informant equates gay in (498) with the Topic particle (§19.1.1).

13 Focalization and interrogation

13.1 Focalization

13.1.1 Subject focalization

The verb takes a special **subject-focalization form** (interlinears: ".SFoc") that includes specification of the relevant AMN category. The focalization form of the verb does not include pronominal-subject agreement as in main clauses. Instead, the focalized subject is separately expressed before the verb. For a NP, the preferred position is that following other full NPs and adverbs, but preceding any clitic-like pronominal object or pronominal PP that cannot be separated from the verb. However, in some examples in the data the focalized NP is clause-initial, preceding other NPs.

The two examples in (499a-b) differ only in the AMN category in the focalization form of the verb (imperfective and perfective, respectively). The focalized NP 'Seydou' follows other NPs (499a-b), but precedes a pronominal object (499c) or pronominal PP (499d).

- (499) a. [pɛ̃: †gɛ̃] săydù sèmà→
 [sheep Def.AnSg] S slaughter.Impf.SFoc
 'It's Seydou [focus] who will slaughter the sheep.'
 - b. [pè: †gé] săydù sèmè→
 [sheep Def.AnSg] S slaughter.Perf.SFoc
 'It was Seydou [focus] who slaughtered the sheep.'
 - c. săydù mì-ý dèmè→ S 1Sg-Acc hit.Perf.SFoc 'It was Seydou [focus] who hit me.'
 - d. săydù [mì Hbérná] dàmè→
 S [1Sg HDat] say.Perf.SFoc
 'It was Seydou [focus] who told me.'

If the focalized subject is a pronoun, it is expressed by the same set of **preverbal subject pronominals** that occur in nonsubject relatives of the type

'the man who(m) I saw' (§4.3.1.1, §14.1.6), e.g. 1Sg *mì* (low-toned) and 2Sg *ó* (high-toned). A low-toned subject pronominal like 1Sg *mì* or 1Pl *yè* induces a contrasting initial-syllable high tone on the focalization form of the verb (500a-b,d) by Rhythmic Tone-Raising.

- (500) a. m †ur n o: 1SgS go.Impf.SFoc 'It is \underline{I} [focus] who will go.'
 - b. [pɛ̂: ¹gɛ̂] mì ¹sɛ́mà→
 [sheep Def.AnSg] 1SgS slaughter.Impf.SFoc
 'It is I [focus] who will slaughter the sheep-Sg.'
 - c. [pè: ¹gé] ó sèmà→
 [sheep Def.AnSg] 1SgS slaughter.Impf.SFoc
 'It is you-Sg [focus] who will slaughter the sheep-Sg.'
 - d. [pè: †gé] yè †sémà→
 [sheep Def.AnSg] 1SgS slaughter.Impf.SFoc
 'It is you-Sg [focus] who will slaughter the sheep-Sg.'

A focalized subject pronoun occurs strictly in **immediately preverbal** position. It therefore follows even a pronominal object or pronominal PP (501).

- (501) a. mì-ý ó dìmê 1Sg-Acc 2SgS hit.Perf.SFoc 'It was you-Sg [focus] who hit me.'
 - b. [mì Hbéná] nà †dámè [1Sg HDat] 3SgS say.Perf.SFoc 'It was he/she [focus] who told me.'

13.1.2 Morphology of subject-focalization forms

13.1.2.1 Positive AMN categories

As noted above, in the presence of a focalized subject the verb takes a special focalization form. It is not a true participle since it does not agree morphologically with the subject (or any other NP).

In focalized clauses, marked perfective-system AMN categories (perfective-2, experiential perfect, recent perfect) are uncommon. The dominant

form of the subject-focalization form is based transparently on the simple **perfective**, i.e. on the **E-stem** of the verb. There is no pronominal-subject suffix. The **final vowel is optionally prolonged** especially with monosyllabic verbs; I take this to be an intonational prolongation (symbol \Rightarrow) and do not transcribe it except in relevant textual examples. The word is **all-low toned** in its regular form. However, the **onset is raised to high tone** after a low-toned pronominal subject or other all-low toned constituent (such as \grave{am} 'who?'), resulting in <HL> monosyllabics, HL bisyllabics, and HLL trisyllabics. In (502), the perfective (as in main clauses) is shown alongside the subject-focalization forms.

(502) Perfective subject-focalization forms of verbs

perfective	subject-focalization		gloss
	regular	after L-tone	
wέ−	wè	$W\widehat{\mathcal{E}}$	'see'
nχέ-	nọè	n效ê	'go in'
gọé-	gọè	gọê	'go out'
úr ⁿ €-	ùr ⁿ ὲ	úr ⁿ ὲ	'go'
káyé-	kàyè	káyè	'shave'
ńdέ-	ìdὲ	ńdè	'give'
<i>?ຈຸກέ-</i>	? ò ɲè	<i>າິອຸກຮ</i> ໍ	'eat (meal)'
úbέ-	ùbê	úbè	'pour'
bèlé-	bèlè	bélè	'get'
pídé-	pìdè	pídè	'shut'
tábé-	tàbè	tábè	'touch'
kún-dé-	kùn-dè	kún-dè	'put'
má:nέ-	mà:nÈ	má:nὲ	'think'
íbí-yέ	ìbì-yè	íbì-yè	'fear'
nìndíyé-	nìndìyè	níndìyè	'listen'

Subject-focalization forms based on perfective-2 -zò- and on recent perfect -zè- were elicited with difficulty: ... wó-zò '... came', ... wò-zé '... has already come'. I was unable to elicit a subject-focalization form with experiential perfect -téré-. Clearly the simple perfective forms in (503) are predominant in subject-focalization contexts.

The corresponding **imperfective** subject-focalization form of the verb is based on the **A/O-stem**, with obligatorily **lengthened final vowel**. The word is all-low toned in its regular form, but like the perfective subject-focalization form its onset is raised to high tone after a low-toned subject pronominal or other constituent.

(503) Imperfective subject-focalization forms of verbs

A/O-stem	subject-focalization		gloss
	regular	after L-tone	
wa-	wà:	wâ:	'see'
noa-	nọà:	nọâ:	'go in'
go-	gò:	gô:	'go out'
ur ⁿ o-	ùr ⁿ ò:	úr ⁿ ò:	ʻgo'
ká:-	kà:	kâ:	'shave'
nda-	ǹdà:	ńdà:	'give'
<i>?әра-</i>	?èɲà:	?ອຸກà:	'eat (meal)'
uba-	ùbà:	úbà:	'pour'
b€la-	bèlà:	bélà:	'get'
pido-	pìdò:	pídò:	'shut'
taba-	tàbà:	tábà:	'touch'
kundo-	kùn-dò:	kún-dò:	'put'
ma:na-	mà:nà:	má:nà:	'think'
ibi-ya	ìbì-yà:	íbì-yà:	'fear'
nindiyo-	nìndìyò:	níndìyò:	'listen'

Stative stems derived from regular verbs (like 'sit') can also occur in subject-focalization constructions. The verb takes an all-low toned form of the regular stative stem, with no pronominal-subject suffix. The tonal influence of a preceding low-toned subject pronoun or other constituent is as described above. Prolongation of the final vowel was observed in some tokens but is not required and appears to be intonational.

(504) Stative subject-focalization forms of verbs

stative	subject-f	ocalization	gloss	
	regular	after L-tone		
óbò-	òbò	óbò	'be sitting'	
bìyó-	bìyò	bíyò	'be lying down'	

Underived statives also occur in the subject-focalization construction and have forms comparable to those of the derived statives in (505). Lengthening of the final vowel is regular with 'be (somewhere)' and with the basic 'have' quasiverb $z\grave{o}$. With 'want', prolongation was observed in some tokens and is here taken to be intonational ($\grave{e}b\grave{a}\rightarrow$).

(505) Subject-focalization forms of underived statives

```
stative
           subject-focalization
                                        gloss
                      after L-tone
           regular
bò-
           bò:
                                        'be (somewhere)'
                       bô:
zò-
                       zô:
                                        'have'
           zò:
èbà-
           èbà
                       ébà
                                        'want'
```

In the progressive, the final inflected (auxiliary) verb takes the subject-focalization form.

```
(506) a. bìdé bìdá-m mì †jélà work(n) work-Impf 1SgS Prog.SFoc 'It's <u>I</u> [focus] who am working.'
```

Combinations including past clitic $=b\varepsilon$ - may also occur in the subject-focalization construction. Attested combinations are the past perfect and the past imperfective. Both the main verb stem and $=b\varepsilon$ - are low-toned, but the verb undergoes the usual raising of its onset to high tone after a low-toned subject pronominal or other constituent.

As usual, the past perfect is built on the bare stem of the verb, which is not lengthened. The following $=b\hat{\epsilon}$ - is prolonged intonationally in some but not all examples in the data.

```
b. mi {}^{\dagger}g\acute{o} = b\grave{e}
2SgS come.Impf=Past
'It was I [focus] who had come.'
```

The past imperfective in main clauses is a combination of imperfective allomorph -m plus past $=b\hat{e}$ - (§10.6.1). In the subject-focalization construction, the -m disappears, but the final vowel is lengthened consistently in

monosyllabic stems and often in longer stems. (The same phonological mutations occur in the past imperfective negative in main clauses, §10.3.3.4.)

```
(508) a. \( \delta \) \( \bar{w\oldsymbol{o}} := b\oldsymbol{e} \)
2SgS \( \text{come.Impf=Past} \)
'You-Sg [focus] were coming.'
b. \( \bar{n\oldsymbol{a}m\oldsymbol{a}} \) \( \bar{n\oldsymbol{b}}\tilde{c} \)
meat \( 1SgS \) \( \text{eat.meat.Impf=Past} \)
'I [focus] was eating meat.'
```

13.1.2.2 Negative AMN categories

The subject-focalization forms of negative verbs follow the general pattern seen above. The verb is inflected for AMN category but not for pronominal-subject, and is all-low toned unless its onset is raised under the influence of a preceding low-toned subject pronominal or other constituent. Intonational prolongation is possible but not required. The basic forms for regular verbs are perfective negative *-lì* and imperfective negative *-nàn*.

```
(509) a. 6
                       ùn-lì
                       go-PerfNeg.SFoc
           'It's you-Sg [focus] who did not go.'
       b. mì
                       †ún-lì
                       go-PerfNeg.SFoc
           'It's I [focus] who did not go.'
       c. ó
                       ùn-nàn
                       go-ImpfNeg.SFoc
           2SgS
           'It's you-Sg [focus] who won't go.'
       d. mì
                       †ún-nàn
           1SgS
                       go-ImpfNeg.SFoc
           'It's I [focus] who won't go.'
```

The stative negative has -n (510).

The underived (lexical) and irregular stative negatives are shown in (511). Intonational prolongation is possible but not required.

(511) Subject-focalization forms of underived negative statives

```
subject-focalization
negative
                                                                 gloss
                  regular
                                    after L-tone
ònú-
                  ònù
                                     ónù
                                                                 'not be (somewhere)'
zò-ń-
                  zò-n
                                    zó-'n
                                                                 'not have'
\hat{\varepsilon}b\hat{u} = l\acute{a}-
                 \hat{\varepsilon}b\hat{u} = l\hat{a}
                                    \varepsilon b \hat{\mathbf{u}} = l \hat{\mathbf{a}}
                                                                 'not want'
```

The past perfect negative has $-1 = b\hat{\epsilon}$ (512).

The past imperfective negative has $=b\acute{a}-l\grave{i}$ following a lengthened form of the stem, as in main clauses (§10.6.1.2).

13.1.3 Object focalization

The verb has its regular main-clause form, including AMN and subject-pronominal agreement. The focalized object may have an accusative suffix, just as in main clauses. The preferred position for a focalized object is following other NPs and adverbs (514c), but preceding a pronominal PP (514d). These features do not clearly characterize a transitive clause as containing a focalized object.

However, there are two clues suggesting the presence of a focalized constituent other than the verb: a) **absence of realis particle** $y\hat{a}$ in indicative statements with past or present time reference; and b) the **all-low toned form of the final inflected verb**.

(514) a.
$$n g \delta$$
Prox.InanSg

Left Perf-1SgS

'This [focus] is what I got (or: found).'

- b. <u>n̂gó-ỳ</u>
 Prox.InanSg-Acc

 'This [focus] is what I know.'

 Lawà-m-∅
 know-Impf-1SgS
- c. săydù ŋgó L'ʔɨŋè-Ø
 S Prox.InanSg Leat.Perf-3SgS
 'This [focus] is what Seydou ate.'
- d. <u>ngó [mì Hbéná]</u> Ldàmè-Ø
 Prox.InanSg [1Sg HDat] Lsay.Perf-3SgS
 'This [focus] is what he/she told me.'
- e. ó-ý dùnó-m ^Ljêlà-m
 2Sg-Acc look.for-Impf ^LProg-1SgS
 'It's you-Sg [focus] that I am looking for.'

13.1.4 Focalization of PP or other adverb

As with object focalization, there is no sharp distinction in form between focalized and unfocalized constructions. A focalized PP or other adverb takes its usual form, as does the verb. The absence of realis $y\hat{a}$ where it would otherwise be expected (515a), and an the all-low toned contour on the verb (515b), are clues that a constituent other than the verb is focused.

Instrumental examples are in (515).

- (515) a. [[séw wò] mì] bìdé-ḿ Lzò-ẁ [[ax Def.InanSg] with] work-Impf LProg-2SgS 'It's with the ax [focus] that you-Sg are working.'
 - b. [[séw wò] mì] Lbìdè-m [[ax Def.InanSg] with] Lwork.Perf-1SgS 'It's with the ax [focus] that I worked.'

A dative example is (516).

(516) [săydù bèrⁿà] ^Ltọè-m [S Dat] ^Lsend.Perf-1SgS 'It was to Seydou [focus] that I sent (it).' A locative example is (517).

```
(517) [[[mì] Hdé:] Lmènè] nà] Lgòlà-m-Ø [[[1SgP] Hfather] Lfield] Loc] Ldo.farm.work-Impf-1SgS 'It's in my father's field [focus] that I will farm.'
```

13.1.5 Focalization of postpositional complement...not!

In PPs, it is not possible to focalize only the NP complement of the postposition. Instead, the entire PP is focalized. See just above.

13.2 Interrogatives

13.2.1 Polar (yes/no) interrogatives (mà)

The particle $m\grave{a}$ is added to a main clause to produce a yes/no (polar) interrogative. The pitch is variable across examples, as we would expect from a pragmatically sensitive particle in clause-final position. Intonational prolongation ($m\grave{a}\rightarrow$) is possible, but is most common in nonfinal (non-prepausal) position, see below. Allowing for intonational modifications, the basic phonological tone seems to be low. For example, in (518c), where $m\grave{a}$ follows a word ending in high tone, I do not hear a particularly high pitch on $m\grave{a}$ of the sort that would indicate tone spreading from the preceding word onto the particle.

- (518) a. $\not\in w$ $\not un-m-\dot uw$ $m\grave a$ tomorrow go-Impf-2SgS Q 'Are you-Sg going tomorrow?'
 - b. [[dàmá wó-ŋ] nà] àrⁿùŋ tégè = bè-Ø mà [[village 2PlP-InanSg] Loc] rain rain.fall=Past-3SgS Q 'Has it rained in your-Pl village?'
 - c. wò-lí-Ø mà come-PerfNeg-3Sgs Q 'Didn't he/she come?'

Yes/no questions provide the addressee with a choice between two polarities (positive, negative) for the relevant eventuality. Both poles of a question may be overtly uttered (519). When *mà* is nonfinal (i.e. not followed by a pause), it is

usually prolonged intonationally (symbol \rightarrow). In this context, $m\grave{a}$ can be interpreted either as a polar interrogative (bracketed with the clause to its left) or as the disjunction 'or' linking the two clauses. This raises a general problem (as for other Dogon languages) as to whether the polar interrogative and the disjunctive particle are meaninfully distinguishable. For more on disjunctive 'or' see §7.2.1.

```
(519) wó-m-ùw mà→ wò-nán-ù come-Impf-2SgS Q come-ImpfNeg-2SgS 'Are you-Sg coming, or aren't you coming?'
```

As in many languages, an explicit polar interrogative morpheme is not obligatory in functionally yes-no questions. An alternative in Yanda Dom is to utter the clause in its usual assertive form, but with an intonational rise on the final syllable.

A polar interrogative clause ending in $m \grave{a} \rightarrow$ can function as a complement clause with a main-clause verb 'not know (that/whether ...)'. For examples see \$17.2.1

WH interrogative clauses (i.e. with 'who?', 'where?', etc.) may also end in *mà* or in a final-syllable intonational rise, though these indicators of interrogation are somewhat redundant in this case.

13.2.2 Content (WH) interrogatives

These interrogative stems are variously nominal ('who?', 'what?'), adverbial ('how?' etc.), or adjectival ('which?'). The syntax of the interrogative clause is predictable from the stem-class category of the interrogative stem. The interrogative word or phrase is **focalized**. This is particularly relevant to 'who?' or 'what?' as clause subject, which requires the subject-focalization form of the verb as described in §13.1.

The clause-final question particle $ma \rightarrow$ is optionally added to content interrogative clauses.

13.2.2.1 'Who?' (àm)

The basic 'who?' stem, restricted to human referents, is \grave{am} . A following verb or other morpheme may get a high tone by Rhythmic Tone-Raising. The accusative form is \grave{am} -f:. In $\check{am} = ...$ 'who is it?' with the 'it is clitic', phonetic $[\grave{am}\check{mm}]$, \grave{am} behaves like underlying $/\check{am}$ / with rising tone. A possessor form \grave{am} - \acute{un} plus the same 'it is' clitic produces the possessor ('Y belongs to whom?')

predicate $\grave{am}-\acute{u\eta}=:$, phonetic $[\grave{am\acute{u}}\bar{\eta}\grave{\eta}]$. Where the referent is understood to be nonsingular, the plural form $\grave{am\acute{v}}\grave{\epsilon}$ may be used (compare dialectal English who all?).

```
(520) a. àm L<sub>1</sub>pílè who? Lfall.Perf.SFoc 'Who fell?'
```

- b. àmíyè Lpìlè who.Pl? Lfall.Perf.SFoc 'Who-Pl fell?'
- c. $\check{a}m = \therefore$ who?=it.is'Who is it?'
- d. [èbà †ná] àm-í: Lwè-w [market Loc] who?-Acc Lsee.Perf-2SgS 'Who did you-Sg see in the market?'

For \grave{am} and plural $\grave{amiy}\grave{e}$ as adjectives in the sense 'which?' with animate nouns, see §13.2.8, below.

```
13.2.2.2 'What?' (?ànè, cì-?ànè), 'with what?', 'why?'
```

The interrogative stem 'what?' is $\frac{\partial \hat{p}}{\partial t}$ (contrast perfective $\frac{\partial \hat{p}}{\partial t}$ 'ate'). It is optionally extended as $\frac{\partial \hat{p}}{\partial t}$ with $\frac{\partial \hat{p}}{\partial t}$ (thing'. Both the simple and extended variants can refer to nonhuman animals as well as to inanimates.

- (521) a. ngó n
 - b. ?ə̀nè L?ə̀nè-w what? Leat.Perf-2SgS 'What did you-Sg eat?'
 - c. ci-lightarrow 6-lightarrow L biliarrow thing-what? 2Sg-Acc L get.Perf.SFoc 'What got you-Sg?' (= 'What has happened to you?',

I was not able to elicit a plural form. However, a conjunction of the type 'what and what?' is in use when referring to a multiplicity of object types.

(522)
$$\check{\epsilon}$$
: $[[ci-?\grave{\partial}n\grave{e} \quad ^\dagger mi \rightarrow] \quad [ci-?\grave{\partial}n\grave{e} \quad mi \rightarrow]]$
Prox.InanPl [[thing-what? and] [thing-what? and]]
'These (things) are what and what?'

Not surprisingly, the instrumental form (§8.1.2) of 'what?' is used to inquire about the instrument or material used in an activity (523).

Similarly, 'why?' is expressed as 'for what?' (524), with purposive postposition dan (§8.3.2). Another 'why?' expression is $?\partial n\dot{c} \uparrow n\hat{r}$.

13.2.2.3 'Where?' (*àmbá:*)

The 'where?' stem is àmbá:. It is common in adverbial use with a motion verb (525a), and can be made predicative by adding a conjugated form of bò- 'be (somewhere)' (525b).

```
(525) a. àmbá: Lùn-m-ù where? Lgo-Impf-2SgS 'Where are you-Sg going?'
```

```
b. àmbá: bò-y
where? be-2PIS
'Where are you-PI?'
```

An informant rejected the (redundant) use of locative postposition with 'where?' (#àmbá: nà).

'It is where?' (= 'where is it?') is $\grave{ambá}$: = \therefore , pronounced with dying-quail intonation on the final vowel. This form can also be used to overtly focus 'where?'.

```
13.2.2.4 'When?' (à:r<sup>n</sup>à, à:r<sup>n</sup>à gá)
```

'When?' is $\grave{a}:r^n\grave{a}$, which can be extended by adding the Temporal (elsewhere also Adverbial) postposition (§8.2.14) to form $\grave{a}:r^n\grave{a}$ $g\acute{a}$.

```
(526) a. [à:r<sup>n</sup>à †gá] [yàndà †ná] wò-m-ù [when? Temp] [Y Loc] come-Impf-3SgS 'When are you-Sg coming to Yanda?'
```

```
b. \grave{a}:r^n\grave{a}=: when?=it.is 'When is it?'
```

```
13.2.2.5 'How?' (ànjă:)
```

The basic 'how?' adverbial interrogative is ànjă:.

(527) [yèndù †wó] ànjă: ^Lyèdè-m-ì
[basket Def.InanSg] how ^Lfix-Impf-1PlS
'How are we going to fix the basket?'

ànjă: can be used with the 'do' verb kán in the sense 'do what?', where the expected reply is the description of an action.

The combination of 'how?' and 'do' can also be used in a subordinated clause ('doing how?') with same-subject subordinator (§15.2.3), as in (529).

(529) [ànjă: kàrⁿ-ɛ́:] yé ^Lgò-m-ìy [how? do-NonP.and.SS] 1Pl ^Lgo.out-Impf-1PlS '(By) doing what (=how) are we going to get out?'

13.2.2.6 'How much/many?' (ànà)

With $\frac{\partial n}{\partial t}$ 'how much?' or 'how many?', if the noun denoting the unit type or substance is overt, it precedes the interrogative (animate nouns take plural -mu). The noun retains its usual tones. The interrogative may follow in the unprefixed form $\frac{\partial n}{\partial t}$, or (often) it takes a prefixal classifier from the set also used by numerals (§4.7.1.2). The prefixed inanimate form is $\frac{\partial n}{\partial t}$. The animate plural form is either $\frac{\partial n}{\partial t}$ (pronounced $\frac{\partial n}{\partial t}$) with a glottal stop separating the two $\frac{\partial n}{\partial t}$ vowels) or $\frac{\partial n}{\partial t}$. The initial high tone on $\frac{\partial n}{\partial t}$ in $\frac{\partial n}{\partial t}$ is due to the lowtoned classifier.

```
(530) a. [pɛ̀:-mù á-ànà] L²bbɛ̀-w
[sheep-AnPl how.many?] Lbuy.Perf-2SgS
'How many sheep did you-Sg buy?'
```

```
b. wó [nèm yè-áŋà] zò-y
2Pl [salt Inan-how.much?] have-2PlS
'How much salt do you-Pl have?'
```

The distributive reduplication àŋà-àŋà is used to ask 'how much?' per unit (e.g. of sale).

The ordinal is <u>ànày-nò</u> or <u>ànà-nè</u> 'how-many-eth?' (French *quantième?*).

13.2.2.7 'Which?' (àngó, etc.)

àngó and the associated forms meaning 'which?' are modifying adjectives that may follow a noun (or a fuller core NP). The preceding noun is tone-dropped as usual with nouns modified by adjectives: ?śló 'house', ?èlò àngó 'which house?'. The forms of 'which?' agree with the referent in animacy and number (531). For animates, the singular variant àm and the plural form àmíyè are identical to the corresponding 'who?' interrogatives. In animate plural NPs, plural suffix -mu is optionally present on the noun preceding àmíyè.

```
(531) 'Which?'

\[
\text{\rightargo}{\text{\lambda}ng\columnum} & \text{inanimate singular} \\
\text{\rightargo}{\text{\lambda}m\columnum} & \text{animate plural} \\
\text{\rightargo}{\text{\lambda}m\columnum} \text{\rightargo} & \text{animate singular (cf. \text{\rightargo}m\cdot\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnum\columnu\columnum\columnum\columnum\columnum\columnum\columnu\columnu\columnu\columnu\colum
```

For the animate forms, compare demonstrative $\partial ng\hat{\epsilon}$ 'this', plural $\partial miy\hat{\epsilon}$ (§4.4.2.1).

Examples are in (532).

- (532) a. [kòdò^L àŋgó] èbà-w [calabash^L which?.InanSg] want-2SgS 'Which calabash do you-Sg want?' (kòdò)
 - b. [nà:-mù^L àmíyɛ] sɛmà-m-ìy
 [cow-AnPl^L which?.AnPl] slaughter-Impf-1PlS
 'Which cows will we slaughter?'

The partitive construction 'which of/from (a set)?' is expressed by combining the appropriate 'which?' form with a locative PP (533). The PP here is tonally independent of the 'which?' form.

13.2.3 Embedded interrogatives

Interrogatives are commonly embedded, especially with 'know' or 'be aware (of)' in the higher clause.

Two types of embedded polar (yes/no) interrogatives are in (534). In (534a), the pronominal subject of the embedded clause is expressed with quotative subject (QuotS) wà (§17.1.2), and the verb ('come') is not inflected for pronominal-subject category. In (534b), by contrast, the embedded interrogative has exactly the same main-clause form, including pronominal-subject inflection on the verb, that it would have if not embedded ('Are they here, or not?'). In context, the truth of the embedded clause is presupposed in (534a) but not in (534b), but this distinction (crucial in English, hence that versus whether) is not important in Yanda Dom.

(534) a.
$$[mi] \stackrel{H}{d}\acute{e}:]$$
 $[mi] \stackrel{H}{w}\acute{a}\rightarrow]$ $[y\grave{a} \quad w\acute{e} \quad m\grave{a}\rightarrow]$ $[1SgP \stackrel{H}{f}ather]$ $[1Sg \stackrel{H}{Q}uotS]$ $[Real \quad come.Perf \quad Q]$ $s\grave{o}: \quad z\acute{o}-\grave{n}-\varnothing$ awareness have-StatNeg-3SgS

'My father is not aware that I have come.'

The following embedded content (WH) interrogatives should be understood to be followed by, and embedded under, 'I don't know...' (zùwò-rá-m) or a similar phrase.

In one construction, the embedded clause has its normal main-clause interrogative form, including the relevant WH interrogative like 'who?' (535).

(535) (I don't know...)

- a. àm †wô: mà→ who? come.Impf.SFoc Q '... who is coming.'
- b. cì-?ànè L+?ánà-m-ì mà→
 what? Leat-Impf-1PIS Q
 '... what we will eat.'
- c. àmbá: b-è: mà→ where? be Q '... where they are.'

In the alternative construction, the WH interrogative is replaced by the corresponding semantically light noun ('who?' \rightarrow 'person', 'what?' \rightarrow 'thing', 'where?' \rightarrow 'place', 'when?' \rightarrow 'time', etc.). The embedded interrogative clause is converted into a relative clause with this light noun as (low-toned) head. The construction is therefore literally of the type 'I don't know the person who... (the thing that..., the place where ...)'.

(536) ('I don't know...')

- a. $\frac{\partial m \partial^{L}}{\partial m \partial^{L}}$ $\frac{\partial \partial m}{\partial m \partial m}$ be $\frac{\partial m \partial^{L}}{\partial m \partial m}$ be '...the place where you-Sg are'
- b. $n\grave{o}^{\mathrm{L}}$ $w\acute{o}$: $g\grave{\varepsilon}$

person^L come.Impf.Rel.AnSg Def.AnSg '...the person who will come'

14 Relativization

14.1 Basics of relative clauses

The following are the major structural features of relatives clauses in Yanda Dom.

- there is no relative morpheme;
- the regular verb of a main clause (inflected both for AMN and pronominal subject) is replaced by a relative verb that includes AMN marking;
- for negative categories, and some marked perfective categories, the form (mainly tonal) of the relative verb is different in subject and nonsubject relatives;
- imperfective positive (but not other) relative verbs show **participle-like** agreement with the animacy and number categories of the head NP;
- the head NP is seemingly bifurcated into an **internal head** consisting maximally of N-Adj-Num plus a possessor, and a **NP-tail** following the relative verb and consisting of determiners and non-numeral quantifiers ('each', 'all'); the determiners agree with the head NP in animacy and number;
- the internal head is **subject to tone-dropping**;
- nonpronominal possessors, even if adjacent to the possessed NP (i.e.
 in alienable possession), are not included in the tone-dropping domain,
 but they lose their power to control a tone overlay on the possessed NP
 when the latter is relative head;
- **proclitic pronominal possessors** (which are obligatory in inalienable possession) are tone-dropped along with the possessed noun;
- in non-subject relatives (those whose head NP is not the subject of the relative clause), if the subject is pronominal it is expressed by a set of subject pronominals **proclitic to the verb**, some but not all of which are low-toned;
- if a **possessor** is the head, it takes regular internal-head form, but it no longer controls a tone overlay on the possessed NP, which reverts to its unpossessed form;
- when a NP **complement of a postposition** is relativized on, the postposition is either omitted or appears in its usual postnominal position, in L-toned form that could be interpreted either as lexical or as due to its being included in the domain of tone-lowering.

14.1.1 Coordinated relatives with a shared head

Instead of two relatives with a shared head NP, when two same-subject clauses are involved the first is expressed as a same-subject subordinated clause, with $-\acute{e}: \sim -\acute{e}:$ on the verb (§15.2.3), or some similar chaining form. Therefore only the final verb has relative form. For examples see §14.1.8 below.

14.1.2 Tone-dropping on the internal head in a relative clause

Fieldwork on relative-clause tone-dropping was difficult for Yanda Dom especially in connection with internal head NPs that contain numerals and other elements. This is probably because of the extra prefix that adds an extra syllable to numerals in this language. My first informant would typically pronounce the tones on the same sequence differently in repetitions, making it difficult to detect a basic pattern. Some occurrences would sound like independent NPs (not relative heads), others would show systematic tone-lowering, and others were intermediate. My second informant had much more consistent tone patterns and I base the analysis chiefly on data from him. For him, the noun and all postnominal elements within the internal head NP were subject to tone-dropping (if not already tone-dropped), except that H-toned classifying prefixes on numerals often escaped tone-dropping, i.e. functioning as tiny, monosyllabic islands.

In the formulae in (537), the middle column shows the form taken by a NP as internal relative-clause head. A tonosyntactic superscript attached to a bracketed phrase is understood to take the entire bracketed string as its domain. For example, $[N \ Adj^L]$ is understood to be expressed as $[N^L \ Adj^L]$. $\subset ... \supset$ enclose tonosyntactic islands, i.e. strings that resist further tonosyntactic targeting.

(537)	regular	as internal head NP	gloss
	a. N → N ^L gà: ⁿ ?ớló pè: nà:	gà: ^{nL} ?Əlò ^L pè: ^L nà: ^L	'cat' 'house' 'sheep' 'cow'
	b. $[N^L Adj] \rightarrow [N Adj]^L$ $g\grave{a}:^{nL} j\grave{e}m\acute{e}$	[gà: ⁿ jèmè] ^L	'black cat'

```
gà:<sup>nL</sup> pílè
gà:<sup>nL</sup> pèy
                                                      [g\grave{a}:^n p\grave{i}l\grave{\varepsilon}]^{\mathrm{L}}
                                                                                                      'white cat'
                                                      [g\grave{a}:^{n}p\grave{\varepsilon}y]^{\mathrm{L}}
                                                                                                      'old cat'
c. animate plural N-mu \rightarrow N-mu^{L}
                                                       gà:"-mù<sup>L</sup>
        gà:<sup>n</sup>-mù
                                                                                                      'cats'
                                                       pê:-mù<sup>L</sup>
        pè:-mú
                                                                                                      'sheep-Pl'
                                                       nà:-mù<sup>L</sup>
                                                                                                      'cows'
        nà:-mù
d. [N^L Adj-mu] \rightarrow [N Adj-mu]^L
       gà:<sup>nL</sup> jèmé-mù
gà:<sup>nL</sup> pílè-mù
gà:<sup>nL</sup> pèy-mù
                                         [gà:" jèmè-mù]<sup>L</sup>
[gà:" pìlè-mù]<sup>L</sup>
[gà:" pèy-mù]<sup>L</sup>
                                                                                                      'black cats'
                                                                                                      'white cats'
                                                                                                      'old cats'
e. [N \text{ Num}] \rightarrow [N (\subset \text{Prefix-}) \text{Num}]^{L} \text{ or } [N (\text{Prefix-}) \text{Num}]^{L}
        ?áló yè-nó:
                                                      [?àlò ⊂yè-⊃ nò:]<sup>L</sup>
                                                                                                      'two houses'
                                                      [?àlò yè-nò:]<sup>L</sup>
                                                      [àn-mù ⊂bó-⊃kùlè]<sup>L</sup>
        án-mù (bó-)kúlé
                                                                                                     'six men'
                                                      [àn-mù (bò-)kùlè]<sup>L</sup>
        án-mù (á-)kúlé
                                                      [àn-mù (Cá-⊃)kùlè]<sup>L</sup> 'six men'
                                                      [àn-mù (à-)kùlè]<sup>L</sup>
f. [N^L \text{Adj Num}] \rightarrow [N \text{Adj } (\subset \text{Prefix-})\text{Num}]^L
                                                                                 or [N Adj (Prefix-)Num]<sup>L</sup>
        g\grave{a}:^{nL} \grave{j}\grave{e}m\acute{\epsilon}-m\grave{u} (\acute{a}-)n\acute{o}: [g\grave{a}:^{n}\grave{j}\grave{e}m\grave{\epsilon}-m\grave{u} (\subset \acute{a}-\supset)n\grave{o}:]^{L}
                                                                                                      'two black cats'
                                                      g\grave{a}:^{nL} j\grave{e}m\grave{e}-m\grave{u} (\grave{a}-)n\grave{o}: " " [g\grave{a}:^n p\grave{i}l\grave{e}-m\grave{u} (\subset \acute{a}-\supset)n\grave{o}:]^L
        gà:<sup>nL</sup> pílè-mù á-nó:
                                                      gà:nL pìlè-mù (à-)nò:L " "

[gà:n pòu - ] " "
                                                      [g\grave{a}:^n p\grave{e}y-m\grave{u}\ (\subseteq \acute{a}-\supseteq)n\grave{o}:]^L
                    pèy-mù á-nó:
                                                      gà:<sup>nL</sup> pèy-mù (à-)nò: L " " "
g. [N Poss] ] \rightarrow [N Poss]<sup>L</sup>
                                                       [?\partial n\hat{\varepsilon} m\hat{\imath} - y^n\hat{\varepsilon}]<sup>L</sup>
        ?ánέ mí-y<sup>n</sup>è
                                                                                                      'my goat'
```

Now consider the NPs with **preposed possessors** in (538), and the form they take as relative-clause heads. A double strike-through as in $\subseteq Poss \supseteq {}^{H}N^{L}$ indicates cancellation of an earlier tonosyntactic overlay.

(538) regular head NP gloss

A nonpronominal possessor like 'chief' in (538a) is not subject to tone-dropping controlled by the relative clause. However, the possessed noun is subject to this tone-dropping, erasing (or blocking) the possessor-controlled overlay. In (538a), 'house' would be $\{L\}$ -toned regardless of which controller was operative. However, in (538b) the possessed noun 'father' cancels its possessor-controlled $\{H\}$ overlay to be tone-dropped by the relative clause.

The same thing happens in (538c), but now the preposed possessor is pronominal. This sequence occurs only in inalienable possession (kin terms). A preposed pronominal possessor is included in the domain of tone-dropping controlled by the relative clause

In (538d), we have stacked possession. The subordinated possessor ('your father') is not subject to tone-dropping controlled by the relative clause, so I use island notation ⊂Poss⊃. The higher possessed noun ('house') is tone-dropped, but there is no way to determine whether this is controlled by its possessor or by the relative clause, so I hedge by putting the ^L superscript on both sides.

The formulae above can be illustrated with a few actual examples here. (539a) illustrates the optional tone-dropping of the postnominal possessor ('your'). (539b) shows that a preposed nonpronominal possessor ('chief') is not tone-dropped, though the possessed noun ('house') is. In this example, the possessor-controlled {L} on 'house' is replaced by a homophonous {L} controlled by the relative clause. A clearer example of this cancellation is (539c), where the possessor-controlled {LH} on 'uncle' is replaced by the relative-controlled {L}. This example, and (539d) which adds an adjective, also show that a preposed pronominal possessor (which occurs with kin terms) is tone-dropped along with the noun (and adjective), though this is audible only for a H-toned pronoun like 2Sg δ .

(539) a.
$$[[?\grave{o}]^L$$
 $pil\grave{e}-z\grave{o}$ $w\grave{o}]$ $[[house 2SgP-InanSg]^L$ fall-Perf2.Rel Def.InanSg] $\grave{a}mb\acute{a}$: $\grave{b}\grave{o}-\varnothing$

```
where? be-3SgS 'Where is [your-Sg house that fell]?' (< ?616 6-n 'your house')
```

- c. $[\grave{o} \quad \stackrel{\text{LH}}{\stackrel{\text{LH}}{\text{lèzu}}} \stackrel{\text{lèzu}}{\stackrel{\text{LH}}{\text{uncle}}} \stackrel{\text{píl\'e}}{\text{fall.Perf.Rel}} \quad \stackrel{\text{g\'e}}{\text{Def.AnSg}}]$ $\stackrel{\grave{a}mb\acute{a}:}{\text{amb\'e}:} \quad \stackrel{\grave{b}\grave{o}-\varnothing}{\text{be-3SgS}}$ 'Where is [your uncle who fell]?' ($<\acute{o}$ $\stackrel{\text{LH}}{\text{lèz\'u}}$ 'your-Sg uncle')
- d. [ò lèzù gòmò]^L pílé gè]
 [2SgPoss Huncle nasty]^L fall.Perf.Rel Def.AnSg]
 àmbá: bò-Ø
 where? be-3SgS
 'Where is [your evil uncle who fell]?' (<ó lèzù gòmò 'your-Sg nsaty uncle')

To repeat, elicitation with another informant produced a more varied (and less systematic data set).

14.1.3 Restrictions on the head NP in a relative clause

A personal pronoun may not head a relative, but it may occur as an independent pronoun in apposition to a relative, which may be headless (540a) or headed by a noun such as 'person'.

- (540) a. $y\acute{e}$ [$\mathring{n}g\acute{i}$ $b\acute{o}$ -m= \mathring{o} :] $\mathring{a}b\mathring{a}$ -y- \acute{i} 1Pl [here be.Rel=Def.AnPl] accept-PerfNeg-1PlS

 'We who are here do not accept (=we refuse).'
 - b. yé [ó nò^L gòlò gòlâ: gè]

 1Pl [2Sg person^L farming do.farm.work.Impf.Rel Def.AnSg]

 La bàdà-m-ì

 Lhelp-Impf-1PlS

 'We will help you-Sg the person who is farming.'

In (819) in Text 3, 'what I have brought and come', the head NP 'thing' belongs logically to the initial VP in a chain.

14.1.4 Relative clause with conjoined NP as head

The elicited example (541) has a conjoined head NP. I heard numerous repetitions of it and there was no sign of tone-dropping on either coordinand. I conclude that this is a tonological island that is impervious to relative-clause-head tone-dropping.

```
(541)
        [[[yè-mù
                          †mí→
                                    [án-mù
                                                   mì→]]
        [[[woman-AnPl
                                   [man-AnPl
                                                   and]]
                          and]
        z\acute{a}:niy^n\grave{a}-m=\grave{o}:
                                      àmbá:
                                                 b-è:
        squabble-AnPl=Def.AnPl]
                                     where?
                                                 be-3PIS
        'Where are the women and men who squabbled?'
```

Examples like this are uncommon, since most cases where the English translation has a conjoined head NP are expressed in Yanda Dom with two distinct NPs. For example, 'the women and men who eat here' is easily rephrased as 'the women who eat here and the men who eat here'. This rephrasing is not possible in (541), which involves reciprocal activity.

14.1.5 Headless relative clause

A predictable, contextually understood, or unspecified head NP may appear as a semantically light noun ('thing', 'person', 'critter', 'place') (542a). Alternatively, it may be omitted entirely, resulting in a superficially headless relative (542b).

- (542) a. [kì^L mì ébà wò] ŋgí ònú-∅ [thing^L 1SgS want.Rel Def.InanSg] here not.be-3SgS 'The thing that I want isn't here.'
 - b. [mì ébà wò] ŋgí ònú-Ø [1SgS want.Rel Def.InanSg] here not.be-3SgS 'What I want isn't here.'

For headless relatives as complements, see §17.5.1 ('consent') and §17.5.2 ('want'). For headless relatives as adverbial clauses, see §15.4.3.

14.1.6 Preverbal subject pronominal in relative clause

In non-subject relatives, if the subject happens to be a pronoun it is expressed by a preverbal pronominal clitic, immediately adjacent to the relative verb. The forms are those in (543). Note that some are high-toned (2Sg, 3Logophoric) and others low-toned. The same pronominal forms are used in inalienable possessor function (with kin terms); see (186) in §6.2.4.1.

(543) Subject pronouns in relative clauses

```
1Sg mì
2Sg δ

1Pl yè
2Pl wò
3Sg nà
3Pl bò
Logo (Sg=Pl) á
```

Some examples of non-subject relatives with a pronoun as subject are in (544).

- (544) a. ?ðlò^L mì ébé wò house^L **1SgS** buy.Perf.Rel Def.InanSg 'the house that I bought'

 - c. $\partial m \partial^L$ [pè: †gé] ó
 place^L [sheep Def.AnSg] **2SgS**sémá-ŋ wò
 slaughter-Impf.Rel.InanSg Def.InanSg
 'the place (where) you-Sg will slaughter the sheep-Sg'

The only form that can intervene between a preverbal subject pronoun and the relative verb is a preceding chained verb; see §14.1.8.

14.1.7 Relative verb

The relative form of the verb lacks pronominal-subject suffixation. It does mark the AMN category. In the imperfective positive there is also partial marking of the intrinsic nominal category (animacy/number) of the head NP, but this category is expressed more reliably by a following determiner, which can follow a relative verb of any AMN category. I therefore do not refer to the Yanda Dom relative verb as a participle.

14.1.7.1 Relative forms of positive perfective-system verbs

For the regular perfective (positive), the form used in relative clauses (hereafter: **perfective relative**) is segmentally the same as the **E-stem**, as in the regular conjugated perfective. There is some fluctuation (probably low-level) between e and e0, between e0 and e1, and between e2 and e2, in the presence of a following definite morpheme. However, the data overall point to the E-stem, and even the variants with back rounded vowel respect the lexical ATR value.

The perfective relative verb is identical to the conjugated main-clause perfective stem. Nonmonosyllabic {H}-toned verbs tend to have declining pitch from one syllable to the other(s), and I initially transcribed them as H.L or trisyllabic H.L.L, but in careful pronunciation the {H} melody can be heard.

There is no distinction in form between nonsubject and subject relative perfective verbs. For animate plural head NP, the usual animate plural suffix $-m\dot{u}$ is added to the verb.

(545) Perfective relative verb

	bare stem	perfective	Perf.Rel	gloss
a.	wó	wé-	wé	'see'
	yέ	yέ	yέ	'weep'
b.	nó	nχέ-	nọé	'hear'
	nó	n ₂ έ-	ngέ	'go in'
	gó	goé-	goé	'go out'
	tó:	toé-	toé	'spit'
c.	ká:	káyé-	káyé	'shave'
	mă:	màyé-	màyé	'make (bricks)'
	nă:	nàyé-	nàyé	'spend night'

```
d. ún
                      úr<sup>n</sup>έ-
                                        \acute{u}r^n\acute{\varepsilon}
                                                         'go'
     ńdέ
                      ndέ-
                                                         'give'
                                        ndέ
     ?έΙέ
                      ?álέ−
                                        ?∮1€
                                                         'go up'
                                                         'touch'
     tábú
                      tábé-
                                        tábé
                                        óbí-yé
                                                         'sit down'
     óbí-yó
                      óbí-yé
                                                         'leave'
e. dògó
                      dògέ
                                        dògέ
     nìndíyó
                     nìndíyé-
                                        nìndíyé
                                                         'listen'
                     (~ níndíyé-)
     bármέ
                      bármέ-
                                        bármé
                                                         'be wounded'
```

The tones of the relative verb are not affected by a preceding all-low toned word. Examples showing the various animacy/number values for head NPs are in (546).

- (546) a. $\frac{\partial n^L}{\partial n^L}$ $\frac{\partial n^L}{\partial n^L}$ meat leave.Perf.Rel Def.AnSg 'the man who left (some) meat' (variant ... $\frac{\partial n^L}{\partial n^L}$
 - b. $\frac{\partial n^L}{\partial n^L}$ $\frac{\partial n\partial m\partial n}{\partial n\partial n}$ $\frac{\partial n\partial m\partial n}{\partial n}$ meat leave.Perf.Rel-AnPl = Def.AnPl 'the men who left (some) meat' (variant ... $\frac{\partial n\partial n\partial n}{\partial n}$
 - c. $izen^L$ nama mi doge wo day^L meat 1SgS leave.Perf.Rel Def.InanSg 'the day (when) I left (some) meat'. (may contract to ... doge = oe:)
 - d. $izen^L$ nama mi doge ge day^L meat 1SgS leave.Perf.Rel Def.InanPl 'the days (when) I left (some) meat'. (variant ... dogoe ge)

My first informant regularly used this E-stem perfective form in relatives corresponding to the **perfective-2** (*-zo-*) in main clauses, suggesting that the perfective-2 tends to be neutralized with the E-stem perfective in this construction. However, relative clauses with a perfective-2 suffix on the verb did pop up; see e.g. (174) in §6.2.2, (311c) in §10.1.1, and (644a) in §15.4.1The suffix appears as H-toned *-zo-* in all such relative examples. *-zo-* (probably here

a cliticized form of the 'have' quasi-verb) also occurs in some other relative combinations to be described below, and a relative form based on the perfective-2 is used as an imperfective in relative clauses; see (555) in §14.1.7.2 just below.

The **recent perfect** with suffix $-z\hat{e}$ - (§10.3.1.4) has relative forms as illustrated in (547). For subject relatives, main-clause $-z\hat{e}$ - usually corresponds to an extended form $-z\hat{e}$ -zo-, though simple $-z\hat{e}$ - is also acceptable. The extended form is not attested in nonsubject relatives.

Aside from this, the tones are different in subject and nonsubject relatives. In subject relatives, an initial H- or L-tone regularly spreads to the end of the stem, followed by $-z\varepsilon(-zo)$ with rhythmically alternating H- and L-tones. In nonsubject relatives, the stem has its lexical tones, and $-z\varepsilon$ is H-toned (it is articulated like a separate verb, i.e. with a renewed high-pitched onset).

(547) Recent perfect relative

stem	RecPf	RecPf relative		gloss
		subject	nonsubject	
a. initial H-to	one			
nớ	nό-zὲ-	nớ-zὲ(-zó)	nó-zé	'go in'
ká:	kâ:-zè-	ká:-zè(-zó)	ká:-zé	'shave'
óbí-yó	óbí-yó-zè-	óbí-yó-zè(-zó)	óbí-yó-zέ	'sit'
b. initial L-to	one			
mǎ:	mă:-zè-	mà:-zέ(-zò)	mă:-zé	'make (bricks)'
gàlá	gòló-zè-	gòlò-zέ(-zò)	<i>gòló-zέ</i>	'do farm work'
nìndíyó	nìndíyó-zè-	nìndìyò-zé(-zò)	nìndíyó-zé	'listen'
c. irregular				
zĭn	zĭn-zè-	zĭn-zὲ(-zó)	zĭn-zé	'take away'

Examples of recent perfect relatives are in (548).

- (548) a. $\frac{\partial n^L}{\partial n^L}$ zá $\frac{\partial f}{\partial n^E}$ zé-zó gè man meal eat.meal-RecPf-An.Rel Def.AnSg 'the man who has finished eating (a meal)'
 - b. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{\partial n^{L}}{\partial n^{C}}$ $\frac{\partial n^{C}}{\partial n^{C}}$ $\frac{\partial n^{C}}{\partial n^{C}}$ $\frac{\partial n^{C}}{\partial n^{C}}$ eat.meal-RecPf-An.Rel-AnPl = Def.AnPl

'the men who have finished eating (a meal)'

- c. izèn^L zá mì ?óné-zé wò day^L meal 1SgS eat.meal-RecPf.Rel Def.InanSg 'the day (when) I finished eating (a meal).'
- d. $iz\dot{e}n^L$ zá mì ?áné-zé gè day meal 1SgS eat.meal-RecPf.Rel Def.InanPl 'the days (when) I finished eating (meals).'
- e. $\frac{\partial n^L}{\partial m} = \frac{\partial n^L}{$
- f. $iz\dot{e}n^L$ $g\dot{\partial}l\dot{\partial}$ mi $g\dot{\partial}l\dot{\partial}-z\acute{e}$ $g\dot{e}$ day^L farming 1SgS eat.meal-RecPf.Rel Def.InanPl 'the days (when) I finished farming.'

The **experiential perfect** has suffix complex *-téré-bè-* or *-téré-zò-* in positive main clauses (§10.3.1.3). The relative form is *-téré* and omits the following auxiliary-like element (549). In subject relatives, the verb has the same tones as in the main-clause experiential perfect. In nonsubject relatives, it has the same tones as in the bare stem.

(549) Experiential perfect relative

stem	RecPf	ExpPf rela	ative	gloss
		subject	nonsubject	
nó ká:	or {LH} before nó-téré- ká:-téré- óbí-yó-téré- nă:-téré-		íré- nó-téré ká:-téré óbí-yó-téré- nă:-téré	'go in' 'shave' 'sit' 'spend
h stam (I)	tanad hafara m	oin alougo táná		night'
,		ain-clause <i>-téré-</i>		
gó		gò-téré	gó-téré	'go out'
mă:	mà:-téré-	mà:-téré	mă:-téré	ʻmake
gòló	gòlò-téré-	gòlò-téré-	gòló-téré-	(bricks)' 'do farm work'

nìndíyó nìndìyò-téré- nìndìyò-téré- nìndíyó-téré- 'listen'

Some examples of the experiential perfect relative forms are in (550).

- (550) a. $\frac{\partial n^L}{\partial n^L}$ $\frac{\partial n^L}{\partial n^L}$ $\frac{\partial n^L}{\partial n^L}$ elephant see-ExpPf.Rel Def.AnSg 'the man who has (ever) seen an elephant'
 - b. $\frac{\partial n^{L}}{\partial n^{L}} = \frac{\partial n^{L}}{\partial n^{L$

 - d. $\frac{\partial m \partial^{L}}{\partial m} \frac{\partial \partial y^{n} \partial m u}{\partial m} \frac{\partial m u}{\partial m} \frac{\partial w \partial t \ell r \ell}{\partial m} \frac{\partial u}{\partial m} \frac{\partial u}{\partial$

14.1.7.2 Relative forms of positive imperfective-system verbs (-n etc.)

The regular main-clause imperfective is characterized by a suffix -m-, added to the A/O-stem, to which an additional pronominal-subject suffix can be added. The corresponding relative forms lack this -m-, though they do have suffixes like - η and vowel-lengthening that may have originated as *-m. The morpheme - $\eta p \in m$ is likely from - η plus * $\gamma \in m$ ancient animacy-number classifier.

There is no difference between subject and nonsubject forms of the verb. Paradigms for 'leave' (551) and 'fall' (552) illustrate the forms. ch $-np\acute{\epsilon}$ versus $-p\acute{\epsilon}$

(551) Imperfective relative forms of dògó 'leave'

		simple	with definite
inanimate	singular	dògá-ŋ	$d\partial g \acute{a} - \eta = w \grave{o}$
	plural	dògá: dògá-nné	dògá: gè dògá-npé gè

animate	singular	dògá: dògá-nɲé	dògá: gè dògá-nné gè
	plural	dògá:-mù dògá-nné-mù	$d\partial g \acute{a}:-m \grave{u}=w \grave{o}$ $d\partial g \acute{a}-n n \acute{e}-m \grave{u}=w \grave{o}$

(552) Imperfective relative forms of *pílé* 'fall'

		simple	with definite
inanimate	singular	pílé-ŋ	pílé-ŋ = wò
	plural	píló: pílé-npé	píló: gè pílé-nné gè
animate	singular	píló: pílé-npé	píló: gè pílé-nné gè
	plural	píló:-mù pílé-nné-mù	píló:-mù = wò pílé-npé-mù = wò

The forms with lengthened stem-final vowel resemble the form taken by the imperfective stem in the past imperfective negative with cliticized =ba-li- (§10.6.1.2). For example, past imperfective (positive) $d\partial g \hat{a} - m = b\hat{e}$ - 'was leaving' is negated as $d\partial g \hat{a} := b\hat{a} - li$ - 'was not leaving', and the latter likely originated as *d $\partial g \hat{a} - \hat{m} = b\hat{a} - li$ -, with the medial * \hat{a} \hat{m} contracting later to \hat{a} :.

For -ŋ in instrumental relative compounds ('water for drinking'), see §5.1.16.

Representative imperfective relative forms are given in (553). These show the form with final lengthening used in the inanimate plural and animate singular, and the form with $-\eta$ for the inanimate singular. The animate plural form is easily constructed from the lengthened form by adding $-m\dot{u}$.

(553) Imperfective relative

	stem w5	imperfective wá-m-ù	Impf relative InanPl/AnSg InanSg		gloss
a.			wá:	wá-ŋ	'see'
	yέ	yá-m-ù	yá:	yá-ŋ	'weep'

b.	nó nó gó tó:	nɔá-m-ù nɔá-m-ù gó-m-ù tó:-m-ù	nọá: nọá: gá: tó:	nọá-ŋ nọá-ŋ gó-ŋ tó:-ŋ	'hear' 'go in' 'go out' 'spit'
c.	ká: mǎ:	ká:-m-ù mă:-m-ù	ká: mă:	ká:-ŋ mằ:-ŋ	'shave' 'make (bricks)'
d.	ún ńdé ?ólé tábú óbí-yó	ûn-m-ù ńdà-m-ù ?ślà-m-ù tábà-m-ù óbì-yò-m-ù	úr ⁿ ó: ńdá: ?ólá: tábá: óbí-yó:	úr ⁿ ú-ŋ ńdá-ŋ ?ślá-ŋ tábá-ŋ óbí-yó-ŋ	'go' 'give' 'go up' 'touch' 'sit down'
e.	dògó nìndíyó bármé	dògó-m-ù nìndíyò-m-ù bármà-m-ù	dògá: nìndíyó: bármá:	dògá-ŋ nìndíyó-ŋ bármá-ŋ	'leave' 'listen' 'be wounded'

For verbs of two or more moras (Cv:, CvCv, etc.), the lexical distinction between {H} and {LH} is respected, and the {LH} stems all begin with a low-tone segment. The remainder of the stem is high-toned in the $-\eta$ form, and in the lengthened form except for the terminal falling tone.

One informant indicated that the $-\eta$ form can also optionally replace the lengthened form for inanimate plural, at least in position before definite inanimate plural $g\hat{e}$. Therefore (554b) with plural head NP ('days') has two variants.

```
(554) a. iz\dot{e}n^L mi ?6l\acute{a}-\eta = \delta:
    day 1SgS go.up.-Impf.Rel.InanSg=Def.InanSg
    'the day (when) I will go up.'

b. iz\dot{e}n^L mi ?6l\acute{a}: g\dot{e}
    " " 26l\acute{a}: g\dot{e}
```

" "?ólá-ŋ 'the days (when) I will go up.'

There is an alternative to the imperfective relative as described above. This alternative includes the morpheme -zo. Morphophonologically, this relative form is identical to the perfective-2 form with suffix -zò- in main clauses, though the aspectual value is different and pronominal-subject marking is not

possible. All such forms are probably related historically to quasi-verb zò- 'have'. Examples of the relative form are in (555).

(555) Imperfective relative (form with -zo-)

```
Impf relative
                                        gloss
    stem
a. Cv with low-tone
                                        'see'
    wś
                  wò-zó
                  gò-zó
                                        'go out'
    gó
b. Cv with high tone
    пэ́
                  nź-zò
                                        'go in'
                                        'bring'
    zó
                  zó-zò
c. Cv:
                                        'shave'
                  ká:-zò
    ká:
                                        'make (bricks)'
    mă:
                  mă:-zò
    nă:
                                        'spend night'
                  nă:-zò
d. {H} toned nonmonosyllabic
    tóló
                  tóló-zò
                                        'pound (in mortar)
    óbí-yó
                  óbí-yó-zò
                                        'sit'
e. {LH} toned nonmonosyllabic
                                        'leave'
    dàgá
                  dàgó-zò
                  nìndí-yó-zò
                                        'listen'
    nìndí-yó
```

An immediately preceding all-low toned constituent, such as a low-toned subject pronominal, raises the tone of the initial syllable of the relative form. Therefore $g\hat{o}$ - $z\hat{o}$ as in (556) becomes $g\hat{o}$ - $z\hat{o}$ in (557) after low-toned 1Sg subject $m\hat{i}$.

(556)
$$iz\dot{e}n^L$$
 of $g\dot{o}$ -zo day^L 2SgS go.out-Impf.Rel 'the day (when) you-Sg will go out'

(557)
$$iz\dot{e}n^L$$
 mi ${}^{\dagger}g\acute{o}-z\acute{o}$ day 1SgS go.out-Impf.Rel 'the day (when) I will go out'

14.1.7.3 Relative forms of stative verbs

Stative derivatives of regular verbs (§10.5.1) can be used in relative clauses. The vocalism and tone are the same as in the inflectable stative in main clauses. There is no difference between subject and nonsubject relative verb forms.

(558)		stem	stative	stative Rel	gloss
	a.	óbí-yó ?ápí-yé- píyé	óbò- ?áɲà- píyò-	óbò ?áɲà píyò	'be sitting (seated)' 'be stopped' '(door) be shut'
	b.	bàmbí-yé jèlí-yé	bàmbá- jèlá-	bàmbá jèlá	'have on one's back' 'be holding in hand'
	c.	dì-yέ	dọá-	d <u>o</u> á	'be carrying on head'

Underived statives ('be', 'have', 'want') have the relative forms in (559). Note the initial high tone.

Progressive verb complexes that end in an auxiliary-like stative make use of the the latter's relative form (560). The imperfective verb with -m has its regular tones.

(560)
$$y\hat{e}^L$$
 ínjú dìyá-m jêlá gê
woman^L water bathe-Impf Prog.Rel Def.AnSg
'a woman who is bathing'

Adjectival predicates do not normally occur in relative clauses ('a dog that is black' is instead expressed as 'a black dog').

14.1.7.4 Relative forms of negative perfective-system verbs

The conjugated main-clause perfective negative has a suffix -*li*- of variable tone. This suffix also appears in corresponding relative forms, in L-toned form.

There is a tonal distinction between nonsubject and subject relatives for some verbs (561a) but not others (561b). The nonsubject relatives follow the tones of the bare stem, while the subject relatives follow those of the main-clause perfective negative.

(561) Perfective negative relative

```
stem PerfNeg PerfNeg Rel gloss nonsubj subj

a. tone difference between nonsubject and subject relative
```

wó wò-líwó-lì wò-lì 'come' wś wà-líwá-lí wà-lì 'see' gò-lígó-lí gò-lì 'go out' gó ńdέ ndà-líńdá-lì ndà-lì 'give' mà:-límă:-lì 'make (bricks)' mă: mà:-lì

dògó dògà-lí- dògá-lì dògà-lì 'leave' nìndíyó nìndìyò-lí- nìndíyó-lì nìndìyò-lì 'listen'

b. no tone difference between nonsubject and subject relative

```
zó-lì-
                          zó-lì
                                        zó-lì
zó
                                                     'bring'
tś
           tọá-lì-
                          tọá-lì
                                                     'slash earth (to
                                        tọá-lì
                                                     sow)'
ká:
           ká:-lì-
                          ká:-lì
                                        ká:-lì
                                                     'shave'
           tóló-lì-
                          tóló-lì
                                                      'pound (in mortar)'
tóló
                                        tóló-lì
óbí-yó
           óbí-yó-lì-
                          óbí-yó-lì
                                        óbí-yó-lì
                                                     'sit'
           nă:-lì-
                          nă:-lì
                                        nă:-lì
                                                      'spend night'
nă:
```

Examples of perfective negative relatives are in (562). (562a-b) are subject relatives, (562c-d) are nonsubject relatives. 'Go out' has different tones in (562a,c) while 'go in' has the same tones in (562b,d).

- (562) a. $\frac{\partial n^L}{\partial man^L}$ go.out-PerfNeg.Rel Def.AnSg 'the man who did not go out'
 - b. $\frac{\partial n^L}{\partial n}$ $\frac{\partial n\partial a-l\hat{l}}{\partial n}$ $\frac{\partial \hat{e}}{\partial n}$ man $\frac{\partial n\partial a-l\hat{l}}{\partial n}$ go.in-PerfNeg.Rel Def.AnSg 'the man who did not go in'
 - c. $iz\dot{e}n^L$ mi $^{\dagger}g\acute{o}-li$ day^L 1SgS go.out-PerfNeg.Rel

'the day I didn't go out'

14.1.7.5 Relative forms of negative imperfective-system verbs

The basic imperfective negative, in its conjugatable main-clause form, has $-n\acute{a}n-\sim -r\acute{a}n-$. The **imperfective negative relative** has a suffix $-\acute{n}$. There is a tonal distinction between relative forms in nonsubject and subject relatives. The bare stem is the model for nonsubject relatives, while the conjugated imperfective negative is the basis for subject relatives.

Irregular forms occur with the two primary verbs of conveyance and with *n*-final verbs ('take away' belongs to both sets) (563b). First, after an *n*-final stem, the suffix is syllable (-*nu*). Secondly, the tones for these irregular forms are distinct from the regular ones.

(563) Imperfective negative relative

	stem	em ImpfNeg ImpfNeg Rel		Rel	gloss	
			nonsubj	subj		
a.	wó	wò-nán-	wó-ń	wò-ń	'come'	
	wź	wà-nán-	wó-ń	wà-ń	'see'	
	gó	gò-nán-	gó-ń	gò-ń	'go out'	
	yέ	yè-nán-	yέ-ń	yè-ń	'weep'	
b. :	irregular					
	zó	zó-nàn-	zó-ń	zó-'n	'bring'	
				~ zò-ń		
	zĭn	zín-nàn-	zĭn-nù	zín-nù	'take away'	
	ún	ún-nàn-	ún-nù	ùn-nú	'go'	
c.	tớ	tò-nán-	tó-ń	tò-ń	'slash earth (to sow)'	
	ká:	kà:-nán-	ká:-ń	kà:-ń	'shave'	
	ńdέ	ǹdὲ-nán-	ńdέ-ń	'ndὲ-ń	'give'	
	tóló	tòlò-nán-	tóló-ń	tòlò-ń	'pound (in mortar)'	
	óbí-yó	òbì-yò-nán-	óbí-yó-ń	òbì-yò-ń	'sit'	

```
'make
d. mă:
             mà:-nán-
                           mă:-ń
                                      mà:-ń
                                                     (bricks)'
                           nă:-ń
                                                     'spend night'
   nă:
             nà:-nán-
                                       nà:-ń
             dògà-nán-
                           dàgá-ń
                                       dàgà-ń
                                                     'leave'
   dàgá
             nìndìyò-nán-
                           nìndíyó-ń
                                      nìndìyò-ń
                                                     'listen'
   nìndíyó
```

Examples (564a-b) are nonsubject relatives; see also (706) in §17.6.5. (564c) is a subject relative.

- (564) a. $iz\dot{e}n^L$ mi $k\acute{a}:-n$ day l 1SgS shave-ImpfNeg.Rel 'a day (when) I do not shave' (</ri>
 - b. [nà: L yè †émé-ń-m=ò:]
 [cow L 1PIS milk(v)-ImpfNeg.Rel-AnPl = Def.AnPl]
 àmbá: b-è:
 where? be-3PIS
 'Where are the cows that we are not going to milk?'
 - c. [nò^L bìdé bìdè-ń] èbù-là-m [person^L work(n) work-ImpfNeg.Rel] want-StatNeg-1SgS 'I don't like/want a person who doesn't work.'

14.1.7.6 Relative forms of negative stative verbs

The stative negative relative is identical in form to the conjugatable stative negative (565). The suffix is stative negative $-\vec{n}$, after a low-toned form of the derived stative stem.

(565)		stem	stative Neg	Stat Neg Rel	gloss
	a.	óbí-yó ?ápí-yé- píyé	òbò-ń- ?àɲà-ń- pìyò-ń-	òbò-ń ?àɲà-ń pìyò-ń	'not be sitting (seated)' 'not be stopped' '(door) not be shut'
	b.	bàmbí-yé jèlí-yé	bàmbà-ń jèlà-ń	bàmbà-ń jὲlà-ń	'not have on one's back' 'not be holding in hand'
	c.	dì-yέ	dọà-ń-	dọà-ń	'not be carrying on head'

Examples of the stative negative relative are in (566). The relative forms are subject to Tone-Raising after a low-toned constituent such as a low-toned pronominal subject (566b).

- (566) a. $\frac{\partial n^L}{\partial n^L}$ $\frac{\partial u}{\partial u}$ $\frac{\partial u}{\partial u}$ $\frac{\partial u}{\partial u}$ $\frac{\partial u}{\partial u}$ money hold.Stat-StatNeg.Rel 'a man who has no money (on him)'
 - b. izèn^L bú:dù mì †jélà-ń gè day^L money 1SgS hold.Stat-StatNeg.Rel Def.InanPl 'the days (when) I don't have any money (on me)'

Negative relative forms of underived statives ('be', 'have', 'want') are in (567).

(567) negative negative relative gloss
$$\begin{array}{cccc}
\grave{o}n\acute{u} & \grave{o}n\acute{u} & \text{`not be (somewhere)'} \\
z\grave{o}-\acute{n} & z\grave{o}-\acute{n} & \text{`not have'} \\
\grave{e}b\grave{u} = l\acute{a} & \grave{e}b\grave{u} = l\acute{a} & \text{`not want'}
\end{array}$$

An example of a **progressive negative relative** (with the relative form of the final stative auxiliary) is (568).

(568)
$$\frac{\partial n^L}{\partial n^L}$$
 $\frac{\partial n^L}{\partial n^L}$ $\frac{\partial n$

With some difficulty, relative clauses with negated **adjectival and NP predicates** based on the clitic $=l\hat{a}$ 'it is not' (§11.4.3, §11.2.1.2) were elicited (569). An informant expressed discomfort with the adjectival examples, preferring alternative phrasings, e.g. 'I'm looking for a short person' in place of (569a).

- (569) a. $[no^L]$ gabu = la]-ý $duno-m-\emptyset$ [person^L tall=it.is.not.Rel]-Acc look.for-Impf-1SgS 'I'm looking for someone who is not tall'
 - b. $[n\hat{o}^{L}] \frac{d\hat{\partial}g\delta = l\hat{a}]-\hat{y}}{[person^{L}] \frac{d\hat{\partial}g\delta = l\hat{a}]-\hat{y}}{Dogon=it.is.not.Rel}-Acc} \frac{d\hat{u}n\hat{o}-\hat{m}-\emptyset}{look.for-Impf-1SgS}$ 'I'm looking for someone who is not a Dogon.'

14.1.7.7 Relative forms of past clitic = $b\varepsilon$ -

A brief summary of the relationship between the conjugated (main-clause) and relative forms including past $=b\varepsilon$ is (570). The only segmental difference is in the past imperfective positive, where the -m- morpheme is replaced by vowellengthening in the relative (this replacement also occurs in negative forms, both main-clause and relative). Tonal differences, both in the stem and in the suffix-clitic complexes, will be described below.

(570) Participle of past clitic (positive polarity)

conjugated	relative
$=b\varepsilon$ -	$=b\varepsilon$
$-1-\varnothing = b\acute{\varepsilon}$ -	$-1-\varnothing = b\varepsilon$
$-\acute{m} = b\grave{\varepsilon}$ -	- <i>:</i> = <i>b</i> ε
:=bá-lì-	:=bá-lì
$-z\varepsilon = b\dot{\varepsilon}$ -	$-z\varepsilon = b\varepsilon$
$-za-l\hat{\imath}=b\hat{\varepsilon}-$	$-za-1=b\varepsilon$
:=bè-	<i>:</i> = <i>b</i> ε
:=bá-lì-	:=bá-lì
	$=b\varepsilon-$ $-l-\emptyset = b\acute{\varepsilon}-$ $-\acute{m} = b\grave{\varepsilon}-$ $:=b\acute{a}-l\grave{i}-$ $-z\varepsilon = b\grave{\varepsilon}-$ $-za-l\grave{i} = b\grave{\varepsilon}-$ $:=b\grave{\varepsilon}-$

The past perfect relative, like the conjugated main-clause past perfect (§10.6.1.1), is based segmentally on the bare stem (including the U-stem for u-final verbs). However, the past perfect relative makes a tonal distinction between nonsubject and subject relatives. In nonsubject relatives, the stem tones are those of the bare stem. In subject relatives, the stem tones are those of the main-clause past perfect. The distinction is audible for the verbs in (571a-b), i.e. for those verbs that have {L}-toned stem before $=b\hat{\epsilon}$ - in main clauses. There is no audible distinction for the verbs in (571c-d), since these stems are {H}- or {LH}-toned both in the bare stem and before $=b\hat{\epsilon}$ in main clauses.

(571)		stem	past Pf	past Pf Rel		gloss
				nonsubj	subj	
	a.	wó gó ?álé	$w\grave{o} = b\acute{\varepsilon}-$ $g\grave{o} = b\acute{\varepsilon}-$ $?\grave{o}l\grave{\varepsilon} = b\acute{\varepsilon}-$	$w \acute{o} = b \grave{\varepsilon}$ $g \acute{o} = b \grave{\varepsilon}$ $7 \acute{o} l \acute{\varepsilon} = b \grave{\varepsilon}$	$w\grave{o} = b\acute{\varepsilon}-$ $g\grave{o} = b\acute{\varepsilon}-$ $l\grave{o}l\grave{e} = b\acute{\varepsilon}$	'come' 'go out' 'go up'
	b.	mă:	$m\grave{a}$: = $b\acute{\varepsilon}$ -	mă: = bè	$m\grave{a}$: = $b\acute{\varepsilon}$ -	'make (bricks)'
		dèr ⁿ €	$d\grave{e}r^n\grave{e} = b\acute{e}$ -	$d\grave{e}r^n\acute{e} = b\grave{e}$	$d\grave{e}r^n\grave{e} = b\acute{e}$	'spend day'

gồlố gồlồ = bế- gồlố = bề gồlồ = bế 'do farm work'

dìyế dìyề = bế- dìyế = bề dìyề = bế carry on head'

mànú mànù = bế- mànú = bề mànù = bế 'cook'

nìndíyố nìndìyồ = bế- nìndíyố = bề nìndìyồ = bế 'listen'

c. yế yế = bề- yế = bề 'se 'go in'

ká: ká: = bề- ká: = bề 'shave'

ún ún = bề- ún = bề 'go'

?ốnế
$$?$$
ớnế = bề- i 06 'eat (meal)'

úbố úbố = bề- i 06 'go'

?ốnế nố i 06 'bề- i 06 'bề- i 00 'go'

carry on head'

work'

carry on head'

weep'

'sgo in'

ká: ká: = bề- 'go in'

kố: bề- in bề- 'go'

carry on head'

'cook'

'listen'

'eap'

'shave'

'go in'

kố 'shave'

'go'

?ốnế = bề- 'give'

'pour'

nốể nốể = bề- nốể = bề- 'give'

tốlổ tốlổ = bề- tốlổ = bề- 'sit'

tốlổ tốlố = bề- tốlố = bề- 'sit'

tốlố tốlố = bề- 'sit'

tốlố + yố = bề- 'sit'

tốlố + bề- 'sit'

tốlố + bề- 'sit'

tốlố + bề- 'sit'

'sit'

'touch'

Example (572a) is a nonsubject past perfect relative, and (572b) is a corresponding subject relative. Note the difference in verb-stem tones.

- (572) a. $iz\dot{e}n^L$ $g\dot{o}l\dot{o}$ $m\dot{i}$ $g\dot{o}l\dot{o}=b\dot{e}$ $w\dot{o}$ day farming 1SgS do.farm.work=Past.Rel Def.InanSg 'the day (when) I had done farm work'
 - b. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}} = \frac{g\partial l\partial}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}} = \frac{g\partial l\partial}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}} = \frac{g\partial l\partial}{\partial n^{L}}$ Def.AnSg 'the man who had done farm work'

The **past perfect negative relative** is based on the 3Sg form of the past perfect negative, which ends in $-li-\varnothing=b\acute{\varepsilon}-\varnothing$, usually truncated to $-l-\varnothing=b\acute{\varepsilon}-\varnothing$. The corresponding relative form is therefore $-l(i)=b\acute{\varepsilon}$. Again there is a difference between nonsubject (573a) and subject relatives (573b) in the case of verbs that that $\{L\}$ -toned form in the past perfect (positive and negative).

- (573) a. izèn ^L gòlò mì gòlá-lì = bé-Ø wò day ^L farming 1SgS do.farm.work-PerfNeg=Past.Rel Def.InanSg 'the day when I had not done farm work'
 - b. $g\partial l\partial$ àn $g\partial l\partial l = b\epsilon$ $g\epsilon$

farming man^L do.farm.work-PerfNeg=Past.RelDef.AnSg 'the man who had not farmed' [also: $\frac{\partial n}{\partial s} \frac{\partial n}{\partial s$

The conjugated main-clause past imperfective is based on the imperfective form with suffix -m followed by the conjugated past clitic (§10.6.1.2). The **past imperfective relative** is based on the same form of the stem observed in the conjugated past imperfective negative (N.B not positive). That is, the -m suffix is absent, the stem-final vowel is lengthened, and the overall tone contour of the stem is $\{(L)HL\}$, with the initial low tone expressed only in lexically $\{LH\}$ verbs of at least two moras, and the medial high tone limited to at most one syllable. Compare the forms in (574) with the negative forms in (413) in §10.6.1.2. No distinction between nonsubject and subject relatives has been observed.

(574)		stem	past Impf	past Impf Rel	gloss
	a.	wó gó zó	$w\grave{a}$ - \acute{m} = $b\grave{\varepsilon}$ - $g\grave{o}$ - \acute{m} = $b\grave{\varepsilon}$ - $z\grave{o}$ - \acute{m} = $b\grave{\varepsilon}$ -	$w\hat{a} := b\hat{\epsilon}$ $g\hat{o} := b\hat{\epsilon}$ $z\hat{o} := b\hat{\epsilon}$	'see' 'go out' 'bring'
	b.	nó dó	$n \circ \lambda = b \cdot \delta - d \circ \lambda = b \cdot \delta + d \circ \lambda = b \cdot $	$n \circ \hat{a} := b \acute{\varepsilon}$ $d \circ \hat{a} := b \acute{\varepsilon}$	'go in' 'insult'
	c.	tó: ká: ʔə́ŋɛ́ úbɔ́ cɛ́dɛ́ ńdɛ́ símbé óbí-yó tábú	tó:-m = bè- ká:-m = bè- ?ápá-m = bè- úbá-m = bè- cédá-m = bè- ídá-m = bè- símbó-m = bè- óbí-yó-m = bè- tábá-m = bè-	tô: = bế kâ: = bế ?ớɲà: = bế úbà: = bế cédà: = bế ndà: = bế símbò: = bế óbì-yò: = bè tábà: = bè	'spit' 'shave' 'eat (meal)' 'pour' 'gather (firewood)' 'give' 'roast, grill' 'sit' 'touch'
	d.	mă: nă: dèr ⁿ é gòló dìyé mànú nìndíyó	$m\check{a}:-m=b\grave{\epsilon} n\check{a}:-m=b\grave{\epsilon} d\grave{\epsilon}r^n\acute{a}-m=b\grave{\epsilon} g\grave{\delta}l\acute{a}-m=b\grave{\epsilon} d\grave{i}y\acute{a}-m=b\grave{\epsilon} m\grave{a}n\acute{a}-m=b\grave{\epsilon} n\grave{i}nd\acute{l}y\acute{o}-m=b\grave{\epsilon}-$	mã: bé nã: = bé dèr¹â: = bé gòlâ: = bé dìyâ: = bé mànâ: = bé nìndíyò: = bé	'make (bricks)' 'spend night' 'spend day' 'do farm work' 'carry on head' 'cook' 'listen'

e.
$$\acute{u}n$$
 $\acute{u}r^n\acute{u}-m=b\grave{\epsilon} \acute{u}r^n\grave{o}:=b\acute{\epsilon}$ 'go'

Example (575a) is a nonsubject relative, (575b) a subject relative. The relative verb has the same form in both.

- (575) a. $iz\dot{e}n^L$ $g\dot{o}l\dot{o}$ $m\dot{i}$ $g\dot{o}l\dot{a}:=b\acute{e}$ $w\dot{o}$ day farming 1SgS do.farm.work.Impf=Past.Rel Def.InanSg 'the day (when) I was doing farm work'
 - b. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}} = b\acute{e}$ $g\grave{e}$ $g\grave{e}$ $g\acute{e}$ $g\acute{$

The **past imperfective negative relative** is consistent in stem form with the conjugated past imperfective negative. It therefore ends in $:=b\acute{a}-l\grave{i}$, and differs only in its final morpheme from the past imperfective relative just illustrated. Nonsubject (576a) and subject (576b) relatives have the same form of the verb.

- (576) a. $iz\dot{e}n^L$ $g\dot{o}l\dot{o}$ $m\dot{i}$ day farming 1SgS $g\dot{o}l\hat{a}:=b\acute{a}-l\dot{i}$ $w\dot{o}$ do.farm.work-Impf=Past-PerfNeg.Rel Def.InanSg 'the day when I was not doing farm work'
 - b. $\frac{\partial n^{L}}{\partial n^{L}} = \frac{g\partial l\partial}{g\partial l\hat{a}} = \frac{g\partial l\hat{a}}{\partial n^{L}} = \frac{g\hat{\epsilon}}{\partial n^{L}}$ gehavior of the man who was not farming gehavior of the man who was not farming gehavior.

The **past recent perfect relative** is directly related to the corresponding conjugated past recent perfect (§10.6.1.5), but may differ tonally. For verbs like 'do farm work' that take {L}-toned form before $-z\acute{\epsilon}=b\grave{\epsilon}$ - in main clauses, the same tone pattern occurs in subject relatives (577b), but the lexical stem tone emerges in the nonsubject relative form (577a). For stems with a H-tone before $-z\grave{\epsilon}=b\grave{\epsilon}$ - in main clauses, nonsubject (577b) and subject (577a) relative verbs are distinguished by tones in the suffix/clitic complex, $-z\acute{\epsilon}=b\grave{\epsilon}$ versus $-z\grave{\epsilon}=b\acute{\epsilon}$.

(577) a. $izen^L golo mi golo-ze=be wo$ day farming 1SgS do.farm.work-RecPf=Past.Rel Def.InanSg
'the day when I had finished farming'

- b. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{g\partial l\partial}{\partial n^{L}}$ $\frac{g\partial l\partial z\dot{\epsilon} = b\dot{\epsilon}}{\partial n^{L}}$ $\frac{g\dot{\epsilon}}{\partial n^{L}}$ farming do.farm.work-RecPf=Past.Rel Def.AnSg 'the man who had finished farming'
- c. $izen^L$ tól mi tóló-ze=be wò day pounding 1SgS pound-RecPf=Past.Rel Def.InanSg 'the day when I had finished pounding'
- d. $y\hat{e}^L$ tól tóló- $z\hat{e} = b\hat{e}$ $g\hat{e}$ woman pounding pound-RecPf=Past.Rel Def.AnSg 'the woman who had finished pounding'

The **past recent perfect negative relative** is based on the 3Sg form of the conjugated past recent perfect negative (§10.6.1.5). The stem-tones for all verbs follow the same patterns as for the corresponding positive; note the difference in stem tones in (578a-b). The suffix/clitic complex has consistent tones for a given verb, hence $-z\acute{a}-l\grave{i}=b\acute{e}$ after a L-tone in (578a-b) and $-z\grave{a}-l\grave{i}=b\acute{e}$ after a H-tone in (578c-d).

- (578) a. $izen^L$ gilio mi day^L farming 1SgS gilio 2a-li = b e wildow do.farm.work-RecPf-PerfNeg=Past.Rel Def.InanSg 'the day when I had not finished doing farm work'
 - b. $\frac{\partial n^L}{\partial n^L} = \frac{g\partial l\partial}{g\partial l\partial z\dot{a} l\dot{i}} = b\dot{\epsilon}$ $g\dot{\epsilon}$ man farming do.farm.work-RecPf-PerfNeg=Past.Rel Def.AnSg 'the man who had not finished farming'
 - c. $iz\hat{e}n^L$ tól mì tóló-zà-lì = bé wò day^L pounding 1SgS pound-RecPf=Past.Rel Def.InanSg 'the day when I had not finished pounding'
 - d. $y\hat{e}^L$ tól tóló-zà-lì = bé $g\hat{e}$ woman pounding pound-RecPf-PerfNeg=Past.Rel Def.AnSg 'the woman who had not finished pounding'

The **derived stative past relative** is illustrated in (579). The relative forms are closely related to the corresponding conjugated forms (§10.5.1). There is no difference in the form of the relative verb in nonsubject and subject relatives.

(579) a.
$$izen^L$$
 mi $óbo:=b\epsilon$ wo

day^L 1SgS sit.Stat=Past.Rel Def.AnSg 'the day when I was sitting'

b. $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}^{L}}$ $\frac{\partial \mathbf{b} \partial \dot{\partial} = \mathbf{b} \dot{e}}{\partial \mathbf{n}^{L}}$ $\frac{\partial \mathbf{c}}{\partial \mathbf{c}}$ $\frac{\partial \mathbf{c}}{$

The **derived stative past negative relative** is illustrated in (580). There is no difference in the form of the relative verb in nonsubject and subject relatives.

- (580) a. izèn L mì óbò: = bá-lì wò day L 1SgS sit.Stat=Past-PerfNeg.Rel Def.AnSg 'the day when I was not sitting'
 - b. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{\partial b\partial \dot{\partial} = b\acute{a} l\grave{i}}{\partial n^{L}}$ $\frac{\partial \dot{b}}{\partial n^{L}}$ $\frac{\partial \dot{b}}{\partial n^{L}}$ $\frac{\partial \dot{b}}{\partial n^{L}}$ $\frac{\partial \dot{b}}{\partial n^{L}}$ Def.AnSg 'the man who was not sitting'

14.1.7.8 Passive relative (-yà)

A special passive relative form is attested in texts. There appears to be no exactly equivalent main-clause verb form. The verb ends in $-y\hat{a}$, which vaguely resembles 3Pl perfective suffix $-\hat{a}$ and mediopassive $-y\hat{e}$, but is not identical with either.

- [ìzèn^L (581) a. sé:dé-má gùní-yà wò] [day^L set-Hort say-Pass.Rel Def.InanSg] đὸ nà kárⁿέ-y 3SgS do-Past.and.then arrive 'The day that had been set arrived, ...' (excerpt from (778) in Text 1)
 - b. [izèn^L dàmí-yà wò]
 [day^L speak-**Pass.Rel** Def.InanSg]
 [wò-y yà dɔ-á]
 [come-Past.and.then Real arrive-Perf.3PIS]
 'On the day that was spoken of they came (back)' (excerpt from 779 in Text 1)
 - c. $[[[k\acute{o} \quad n\acute{a}-\eta] \quad n\grave{a}] \quad c\grave{\imath}^{\rm L} \quad k\acute{u}n\acute{d}\acute{-}y\grave{a}]$ $[[[head \quad 3Sg-Poss] \ Loc] \quad thing^{\rm L} \quad put-Pass.Rel]$

```
[zàmtùrù-sùwà L
                         bàl
                                        kúndí-yà]
[donkey-shit<sup>I</sup>
                                        put-Pass.Rel]
                         gather
ľkó
                                        wànà]
                 bò
                          wò]
[InanSg
                 be
                         Def.InanSg] other]
                    kàr<sup>n</sup>à-lì
                                        †ní→]
Γá
[LogoSgS
                    do-PerfNeg
                                       Subjunct]
'The thing that was put on his head (=blamed on him), the donkey
dung that had been put (there), that he hadn't done it ....' (excerpt
from (794) in Text 1)
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14.1.8 Relative clause involving verb- or VP-chain

When two verbs are tightly-chained (without overt subordination), as in (582a), the corresponding relative clause is formed by changing the final verb in the chain into its morphological relative form. The nonfinal chained verb is unaffected (582b).

- (582) a. súwó bèlè-nán-Ø go.down be.able-ImpfNeg-3SgS 'He/She cannot get down.'
 - b. $y\hat{e}^L$ súwó bèlè-ń $g\hat{e}$ woman $g\hat{e}$ go.down be.able-ImpfNeg.Rel Def.AnSg 'the woman who cannot get down'

If a nonsubject relative containing a pronominal suffix has a tight chain like this, the preverbal subject pronominal precedes the chain. The effect is that the two chained verbs are not separated. Note the position of 1Sg subject *mì* in (583b), a relativize clause related to the main clause (583a).

- (583) a. [èné gè] dèmé bèlè-ná-m [child Def.AnSg] hit be.able-ImpfNeg-1SgS 'I cannot hit the child.'
 - b. $\frac{\partial n\partial^L}{\partial n}$ $\frac{$

In chain-like combinations where the nonfinal verb is morphologically marked, the relative-clause version again marks only the final verb in the sequence as relative. For example, (584b) is the relative-clause version of (584a); both show

the same-subject subordinating suffix $-\dot{\epsilon}$: $\sim -\dot{\epsilon}$: on the first verb. Another example with this subordinator is (584c).

- (584) a. $ur^n \epsilon$:

 go-and.SS Lcome-Impf-1SgS

 'I will go and come (back here).'
 - b. àn ùr^n-é: wô: gè
 man go-NonP.and.SS come.Impf.Rel Def.AnSg
 'the man who will go and come (back here)'
 - c. $[n\delta^L]$ $[kìr^n\grave{a}]$ ${}^{\dagger}g\acute{z}-\grave{e}:]$ [person^L [bone throw-NonP.and.SS] $s\grave{e}mb\grave{e}-n^L$ $b\^{o}:]$ $\grave{e}b\grave{u}-l\grave{a}-\acute{m}$ sweep-ImpfNeg.Rel^L NearDist-AnPl want-StatNeg-1SgS 'I don't like those people who throw bones and do not sweep up.' $(< g\grave{i}z-\acute{e}:, s\grave{e}mb\grave{e}-\acute{n})$

The overtly marked subordinated clause with $-\acute{e}: \sim -\acute{e}:$ does not have to be adjacent to the final verb. Other constituents may intervene between the two verbs. In (585a), a proclitic subject pronoun intervenes. In (585b), a direct object specifically associated with the final verb intervenes.

- (585) a. izèn^L ùrⁿ-é: mì wó-ŋ
 day^L go-NonP.and.SS 1SgS come-Impf.Rel.InanSg
 '(the) day (when) I will go and come (back here)'
 - b. /nò^L ὴgí w-ě:1 [person^L here come-NonP.and.SS] ?áná:-mù = † wó] zá eat.Impf.Rel-AnPl=Def.AnPl] meal bó àmí-yè 3PIS who?-Pl 'The people who come and eat (meals) here, who are they?' [also variant with ... $z\acute{a}$? $\grave{\partial}$ $p\grave{i}$ - $m\grave{u}$ = † $w\acute{o}$...]

14.1.9 Determiners following the relative verb

Determiners associated with the clause-internal head NP follow the relative verb.

Definite morphemes are very common in relative clauses, and numerous examples occur in preceding sections, for example inanimate singular definite wò in (539a-b) in §14.1.2. Definite morphemes are not tonosyntactically active in any context, so there is no new issue in relatives.

Demonstrative pronouns also follow the verb in a relative clause. Since demonstratives control $\{L\}$ on preceding words in NPs, there is an issue as to how they behave tonosyntactically in relatives. What happens is that the verb itself is subject to tone-dropping from the demonstrative. In nonsubject relatives, a proclitic subject pronoun (if present) is also tone-dropped; this is audible with lexically H-toned proclitics like 2Sg δ .

In (586-70), the (a) examples are definite. The (b) examples end in demonstratives and show a tone-dropped verb and subject proclitic (the brackets are tonosyntactic). Variants with $nn\epsilon$ (likely < *-ny y\epsilon), cf. (169) in §6.2.1.2 and (551-2) in §14.1.7.2 above, are shown in parentheses below relevant inanimate plural and animate singular forms (587-9).

- (586) a. $\frac{?\partial l\partial^L}{\text{house}^L}$ 6 wá-ŋ wò house 2SgS see-ImpfRel.InanSg Def.InanSg 'the house that you-Sg see'
 - b. $?\partial lo^{L}$ [\dot{o} wà- η]^L $\dot{\eta}g\dot{o}$ house [2SgS see-ImpfRel.InanSg]^L Prox.InanSg 'this house that you-Sg see'
- (587) a. $?\partial l\partial^L$ ó $w\acute{a}$: $g\grave{e}$ house L 2SgS see.ImpfRel.InanPl Def.InanSg
 'the houses that you-Sg see'
 [also: ... $w\acute{a}$ - $np\acute{e}$ $g\grave{e}$]
 - b. $\frac{\partial l \partial^L}{\partial l \partial^L}$ [$\frac{\partial}{\partial l \partial l}$ $\frac{\partial w \partial_l \partial_l}{\partial l \partial l}$ $\frac{\partial w \partial_l \partial_l}{\partial l \partial l}$ $\frac{\partial w \partial_l}{\partial l \partial l}$ Prox.InanPl 'these houses that you-Sg see' [also: ... $\frac{\partial w \partial_l}{\partial l \partial l}$ $\frac{\partial w \partial_l}{\partial l \partial l}$ Prox.InanPl 'these houses that you-Sg see' [also: ... $\frac{\partial w \partial_l}{\partial l \partial l}$ $\frac{\partial w \partial_l}{\partial l$
- (588) a. $\frac{\partial n^L}{\partial n}$ ó $\frac{\partial m}{\partial n}$ gê $\frac{\partial m}{\partial n}$ 2SgS see.ImpfRel.AnSg Def.InanSg 'the man who(m) you-Sg see' [also: ... $\frac{m}{\partial n}$ [also: ... $\frac{m}{\partial n}$ [also: ... $\frac{m}{\partial n}$]
 - b. $\frac{\partial n^L}{\partial n^L}$ [$\frac{\partial}{\partial n^L}$ wà:] $\frac{\partial}{\partial n^L}$ nà $\frac{\partial}{\partial n^L}$ [2SgS see-ImpfRel.AnSg] NearDist.AnSg Def.InanSg 'that man who(m) you-Sg see'

[also: ... $w\grave{a}$ - $np\grave{e}$]^L $n\grave{a}$ † $g\acute{e}$]

- (589) a. $\frac{\partial n^L}{\partial n^L}$ ó $\frac{\partial w\acute{a}:-m\grave{u}=w\grave{o}}{\partial n^L}$ see.Impf.Rel-AnPl=Def.AnPl 'the men that you see' [also: ... $\frac{\partial v\acute{a}:-m\grave{u}=w\grave{o}}{\partial n^L}$]
 - b. $\frac{\partial n^L}{\partial man^L}$ $\frac{\partial man^L}{\partial see}$ $\frac{\partial man^L}{\partial see}$ See.Impf.Rel NearDist.AnPl 'those men whom you see' [also: $\frac{\partial man^L}{\partial see}$ $\frac{\partial$
- $(590) \quad a. \quad \frac{iz en^L}{day^L} \quad mi \qquad \frac{75l \acute{e}}{dout} \qquad w\acute{o} \\ \quad day^L \qquad 1SgS \qquad go.up.Perf.Rel \qquad Def.InanSg \\ \quad \text{`the day when I went up'}$
 - b. $iz\dot{e}n^L$ $[mi \quad ?\dot{\partial}l\dot{e}]^L$ $m\grave{a}ng\acute{o}$ day^L $[1SgS \quad go.up.Perf.Rel]^L$ FarDist.InanSg 'that other day when I went up'

Likewise, in (584c) in §14.1.8, the imperfective negative relative form $s \approx mb \approx n$ ('does not sweep') drops its final H-tone to $s \approx mb \approx n$ before the demonstrative $b \approx n$:

14.1.10 Non-numeral quantifiers following the relative verb

 $c\hat{\epsilon}m$ 'all' can follow relative verbs, as can $p\acute{u}\rightarrow$, which can have either sense. These quantifiers do not control tonosyntactic overlays.

- (591) a. nà:-mù ó dòg€-mù=wò pú→
 cow-AnPl 2SgS leave.Perf.Rel-AnPl=Def.AnPl all
 'all the cows that you have left (there)'
 - b. $n\grave{a}:-m\grave{u}$ 6 $\acute{e}m\acute{a}-l(\grave{i})-m\grave{u}=w\grave{o}$ $c\^{e}m$ cow-AnPl 2SgS milk(v)-PerfNeg.Rel-AnPl=Def.AnPl all 'all the cows that you have not milked'

The very restricted distributive $k\acute{a}m\acute{a}$ quantifier, as in $n\grave{o}^L$ $k\acute{a}m\acute{a}$ 'each person; everybody' (§6.6.2), and other distributives such as $t\grave{u}$ - $t\acute{u}m\acute{a}y$ (< numeral '1'), are syntactically adjectives and so remain with the internal head in relatives and are themselves tone-lowered.

- (592) a. $[n\grave{o} \quad k\grave{a}m\grave{a}]^L \quad w\acute{e}-m\grave{u} = wo$ $c\^{e}m$ [person each] come.Perf.Rel-AnPl=Def.AnPl all 'every person who came'
 - b. [[?\(\frac{1}{2}\)]\(\frac{1}{2}\)\(\frac{1}{2}\

14.2 Subject relative clause

The head NP, which may appear in various positions before the verb, undergoes tone-dropping. Determiners and non-numeral quantifiers associated with the head NP appear after the verb. The verb takes the regular relative form appropriate to the AMN category, but does not agree with the head NP. Since the subject NP is normally overt, and is nonpronominal, there is no separate subject pronominal preceding the verb.

Examples are in (593). The lexical form of the head noun is in parentheses after the free translation. The head NP (usually just a noun) is bolded in the interlinear.

- (593) a. [ébà nà] àn^L mì-ý wé gè [market Loc] man^L 1Sg-Acc see.Perf.Rel Def.AnSg 'the man who saw me in the market' (án)
 - b. $n\grave{o}-m\grave{o}^{L}$ [ébà nà] mì-ý wé m-ò: person-AnPl^L [market Loc] 1Sg-Acc see.Perf.Rel Pl-Def.AnPl 'the people who saw me in the market' ($n\grave{o}-m\acute{o}$)
 - c. $s\grave{e}w^L$ $m\grave{i}-\acute{y}$ $t<code-block>{\not}2\acute{e}$ $w\grave{o}$ ax^L 1Sg-Acc cut.Perf.Rel Def.InanSg 'the ax that cut me' $(s\acute{e}w)$ </code>
 - d. $s\grave{\varepsilon}w^L$ $m\grave{\imath}-\acute{y}$ $t\not{\Sigma}\acute{\varepsilon}$ $g\grave{\varepsilon}$ ax^L 1Sg-Acc cut.Perf.Rel Def.InanPl 'the axes that cut me' $(s\acute{\varepsilon}w)$
 - e. $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}^{L}}$ $\frac{\mathbf{p}il\acute{e}}{\mathbf{f}all.Perf.Rel}$ $\frac{g\grave{e}}{\mathbf{p}ef.AnSg}$ 'the man who fell' $\frac{\partial \mathbf{n}}{\partial \mathbf{n}}$

- f. $\frac{\partial n^{L}}{\partial n^{L}}$ $\frac{\partial n^{L}}{\partial n^{L}}$ fall.Perf.Rel $\frac{\partial n^{L}}{\partial n^{L}}$ fall.Perf.Rel $\frac{\partial n^{L}}{\partial n^{L}}$ fall.Perf.Rel $\frac{\partial n^{L}}{\partial n^{L}}$ fall. Perf.Rel $\frac{\partial n^{L}}{\partial n^{L}}$ fal
- g. cin^L $pil\acute{e}$ $w\grave{o}$ $stone^L$ fall.Perf.Rel Def.InanSg 'the stone that fell' (cin)
- h. cin^{L} $pil\acute{e}$ $g\grave{e}$ $stone^{L}$ fall.Perf.Rel Def.InanPl 'the stones that fell' (cin)
- i. $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}^{L}} = \frac{m\mathbf{\hat{i}} \mathbf{\hat{y}}}{\mathbf{\hat{y}}} = \frac{d\mathbf{\hat{e}}m \mathbf{\hat{a}}}{\mathbf{\hat{i}}} = \frac{g\mathbf{\hat{e}}}{\mathbf{\hat{e}}}$ 'the man who will hit me' (\(\delta \mathbf{n}\))
- j. $\frac{\partial n^L}{\partial n^L} = \frac{m\hat{i}-\hat{y}}{m^2} = \frac{\partial \hat{y}}{\partial n^2} = \frac{m}{n^2} = \frac{\partial \hat{y}}{\partial n^2} = \frac{m}{n^2} = \frac{\partial \hat{y}}{\partial n^2} = \frac{m}{n^2} = \frac{\partial \hat{y}}{\partial n^2} = \frac{\partial \hat{y}}$
- k. $s\grave{e}w^L$ $m\grave{i}-\acute{y}$ $t<code-block>{\cancel{2}\acute{a}}-\emph{\eta}$ $w\grave{o}$ ax^L 1Sg-Acc cut-Impf.Rel Def.InanSg 'the ax that will cut me' $(s\acute{e}w)$ </code>
- 1. $s\grave{\varepsilon}w^L$ $m\grave{\imath}-\acute{y}$ $t\diamond\hat{a}$: $g\grave{\varepsilon}$ ax^L 1Sg-Acc cut.Impf.Rel Def.InanPl 'the axes that will cut me' $(s\acute{\varepsilon}w)$
- m. $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}^{L}}$ $\frac{\partial \mathbf{n}^{-1}}{\partial \mathbf{n}^{C}}$ $\frac{\partial \mathbf{r}}{\partial \mathbf{n}^{C}}$ $\frac{\partial \mathbf{r}}{\partial \mathbf{n}^{C}}$ $\frac{\partial \mathbf{r}}{\partial \mathbf{n}^{C}}$ $\frac{\partial \mathbf{r}}{\partial \mathbf{n}^{C}}$ Def.AnSg 'the man who didn't go'
- n. $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}}$ $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}}$ $\frac{\partial \mathbf{n}^{L}}{\partial \mathbf{n}}$ go-ImpfNeg.Rel Def.AnSg 'the man who will not go'

14.3 Object relative clause

The core of the head NP is clause-internal, in tone-dropped form. It is not marked for accusative case. Determiners and other late-NP elements appear

after the verb, but refer to the head NP. If the subject is pronominal, it is expressed as a proclitic to the verb.

The object-relative examples in (594) illustrate the four animacy and grammatical number categories of the head NPs: 'stone(s)', 'cow(s)'. The verb takes the perfective form $d\partial g d$ in all of the examples, but the following definite morpheme agrees with the head NP.

- (594) a. [cìn^L mì dògó wò] àmbá: bò-Ø [stone^L 1SgS leave.Perf.Rel Def.InanSg] where? be-3SgS 'Where is the stone that I left?'
 - b. [cìn^L mì dògó gè] àmbá: bò-Ø [stone^L 1SgS leave.Perf.Rel Def.InanPl] where? be-3SgS 'Where are the stones that I left?'
 - c. [nà: L mì dògó gè] àmbá: bò-Ø [cow 1SgS leave.Perf.Rel Def.AnSg] where? be-3SgS 'Where is the cow that I left?'
 - d. [nà:-mù^L mì dògó m=ò:]
 [cow-AnPl^L 1SgS leave.Perf.Rel PlDef.AnPl]
 àmbá: b-è:
 where? be-3PlS
 'Where are the cows that I left?'

Imperfective examples are in (595).

- (595) a. [cìn^L ó dògá-ŋ=ò:] àŋgó= ∴ [stone^L 2SgS leave.Impf.Rel = Def.InanSg]which?InanSg=it.is 'Which is the stone that you will leave?'
 - b. $[cin^{L}]$ ó $d\partial g\hat{a}$: $g\hat{\epsilon}$] $\dot{a}y\hat{\epsilon} = :$ [stone^L 2SgS leave.Impf.Rel Def.InanPl] which?InanPl=it.is 'Which are the stones that you will leave?'
 - c. $[n\grave{a}:^L \quad \acute{o} \quad d\grave{g}\hat{a}: \quad g\grave{e}] \quad \grave{a}ng\acute{e} = ::$ [cow^L 2SgS leave.Impf.Rel Def.AnSg] which?AnSg=it.is 'Which is the cow that you will leave?'
 - d. [nà: L o dògá-m=ò:] àmbá: b-è: [cow 2SgS leave.Impf.Rel-AnPl-Def.AnPl] where? be-3PlS 'Where are the cows that you will leave?'

14.4 Possessor relative clause

Example (596) illustrates the possessor-relative structure, with the possessed noun 'head' directly following the low-toned head noun 'man/men'. The final definite morpheme agrees with the relative-clause head 'man/men'. The **possessed noun does not undergo tone-dropping**, as it is effectively freed from the (morphophonological) influence of the possessor in this construction. Compare \acute{an} $k\grave{o}$: '(a/the) head of a man', where $k\acute{o}$: drops its tones following the possessor.

- (596) a. $\frac{\grave{a}n^L}{man^L}$ $\frac{k\acute{o}:}{head}$ $\frac{c\acute{e}y\grave{o}}{hurt.Stat}$ $\frac{g\grave{e}}{Def.AnSg}$ 'the man whose head hurts'
 - b. $\frac{\partial n^L}{\partial m}$ $\frac{\partial k}{\partial m}$ $\frac{\partial k}{\partial m}$ $\frac{\partial k}{\partial m}$ $\frac{\partial k}{\partial m}$ head hurt.Stat-AnPl = Def.AnPl 'the men whose head hurts (=whose heads hurt)'

Cues of this syntactic type were often rephrased in Yanda Dom. In (597a), 'the man whose house fell' was rephrased as 'the man (who is) the owner of (the) house that fell'. Here 'owner of (the) house that fell' as a unit is treated as an adjectival modifier of 'man'. (597b), with a resumptive possessor pronoun, is partially analogous to nonstandard English examples of the type 'the children_x who their_x father died', but the definite morpheme agrees in number with the relative-clause subject ('father') rather than with 'children'.

- (597) a. [àn^L [[îlò^L pílé] ^Lbàdù] gè]
 [man^L [[house^L fall.Perf.Rel] ^Lowner] Def.AnSg]
 àmbá: bò-Ø
 where? be-3SgS
 'Where is the man (who is) the owner of the house that fell?'
 - b. [ènè^L [bò ^Hdé:] tíbé gè] àmbá: b-è: [child.Pl^L [3PlS ^Hfather] die.Perf.Rel Def.AnSg] where? be-3PlS 'Where are the children whose father died?'

14.5 Relativization on the complement of a postposition

When the NP complement of a PP is relativized on, one possibility is for the postposition to be omitted. Thus compare (598a), with audible locative

postposition $n\dot{a}$, and its relativized counterpart (598b), which omits the postposition.

- (598) a. [bòndò †ná] yà pílé-w [hole in] Real fall.Perf-2SgS 'You-Sg fell into the pit.'
 - b. [bòndò¹ ó pílé wò] àngó = ∴
 [pit¹ 2SgS fall.Perf.Rel Def.InanSg] which?=it.is
 'Which (one) is the pit that you-Sg fell (into)?'

If the postposition is overt in the relative clause, it follows its complement noun as usual. However, both the noun and the postposition are low-toned. In other words, the noun is tone-dropped, and it does not induce Rhythmic Tone-Raising on the postposition. The postposition is perhaps included in the domain of relative-controlled tone-dropping, but we cannot prove this conclusively since the relevant (noncomposite) postpositions elsewhere have L- as well as H-toned forms, so the L-toned forms in relatives might just be lexical.

- (599) a. [bòndò^L nà] ó pílé wò
 [pit^L Loc] 2SgS fall.Perf.Rel Def.InanSg
 'the pit that you-Sg fell into'
 - b. [ŋgó [àn^L mi] ó dàmé gè]
 [Prox.InanSg [man^L to] 2SgS speak.Perf.Rel Def.AnSg
 'the man to whom you-Sg said that'
 - c. [àn^L bèrⁿà] bú:dù ó tạế gè [man^L Dat] money 2SgS send.Perf.Rel Def.AnSg 'the man to whom you-Sg sent money'

15 Verb (VP) chaining and adverbial clauses

A **direct chain** of verbs or VPs is one where the nonfinal verbs take their barestem form, with no overt subordinator. The chain is completed by a single verb with full inflection. Direct chains in Dogon languages express co-events that are conceptually integrated into a larger whole, but the languages differ as to how strict the criteria for conceptual integration are. Compared to other Dogon languages, Yanda Dom has relatively few direct chains. This is because it has some highly productive subordinators (notably those for same-subject VP chains) that are used in combinations that correspond to direct chains in some other Dogon languages such as Jamsay.

A **loose chain** is one where the nonfinal VP or clause does have an overt subordinator. In such a chain, each VP or clause usually has some degree of syntactic and semantic autonomy. However, the VPs in same-subject chains often share some constituents, and some syntactic integration may be apparent.

A useful test of syntactic autonomy is the position of a preverbal subject pronominal (P) in a relative clause. In relative clauses not involving a chain, such pronouns immediately precede the verb. In a relative involving a chain, if the order is ...P verb_1 verb_2 , we conclude that the two verbs form a tight, compound-like unit. If the order is ... verb_1 P verb_2 , then the VP or clause ending in verb_1 has at least some syntactic autonomy.

15.1 Direct chains (without chaining morpheme)

Direct chains, where the nonfinal verb appears as a bare stem (with no inflectional or subordinating suffix), are limited to integrated events that can be decomposed into two simultaneous or at least overlapping aspects (co-events) which are marked by different verbs. When two events are sequential rather than simultaneous, a suffixally marked chain-like subordinated form is used. For example, 'go and come (back)' is not expressed as a direct chain; see §15.2.2.2. As a result, direct chains are more restricted in YD than in, say, Jamsay.

Some complement-like constructions that are expressed as direct chains are described in §17.4. These include the 'be able to VP' construction expressed with final 'get' verb (§17.4.2) and a 'finish VPing' construction (§17.4.1).

Only very few elements, basically proclitics to verbs, may **intervene between chained verbs**, and even these elements do so only optionally. These

are realis $y\hat{a}$ (used with perfective positive verbs and with statives) and pronominal subject proclitics, as in relative clauses. Adding realis $y\hat{a}$ to a V_1 V_2 chain, we get either $[V_1 \ y\hat{a} \ V_2]$ (600a) or $[y\hat{a} \ V_1 \ V_2]$ (600b). The 1Sg proclitic subject pronoun $m\hat{i}$ likewise combines with the chain as $[V_1 \ m\hat{i} \ V_2]$ (600c) or $[m\hat{i} \ V_1 \ V_2]$ (600d).

When V_1 and V_2 are adjacent, under some conditions one or the other appears in $\{L\}$ -toned form. If V_1 is $\{H\}/\{H\}$ -toned, its tones are stable, but an immediately following clause-final V_2 usually drops to $\{L\}$ -toned regardless of its lexical tones, as with sundampuw in (600b) This is an instance of a general pattern for verbs to drop tones clause-finally when preceded by other full constituents, as especially in focalized clauses. The final determiner in (600c-d) protects suw from dropping its tones. Likewise, when realis yu intervenes between V_1 and V_2 , it protects V_2 from tone-dropping, as in (600a), contrast (600b) where yu precedes both verbs and V_2 drops tones.

Further examples of tonal relationships are in (601). Here V_1 is a $\{H\}/\{H\}$ -toned verb k und o which is stable tonally. The immediately following $\{LH\}/\{L\}$ -toned verb 'abandon' is $\{L\}$ -toned throughout, not only in the negative forms (601b,d) where it is regularly $\{L\}$ -toned, but also in the perfective, imperfective, and imperative where it would otherwise have at least one H-tone (601a,c,e).

- b. kó kúndó bèzè-lí-Ø InanSg **put.in** abandon-PerfNeg-3SgS 'He/She did not put it in and leave it.'
- c. kó kúndó ^Lbèzò-m-ù
 InanSg **put.in** ^Labandon-Impf-3SgS
 'He/She will put it in and leave it.'
- d. kó kúndó bèzè-náŋ-Ø InanSg **put.in** abandon-Impf-3SgS 'He/She will not put it in and leave it.'
- e. kó kúndó ^Lbèzò
 InanSg **put.in** ^Labandon.Imprt
 'Put-2Sg it in and leave it!'

The chain $pil\acute{e}$ $s\acute{u}w\acute{o}$ 'fall down' has exactly the same tonal patterns as $k\acute{u}nd\acute{o}$ $b\grave{e}z\acute{e}$ when V_1 and V_2 are adjacent and V_2 is clause-final. For example, elsewhere the perfective negative of 'go down' is $s\acute{u}w\acute{o}-l\grave{i}$ - with {H}-toned stem. However, when chained to preceding $pil\acute{e}$ 'fall' we get $pil\acute{e}$ $s\grave{u}w\grave{o}-l\acute{i}$ - 'did not fall down'.

Now consider what happens when V_1 is lexically $\{LH\}/\{L\}$ -toned, like $d\hat{e}$ - $d\hat{e}$ 'set, put (e.g. container) down'. The verb appears with its regular $\{LH\}$ -tones in the perfective and imperfective (602a,c). However, in the perfective negative, imperfective negative, and imperative, we get $\{L\}$ -toned $d\hat{e}$ - $d\hat{e}$, and an initial H-tone appears on V_2 (602b,d-e).

- (602) a. [èzù 'wó] yà dè-dé Lbèz-ò [waterjar Def.AnSg] Real put.down-Tr Labandon.Perf-3PlS 'They put down and left the waterjar.'
 - b. kó dè-dè †bézè-lí-∅ InanSg **put.down-Tr** abandon-PerfNeg-3SgS 'He/She did not put it down and leave it.' [for tones compare yè:dè †bézè-zó-m in (769) in Text 1]
 - c. kó dề-dế Lbèzò-m-ù
 InanSg put.down-Tr Labandon-Impf-3SgS
 'He/She will put it down and leave it.'
 - d. *kó* dê-dê †bézè-náŋ-∅ InanSg **put.down-Tr** abandon-Impf-3SgS

'He/She will not put it down and leave it.'

e. kó dê-dê L+bézò
InanSg **put.down-Tr** Labandon.Imprt
'Put-2Sg it down and leave it!'

There are two ways to analyse the aberrant (602b,d-e). One is to allow the initial L-tone of $d\hat{e}$ - $d\hat{e}$ to spread rightward to the end of the word. At this point both verbs are {L}-toned, and we could allow Rhythmic Tone-Raising to raise the tone of the first syllable of V_2 . An alternative analysis is that the final H-tone of $d\hat{e}$ - $d\hat{e}$ jumps across the word boundary and docks on the first syllable of V_2 . For another case of this phonological issue, see discussion of (83c) in §3.8.4.

15.1.1 Verbal noun of directly chained verbs

Verb chains can form a verbal noun in compound form. The final verb takes its usual verbal noun form. The nonfinal verb has its regular bare stem form but drops tones, like initials in many noun-noun compounds. For example, $pil\acute{e}$ $s\acute{u}y\acute{o}$ - 'fall down' ('fall' plus 'go down') becomes $pil\acute{e}$ - $[s\check{u}y-\mathcal{O}]$ '(act of) falling down'.

15.1.2 Presence of AN suffix in nonfinal verb in direct chains

In direct chains, by definition inflectional or subordinating suffixes are absent on the nonfinal verbs in the chain. In some other Dogon languages, an auxiliary-like element Y can appear in an [X-Y]-Z verb chain, functioning as a perfective marker for the X verb. This construction is not known in YD, since perfectivity entails sequencing, and since YD does not express sequential events as direct verb chains.

15.1.3 Arguments of directly chained verbs

As noted earlier, chained verbs are typically adjacent, allowing only certain elements (realis $y\dot{a}$, subject proclitics) to intervene, and then only optionally. Overt subject and object NPs, adverbial phrases, and other clausal elements precede both verbs. See (601a,c,e) in §15.1 above for examples involving direct objects.

15.1.4 Negation of direct verb chains

Only the final verb in the chain is inflectable. As a consequence, the only possible negation is wide-scoped and is expressed by suffixation on the final verb. See (601b,d) in §15.1 above for examples. Negation of verb chains is probably rare in discourse.

15.1.5 Direct chains including a motion verb or 'pick up, take'

The combination 'fall' plus 'go down' meaning 'fall down' is illustrated in §15.1 above. It was difficult to elicit other examples. Meanings like 'X came singing' and 'X ran up the hill' are expressed using various loose-chain constructions, not as direct chains of two simple (uniterated) verbs. For a construction that does involve iteration, see the following section. Loose-chain constructions covered elsewhere are illustrated in (603a-c) to make the point that direct chaining is not usual with motion verbs.

- (603) a. [nùŋà nùŋá-m] wè-Ø [song sing-Impf] come.Perf-3SgS 'He/She came singing (a song).' [imperfective clause, §15.2.1]
 - b. zòbò-y yà ?ólé-⊘ run-Past.and.then Real go.up.Perf-3SgS 'He/She ran up (e.g. a hill).' [-y with coindexed subject, §15.2.2.2]
 - c. [tòlò^L ná] w-ò
 [pound^L Purp] come-Perf.3PIS
 'They came to pound (grain).'
 [purposive clause, §17.6.1]

15.1.6 Durative verb-iterations chained to a following verb

The construction in (604) has an iterated bare verb stem functioning as a durative clause chained to a following verb. Prolonged duration is emphasized. The first occurrence of the verb has the tones of the regular bare stem, while the second and any subsequent iterations are {L}-toned. The regular bare stems are shown in parentheses after the free translations.

- (604) a. [nùŋà nùŋó-nùŋô] wè-Ø [song **Iter-sing**] come.Perf-3SgS 'He/She came singing (a song).' (nùŋớ)
 - b. [ànjă: kán-kàn] zá bèlá-m gèlà-Ø ¹mâ→ wà [how? Iter-do] food get-Impf Prog-3SgS Q Quot '(He asked:) By doing what (=how) do you keep getting food?' (kán) (excerpt from (800) in Text 2)
 - c. [nnôy [zá wò1 [thus [meal Def.InanSg] ?≼ηέ-?⇒ηὲ bèlá-m jèlà-Ø dè gày] Iter-eat get-Impf Prog-3SgS if Top] '(He said:) if this is how you keep getting the food, ...' (?ápɛ́) (excerpt from (809) in Text 2)

15.1.7 Perfective auxiliary té after another verb

 $t\acute{e}$ can be chained to a preceding verb. It is elicitable with any verb, but the only textual attstion is with $d\grave{g}\acute{g}$ 'leave, abandon'. Other than emphasizing perfectivity, it adds little to the meaning of the preceding verb. It is probably cognate to similar elements like Jamsay $t\acute{l}$, which (as auxiliaries) are likewise predominantly found with a handful of verbs like 'leave'. In these other languages the relevant form is often associated with perfective-1b suffix (Jamsay $-t\grave{l}$) and/or with a verb meaning 'send' (Jamsay $t\acute{l}$:), but YD $t\acute{l}$ - 'send' is not a perfect match.

 $t\acute{e}$ has a full paradigm, e.g. (still chained to 'leave') perfective $d\partial g \delta$ $t\acute{e}$ -, perfective negative $d\partial g \delta$ $t\acute{a}$ - $l\grave{i}$ - 'did not leave' (with {L}-toned $d\partial g \delta$), imperfective $d\partial g \delta$ $t\acute{a}$ -m-. However, $t\acute{e}$ is especially useful in subordinated forms where a regular perfective verb form would not work, as in (605) with subordinator -y (§15.2.2), giving the sense 'after having VPed, ...'. See also $s\acute{a}$: $t\acute{e}$ - in (791) in Text 1, and $d\partial g \delta$ $t\acute{e}$ - $z\acute{o}$ - \varnothing $d\grave{e}$ in (821) in Text 3.

(605) [dògò té-y] á úrⁿé wò [leave Perf-and] 3LogoS go.Ppl.Perf Def.InanSg 'when I left (it) and went' (excerpt from (788) in Text 1)

15.2 Adverbial clauses with overt chaining or subordinating morpheme

15.2.1 Imperfective subordinator -m

The suffix -m, without explicit pronominal-subject marking, produces **imperfective subordinated clauses** that form part of various combinations including the progressive constructions described in $\S10.5.2$, above. In this case, "imperfective" can extend to statives ($\S15.2.1.3$).

This type of clause is called for when the activity or state in question overlaps with the time interval of a main-clause predicate. The two clauses **often have the same subject**, whose pronominal expression is limited to the main clause. However, disjoint subjects are also possible; see §15.2.1.3 for examples.

- (606) a. $[g\partial l\partial g\partial la-m]$ $y\partial m\partial = b\acute{e}-\varnothing$ [farming do.farm.work-Impf] be.long.time=Past-3SgS 'He/She did farm work for a long time.'
 - b. [zá ?óná-m] màgí yà óbò-Ø [meal eat-Impf] over.there Real sit.Stat-3SgS 'He/She is sitting over there eating.'

This construction should be distinguished from logophoric-subject clauses with -m, on which see §10.4.3 and §18.2.1.2.

15.2.1.1 Imperfective -m on activity verb plus time-of-day verb

A verb with a meaning like 'spend (day, night, etc.)' denoting an extended time interval can readily combine with a preceding imperfective clause with the same subject. The imperfective verb ends in -m without pronominal-subject conjugation.

- (607) a. [té: zàndá-m] Ldèrⁿ-à [tea cook-Impf] Lspend.day.Perf-3PlS 'They spent all day making tea.'
 - b. [jà jè-ḿ] nă:-m-è [dance(n) dance-Impf] spend.night-Impf-3PlS 'They will spend the night dancing.'

15.2.1.2 Imperfective $-\dot{m}$ in different-subject complements

While imperfective -m occurs most often in constructions where the two clauses share a subject, and in general are tightly fused, it is also possible for it to form imperfective complements of main-clause verbs of perception ('see', 'hear', 'find'), cf. §17.2.3. In this construction, the subject of the imperfective clause must be represented by a preverbal subject pronoun, even when a full subject NP is also present.

- (608) a. [nò-mó wò] záŋ bò záníyá-m]

 [person-AnPl Def.AnPl] fight(n) 3PlS fight-Impf]

 Ltèmbè-m

 Lfind.Perf-1SgS

 'I found the people fighting (squabbling).'
 - b. [[yè-mù †wó] tól bò tóló-m]
 [[woman-AnPl DefAnPl] pounding 3PlS pound-Impf]
 w∂ = bé-m
 see=Past-1SgS
 'I saw the women pounding (in mortars).'
 - c. [dèndà: †gá] sátárá bòn nà bàrá-m]
 [night Loc] young.man tomtom 3SgS beat-Impf]
 nò = bé-m
 hear=Past-1SgS
 'At night I heard a young man play(ing) a tomtom.'

15.2.1.3 Imperfective -m complements of stative verbs

Although the conjugated derived stative form of verbs (e.g. 'be sitting') does not include -m- or other recognizable allomorph of the imperfective suffix, in constructions like those of the preceding section, e.g. with 'find' as main-clause verb, imperfective -m is added to the stative verb in the complement.

- (609) a. [sǎydù nà óbò-m] Ltèmbè-m
 [S 3SgS sit.Stat-Impf] Lfind.Perf-1SgS
 'I found Seydou sitting.'
 - b. [háwà ènè nà bàmbá-m] Ltèmbè-m
 [H child 3SgS carry.on.back.Stat-Impf] Lfind.Perf-1SgS
 'I found Haouwa carrying a baby on her back.'

See also $b\acute{o}-\acute{m}$ '(while) being' with the locational 'be' quasi-verb; see (118b) in §4.7.1.1.

15.2.1.4 Imperfective subordinate clauses with $-m = \delta$; plural $-m = g \hat{\epsilon}$

This construction is common in texts. The form $-m-\delta$: consists of -m (presumably imperfective) plus inanimate singular definite $w\delta$. For the contracted pronunciation, cf. phonetic $[m\delta:]$ from animate plural definite $/-m\dot{u}$ w δ /. This morphemic analysis is supported by the plural form -m $g\dot{e}$, with inanimate plural definite $g\dot{e}$.

This subordinated clause type is common medially in narrative text segments, with no obviously imperfective aspectual quality. An informant usually translates it with 'when ...' (French lorsque ...), setting up a following foregrounded clause. The subject pronominal category is expressed by a preverbal clitic pronominal, with \acute{a} (elsewhere reflexive or 3Logophoric) for 3Sg.

```
(610) a. àmbà [ènè<sup>L</sup> bô:]
God [children<sup>L</sup> those.NearDist]
á bálé-m=3:,
3ReflSg gather-Impf=Def.InanSg
'God gathered (=adopted) those children, ...' (excerpt from (845) in Text 5)
```

```
b. b\dot{o}-\acute{y} \acute{a} p\acute{o}d\acute{e}-\acute{m} g\dot{e}, ... 3Pl-Acc 3ReflSgS greet-Impf Def.AnSg, ... 'when she had greeted them, ...' (excerpt from (853) in Text 5)
```

15.2.2 Clauses with -y 'and then' (past, anterior)

This subordinator connects its clause with an immediately following clause. The conditions for using -y are those in (611).

- (611) a. the event denoted by the subordinated clause precedes that denoted by the following main clause;
 - b. the two events are part of a single episode;
 - c. the event denoted by the subordinated clause (and therefore the entire sequence) is completed.

In interlinears, the gloss is 'Past.and.then'. For future and other imperfective contexts, -y is replaced by another subordinator, $-\epsilon : \sim -\epsilon :$, see §15.2.3 below.

The subjects of the two clauses may be coindexed or disjoint, see $\S15.2.2.1-2$ below. In the disjoint case, a proclitic subject pronoun is obligatory, and (perhaps under the influence of this proclitic) the -y form of the verb is $\{H\}$ -toned. In the coindexed case, lexical tones affect the tones of the -y form. Lexical $\{H\}$ is realized as $\{H\}$, while lexical $\{LH\}$ spreads its initial tone all the way to the right to result in $\{L\}$. Irregular $\{HL\}$ stems preserve the full contour.

The stem takes the E-stem, as in the simple perfective. Vowel-length is preserved in Cv:- stems, except that Ca:- stems take their bisyllabic form Caye-. In the presence of w or another labial or rounded segment, a final e is often heard as o, hence $w\dot{e}$ - $y \sim w\dot{o}$ -y ('come'), $k\dot{u}b\dot{e}$ - $y \sim k\dot{u}b\dot{o}$ -y ('eat [meat]'). By contrast, final e is distinctly audible.

(612)	bare stem	perfective	Past.and.DS (coindexed)	gloss
	a. <i>Cv</i> -+ <i>ATR</i> , { <i>L</i> }			
	gó Wó	gọé- wé-	gọè-y wè-y∼ wò-y	'go out' 'come'
	-ATR, {L} wó	wé-	wè-y	'see'
	y€ -ATR, {H}	yé-	yè-y	'weep'
	n∕o +ATR, {HL}	nχέ-	n <u></u> χέ-y	'go in'
	zó	zoé-	zoé-ỳ	'bring'
	b. <i>Cv:</i> -			
	<i>Co:-</i>			
	tó:	toé:-	toé:-y	'spit'
	<i>Co:-</i>			
	té:	té:-	té:-y	'sprout'
	Ca:-			
	mǎ:	màyé-	màyè-y	'make (bricks)'
	nǎ:	nàyé-	nàyè-y	'spend night'
	ká:	káyé-	káyé-y	'shave'
	c. <i>CvCv</i> - (along { <i>H</i> }	with Cvn-, nCv-)	
	in	úr ⁿ é-	úr ⁿ É-V	ʻgoʻ

```
ńdέ
                    ńdέ-
                                         ńdέ-y
                                                            'give'
     ? έρε
                    ?≼́ηέ-
                                         ?≼́ηέ-y
                                                            'eat (meal)'
     ?έΙέ
                    ?έΙέ-
                                         ?₅ίέ-у
                                                            'go up'
                                                            'pound (in mortar)'
     tóló
                    tólé-
                                         tólé-y
     úbś
                    úbέ-
                                         úbέ-y
                                                            'pour'
                    tábé-
                                         tábé-y
                                                            'touch'
     tábú
  \{L\}
     dèr<sup>n</sup>€
                    dèr<sup>n</sup>έ-
                                         d\grave{e}r^n\grave{\varepsilon}-y
                                                            'spend day'
                                                            'do farm work'
    gàlá
                    gàlé-
                                         gòlè-y
                                                            'carry on head'
    dìγέ
                    dìyέ-
                                         díyè-y
d. trisyllabic
                                                            'sit'
    óbí-yó
                    óbí-yé-
                                         óbí-yé-y
    nìndíyó
                    nìndíyé
                                         nìndìyè-y
                                                            'listen'
```

15.2.2.1 -y with disjoint subjects

If the subjects are **disjoint**, the subject of the subordinated clause must be expressed as a **subject pronoun proclitic to the verb** (1Sg *mì*, 2Sg *ó*, etc.), and the *-y* verb appears as {H}-toned. A resumptive third person subject proclitic is required even when the subject is already expressed as a full NP (613b). The presence of a subject proclitic tips the listener off to the fact that the following clause has a disjoint subject.

```
(613) a. [[sùŋ †wó] mì dílíyé-y]
[[rope Def.InanSg] 1SgS pull-Past.and.then]

[yà púlí-yé-Ø]
[Real snap-MP-3SgS]

'I pulled the rope and (then) it snapped.'
```

```
b. [sĕydù [sùŋ 'wó] nà dílíyé-y]
[Seydou [rope Def.InanSg] 3SgS pull-Past.and.then]
[yà púlí-yé-Ø]
[Real snap-MP-3SgS]

'Seydou pulled the rope and (then) it snapped.'
```

```
c. [[sùŋ †wó] ó dílíyé-y]
[[rope Def.InanSg] 2SgS pull-Past.and.then]

[yà púlí-yé-Ø]
[Real snap-MP-3SgS]

'You-Sg pulled the rope and (then) it snapped.'
```

In (613a-b), the second (i.e. main) clause is shown in its full form, with realis $y\hat{a}$ (which requires the regular tones of the following simple perfective verb). It is also possible to omit $y\hat{a}$ in (613ab), in which case the perfective verb drops to $\{L\}$ tone. For example, (613a) has a variant (614). This reduction of the main clause is similar to reductions within perfective clauses that have preverbal constituents, especially if focal.

```
(614) [[sùŋ 'wó] mì dìlíyé-y]
[[rope Def.InanSg] 1SgS pull-Past.and.then]

L'pùlì-yè-Ø

L'snap-MP.Perf-3SgS

'I pulled the rope and (then) it snapped.'
```

15.2.2.2 -y with coindexed subjects

The subordinated and main clauses may also have **coindexed subjects**. Examples are (615ab), which are explicit about the agency of the snapping event. In this construction, there are no preverbal subject clitics in the subordinated clause. In (615a), the final 1Sg suffix in the main clause is sufficient. A nonpronominal subject NP normally occurs at the beginning of the construction (though one can argue about bracketing), and there is no resumptive subject proclitic (615b).

```
(615) a. [[sùŋ
                          †wó1
                                          dìlìvè-v1
                         Def.InanSg]
                                          pull-Past.and.then]
           [[rope
            [yà
                       púl-lé-m]
                       snap-Tr-1SgS]
            [Real
            'I pulled the rope and made it snap.'
       b. [sĕydù
                       [sùŋ
                                    †wó1
                                                    dìlìyè-y]
           [S
                                                   pull-Past.and.then]
                       [rope
                                    Def.InanSg]
                      púl-lé-Ø]
            [yà
           [Real
                      snap-Tr-3SgS]
            'Seydou pulled the rope and made it snap.'
```

With coindexed subjects, sometimes the -y clause denotes a **prolonged activity** or situation rather than a temporally contained event. The prolonged activity leads up to the event denoted by the following clause, as in (616). The free translation often has 'until'.

The 'be tired' construction (see just below) makes use of this.

The coindexed-subject construction with -y competes to a limited extent with direct chains. The latter usually denote single events that can be unpacked into co-events. For example, direct chain $pil\acute{e}$ $s\acute{u}y\acute{o}$ - 'fall down' ('fall' plus 'go down') denotes a single event that can be decomposed into manner and direction. The subordinated construction $pil\acute{e}$ -y $s\acute{u}y\acute{o}$ - can also be used to denote a typical falling event, but unlike the direct chain it can also be used to denote a sequence of events ('fall' followed by 'go down'). In perfective positive contexts, realis $y\grave{a}$ may precede both verbs in a direct chain (617a), but may not precede a subordinated clause with -y (617b).

```
(617) a. yà pílé Lsùyè-Ø
Real fall Lgo.down.Perf-3SgS
'He/She fell down.'
b. pílé-y [yà súyé-Ø]
fall-Past.and.then [Real go.down.Perf-3SgS]
'He/She fell down.' or 'He/She fell and (then) went down.'
```

For nonpast time frames, there is a similar competition between direct chains and $-\epsilon \approx -\epsilon$ subordinated clauses.

A nonsubject constituent may be logically shared by the subordinated and main verbs. Such constituents usually appear to the left of the subordinated verb, but bracketing may be ambiguous.

A construction with -y plus $b\grave{o}$ - 'be' (negative counterpart $\grave{o}n\acute{u}$ - 'not be') is attested. See (280b) in §8.4.7.3.

15.2.2.3 -y clause plus 'be tired' main clause

A special case of the coindexed-subject construction is a combination (common in narrative style) with the verb 'become tired' in the main clause. This verb does not necessarily predicate physical weariness, or at least does not emphasize it. It may primarily **exaggerate the duration and intensity** of the activity denoted by the subordinated clause. Compare English *shop until you drop*.

```
(619) [nàmà kúbó-y] [yà óμέ-m]

[meat eat-and.DS] [Real be.tired.Perf-1SgS]

'I ate meat until I was tired.' (= 'I gorged myself on meat')
```

15.2.2.4 Negation and -y clauses

The -y clause itself cannot be negated. The main clause can of course be negated. In this case, usually the negation does not have scope over the subordinated clause (620). In free translations, 'but' is often appropriate.

```
Hdé:]
(620)
           [[mì
                               bèr<sup>n</sup>àl bú:dù
                                                        némílé-v.
                                                mì
           [[1SgP Hather]
                                                1SgS
                                                        ask-Past.and.then
                              Dat]
                                      money
            mì-ý
                        àdà-lí-∅
            1Sg-Acc
                       give-PerfNeg-3SgS
            'I asked my father for money but he didn't give me (any).'
```

```
b. [[sùŋ †wó] dìlìyè-y]
[[rope Def.InanSg] pull-Past.and.then]

púl-ló-lù-m

snap-Tr-PerfNeg-1SgS

'I pulled the rope but did not make it snap.'
```

If the first clause is separately negated, it does not appear in subordinated-clause form. Instead, a regular negative main clause is followed directly by the second clause (621).

```
(621) sémbá-lù-m [mì-ý Làlìyè-Ø] sweep-PerfNeg-1SgS [1Sg-Acc Lchase.away.Perf-3SgS] 'I didn't sweep up and (so) he/she drove me out.'
```

15.2.3 $-\epsilon = -\epsilon$ after {L} 'and' (same-subject, anterior, nonpast time)

This form is used to link a clause to a following clause under the following conditions:

- (622) a. the two clauses have coindexed subjects (usually not repeated);
 - b. the events denoted by the two clauses are chronologically sequenced;
 - c. the two-event sequence as a whole is not in the past (it can be present or, more often, future)

The clause following the $-\epsilon$: $\sim -\epsilon$: clause may be imperfective or a modal form (imperative, hortative). The construction is common with regularly paired events ('eat and drink'), and combinations where the second event reverses the first ('go and come back', 'go up and go down').

The first clause ends in a verb with $\{L\}$ -toned stem followed by $-\epsilon$: $\sim -\epsilon$: replacing the stem-final vowel. Arguably this is just an extension of the final $\{e \ \epsilon\}$ of the E-stem, as in the simple perfective.

A few examples are in (623). The gloss is 'NonP.and.SS'.

- (623) a. ur^n -€: wo-m-Ø go-NonP.and.SS come-Impf-1SgS 'I will go and come (back).'
 - b. ur^n - ε : wogo-NonP.and.SS come.Imprt
 'Go-2Sg and come (back)!'
 - c. [[kó: ?ómó] kày-é:] úrⁿù-m̀-Ø [[head 1SgP.InanSg] shave-NonP.and.SS] go-Impf-1SgS 'I will shave (my head) and go.'
 - d. ?àn-é: ún-mà-n eat.meal-and.SS go-Hort-PlAddr 'Let's (you-Pl and I) eat and (then) go!'

The same clause type occurs as the same-subject complement of 'want', see §17.5.2, for past as well as nonpast time.

The suffix is -\(\epsilon\): or -\(\epsilon\): depending on the ATR-harmonic class of the verb (especially its final vowel). Representative forms are given in (624).

```
(624)
                                'and.SS'
             bare stem
                                                       gloss
        a. Cv-
           +ATR
                                w-ě:
                                                       'come'
             wó
                                gọ-ě:
                                                       'go out'
             gó
                                                       'bring'
             zó
                                zo-ě:
           -ATR
                                y-Ě:
                                                       'weep'
             yέ
                                                       'see'
             wź
                                W-\check{\mathcal{E}}:
                                                       'slash earth (to sow)'
             tś
                                tɔ̞-ěː
                                                       'go in'
             nś
                                nρ-ě:
        b. Cv:-
           +ATR
             tó:
                                to-ě:
                                                       'spit'
                                                       'shave'
             ká:
                                kày-é:
           -ATR
             mă:
                                mày-έ:
                                                       'make (bricks)'
                                                       'spend night'
                                này-έ:
             nă:
         c. CvCv- (and Cvn-)
           +ATR
             pílé
                                pìl-é:
                                                       'fall'
                                                       'pound (in mortar)'
             tóló
                                tòl-é:
                                tàb-é:
                                                       'touch'
             tábú
                                                       'cook'
             mànú
                                màn-é:
           -ATR
                                \grave{u}r^n-\acute{arepsilon}:
                                                       'go'
             ún
                                sèm-έ:
                                                       'slaughter'
             sémé
             ?၃΄ριέ
                                ?èɲ-έ:
                                                       'eat (meal)'
             ?έΙέ
                                ?à1-έ:
                                                       'go up'
                                                       'spend day'
             d\grave{e}r^n\acute{\varepsilon}
                                d e r^n - \epsilon:
             gàlá
                                gàl-έ:
                                                       'do farm work'
             dìyέ
                                dìy-έ:
                                                       'carry on head'
         d. trisyllabic
                                                       'sit'
             óbí-yó
                                òbì-y-é:
             nìndíyó
                                nìndíy-é:
                                                       'listen'
```

In cases involving tight integration of two co-events, whose chronological sequencing is blurry, the construction with $-\epsilon$: $\sim -\epsilon$: may **compete with direct chains**, where the first verb occurs in its bare stem form. For example, 'fall' and 'go down' combine in a tight chain to denote the event usually expressed in English as *fall down* (625a). They can also combine using $-\epsilon$: $\sim -\epsilon$:, a phrasing that allows for a time lapse between the two events, as when the fall occurs on a roof and the victim then comes down on a ladder (625b).

```
(625) a. pílé súwó-m-ù fall go.down-Impf-3SgS 'He/She will fall down.'
```

```
b. pìl-é: súwó-m-ù fall-NonP.and.SS go.down-Impf-3SgS 'He/She will fall and (then) go down.'
```

For past time frames, a similar competition occurs between -y subordinated clauses and direct chains.

Negation of the main clause is usually understood not to have scope over the subordinated clause. However, since the subordinated clause cannot be separately negated, alternative wide-scope readings are occasionally possible (626a).

```
(626) a. ùr^n-ɛ́: wò-lá
go-NonP.and.SS come-Prohib
'If you go, don't come (back here)!'
'Don't-2Sg go and come (back here)!'
b. ùr^n-ɛ́: wò-ráŋ-Ø
go-NonP.and-SS come-ImpfNeg-3SgS
'He/she will go and not come (back).'
```

Often both the subordinated verb and the final inflected verb **share nonsubject constituents**. For example, if both are transitive they may have a direct object NP in common. Shared constituents (NPs, PPs, other adverbs) typically precede the subordinated verb. Bracketing is difficult in such cases.

(627) Éw pè: sèm-é: pánà-m-Ø tomorrow sheep slaughter-and.SS skin&butcher-Impf-1SgS 'Tomorrow I will slaughter and skin (and butcher) a sheep.'

In relative clauses, only the final inflected verb takes relative form. In a nonsubject relative clause, a pronominal subject is expressed by a preverbal subject pronoun as usual. In the present construction, this subject pronoun directly precedes the final relative verb. This is a further indication that the "and.SS" verb is not inseparable from the final verb.

(628) $izen^L$ $ir^n-\epsilon$: mi $wo-\eta$ day^L go-and.SS 1SgS come-Impf.Rel.InanSg 'the day (when) I will go and come (back here)'

15.2.4 Verbs commonly found in suffixally marked chained form

The verbs described below are frequently chained to following verbs, using suffix -y for past time and $-\varepsilon$: or allomorph for nonpast time.

15.2.4.1 'Be/do together' verbs (*mú:mbí-yε*, *mòrⁿ*5)

Mediopassive $m\acute{u}:mb\acute{t}-y\acute{\epsilon}$ 'assemble, come together' or underived $m\grave{o}r^n\acute{b}$ 'do together' can be chained to a following verb denoting an activity. The chained verb takes -y for past time and $-\acute{\epsilon}$: for nonpast time. For $y-\^{a}$: in (629a-b) see (102) in §4.3.1.2.

- (629) a. *y-â:* mù:mbì-y-é: ún-m-ìy
 1Pl-all.together assemble-MP-NonP.and.SS go-Impf-1PlS
 'We will all get together and go (=go together).'
 - b. y-â: mòrⁿ-έ: ún-m-ìy
 1Pl-all.together assemble-and.then go-Impf-1PlS
 'We will all get together and go (=go together).'

15.2.4.2 '(Go) with, (take) along' chains including *jèlí-yé-* 'hold'

There is no close counterpart to elements such as Jamsay $jij\hat{\epsilon}$ that function something like nonfinal chained verbs with the sense '(go/come) with/accompanied by (sth)'. This is expressed in YD not by a direct chain, rather by a regular marked chain with subordinator -y (past time) or $-\hat{\epsilon}$: (nonpast time) added to any verb with a meaning like 'hold' or 'keep'. This is normally followed by a verb of motion or conveyance.

```
(630) [[înjê {}^{\dagger}g\acute{e}] j\acute{e}lî-yê-y] \acute{u}r^n\acute{e}-m [[dog Def.AnSg] hold-MP-and.then] go.Perf-1SgS 'I went, taking the dog along.'
```

15.3 Other temporal adverbial clauses

15.3.1 'Since ...' clause with $-n\acute{a} \sim -r^n\acute{a}$

Clauses of the type '(ever) since ...', denoting an extended time interval that began with a specified event and continues to the present (or a similar temporal reference point), are expressed by adding a suffix $-n\acute{a}$ to the verb of the 'since' clause. The allomorph $-r^n\acute{a}$ is optionall, except after the two verbs that ends in n.

For the use of this form in 'as soon as ...' clauses, see §15.3.4.

The subject of the 'since' clause proper is always expressed by a preverbal pronoun (e.g. 1 Sg m), $2 \text{Sg } \delta$). This pronoun is required even if the subject has just been spelled out by a fuller NP (which is treated syntactically as a topic), and regardless of whether the subordinated and main clauses have the same or different subjects. For example, (631a) is literally "the goat, since (=from the moment) it came here, it hasn't eaten."

- (631) a. [$?\acute{e}n\acute{e}$ $g\grave{e}$] [$n\grave{a}$ $w\acute{e}$ - $n\acute{a}$] [goat Def.AnSg] [3SgS come-since] $?\acute{e}n\acute{e}$ $?\acute{e}n\acute{a}$ - $l\grave{e}$ eat-VblN eat-PerfNeg-3SgS 'The goat hasn't eaten (anything) since it came (here).'
 - b. [mì nọc-ná] gò-lú-m [1SgS go.in-since] go.out-PerfNeg-1SgS 'Since I went in, I haven't gone out.'
 - àrⁿùŋ [nà tégé-ná] rain.fall-since] [3SgS rain [[ìzèn L pú→] [òy †ná] úrⁿú-m bò-Ø] [[day^L all] [field Loc] go-Impf be-3SgS] 'Since it rained, he has been going to the fields every day.'
 - d. [nà 'sá:-m=ò:] [bò tíbé-ná]
 [3SgP sister-AnPl=Def.AnPl] [3PlS die-since]
 [ŋgí wò-lí-Ø]
 [here come-PerfNeg-3SgS]

 'Since his sisters died, he hasn't come here.'

As shown by the data in (632), -nà 'since' is added to a form identical to that of the conjugated **perfective stem**. The only minor exception is that *Co:* verbs like 'spit' (632c) take the form *Cwe:*- with long *e:* before the 'since' suffix.

(632)		bare stem	'since'	gloss
	a.	wó	wé-ná	'come'
	и.	wó	wé-ná	'see'
		yέ	yέ-ná	'weep'
	b.	gó	gọé-ná	'go out'
		nớ	nọć-ná	'go in'
		zó	zoé-ná	'bring'
	c.	tó:	tọć:-ná	'spit'
	d.	mă:	màyé-ná	'make (bricks)'
		nă:	nàyé-ná	'spend night'
		ká:	káyé-ná	'shave'
	e.	ún	úr ⁿ é-ná	ʻgo'
		ńdέ	ńdέ-ná	'give'
		<i>?ອຸກຮ໌</i>	?ອຸກέ−ná	'eat (meal)'
		?ર્ ડ ીર્દ	?ə́lé-ná	'go up'
		tóló	tólé-ná	'pound (in mortar)'
		úbś	úbé-ná	'pour'
		tábú	tábé-ná	'touch'
		óbí-yó	óbí-yé-ná	'sit'
	f.	dèr ⁿ é	dèr ⁿ €-ná	'spend day'
		gàlá	gòlé-ná	'do farm work'
		dìyέ	dìyé-ná	'carry on head'
		nìndíyó	nìndíyé-ná	'listen'

A distinct morpheme $b\hat{a} \rightarrow$ 'since' is used with a NP complement: $nin\hat{a}$: $b\hat{a} \rightarrow$ 'since yesterday'. Another phrasing for this sense is $[X \ g\acute{o} \ m\acute{e}r^n\acute{a}]$ '(since) before X went out' or $[X \ g\acute{o}\acute{e}-n\acute{a}]$ 'since X went out', based on the verb $g\acute{o}$ 'go out' (§10.2.1.4).

(633) a. $[nina: ba \rightarrow] bide bida-m jela-y$ [morning since] work(n) work-Impf Prog-1PIS 'We have been working since morning.'

b. [nìŋà: gó mér¹á] bìdé bìdá-m jèlà-y
[morning go.out before] work(n) work-Impf Prog-1PlS
'We have been working since morning.'

15.3.2 'No sooner ..., than ...' $(-n\acute{a} \sim -r^n\acute{a}$, imperfective plus \rightarrow)

Two constructions are observed when the event denoted by the second clause is specified as immediately (and unexpectedly) following (the completion of) the event denoted by the first clause.

In the first construction, the first clause contains the same $-n\acute{a} \sim -r^n\acute{a}$ subordinator on the verb, and has the same obligatory preverbal subject pronominal, that we saw in 'since...' clauses (§15.3.1). This construction was regularly elicited when the sequence of closely spaced events took place in the past. The second clause is reduced by omission of realis $y\grave{a}$ before the perfective verb. The latter appears in low-toned form (634a,d), unless it is preceded by a low-toned constituent within its clause, in which case it appears in its lexically-toned form (634b-c). The absence of $y\grave{a}$ and the tone-dropping are characteristic of perfective verbs in clauses with focalized constituents.

- (634) a. [[?áló †ná] mì dọć-ná] bìyé-m [[house Loc] 1SgS arrive-since] lie.down.Perf-1SgS 'As soon as I arrived at the house, I lay down (to sleep).'
 - b. [[?áló †ná] mì dạé-ná]
 [[house Loc] 1SgS arrive-since]
 [àrnùŋ tégílí-yé-Ø]
 [rain(n) rain.fall-Inch.Perf-3SgS]

 'As soon as I arrived at the house, rain began to fall.'
 - c. [nà wé-ná] [yàŋ tólé-Ø]
 [3SgS come-since] [weeping begin.Perf-3SgS]

 'As soon as she came, she started crying.'
 - d. [àrnùŋ nà tégílí-yé-ná] [[?áló †ná] Lnọè-Ø]
 [rain 3SgS rain.fall-Inch-since] [[house Loc] Lgo.in.Perf-3SgS]

 'As soon as rain started to fall, he/she went into the house.'
 - e. [[mì LH lăl] móndò mì-ý nà ńdέ-ná] [[1SgP LH friend] motorcycle 1Sg-Acc 3SgS give-since]

[[mì LH dèré] [mì Hbérná] yà élé-zè-Ø [[1SgP LH elder.sib] [1Sg HDat] Real dispossess-RecPf-3SgS 'As soon as my friend gave me a motorcycle, my older (same-sex) sibling took (it) away from me.'

The second construction was produced when the sequence of events is in the nonpast (either future, or present habitual). The verbs of the first clause is imperfective, with regular pronominal-subject inflection. The second clause is usually likewise imperfective, but it can also be an imperative or hortative. The first clause has realis $y\hat{a}$, since its reality is presupposed in this context. The only "subordinator" is an **obligatory prolongation of the final segment** (symbol \rightarrow) of the imperfective verb of the first clause. In (635a), the m is prolonged, while in (635b) the final vowel is prolonged.

```
(635) a. [[dùmózán nà] yà dạá-m-∅→]
[[D Loc] Real arrive-Impf-1SgS]
bìyó-m-∅]
lie.down-Impf-1SgS
'As soon as I (will) arrive in Douentza, I will lie down (=go to bed).'
or: '(Habitually) as soon as I arrive in Douentza, I lie down.'
```

```
    b. [[dùmózán nà] yà dọá-m-è→]
[[D Loc] Real arrive-Impf-3PIS]
bìyó-m-è
lie.down-Impf-3PIS
'As soon as they arrive in Douentza, they will lie down (=go to bed).'
```

15.3.3 Noun-headed temporal clause ('the time when ...')

A noun denoting a temporal moment or interval ('time', 'year', 'day', 'era', etc.) can serve as head of a relative clause that functions as a temporal adverbial clause ('when...'). The relative clause can function as complement of the instrumental postposition m' 'with' (§8.1.2), as in (636a), or a postposition may be absent but implied (636b).

```
(636) a. [w \grave{a} \grave{g} \grave{a} \grave{d} \grave{u}^L m \grave{i} p \acute{l} \acute{e} w \grave{o} ] m \grave{i},

[t ime^L 1SgS fall.Perf.Rel Def.InanSg] with,

p \grave{o} l \uparrow g \acute{e} l \grave{a} := b \acute{a} - l \grave{u} - m

knife have.Impf=Past-PerfNeg-1SgS
```

'At the time when I fell, I didn't have a knife (on me).'

b. módùbè *[ìzèn*^L nà wé wò], holy.man [dav^L 3SgS come.Perf.Rel Def.InanSg], [dàmá wò cêm] yà múmbí-y-á Real assemble-MP.Perf-3PIS [village Def.InanSg all] 'The holy man, the day when he came, the whole village (=all the villagers) assembled.'

15.3.4 Reverse anteriority clause 'before ...' (mérⁿá, mì)

The clause-final particle $m\acute{e}r^n\acute{a}$ is added to a **high-toned form of the bare stem** of the verb to constitute a 'before ...' clause, which may precede or follow its main clause. A preverbal subject pronominal is required, even if the subject is also expressed by a full NP. This construction is regular when the 'before ...' clause and the main clause have different subjects.

- mérⁿá] (637) a. [nìnà: †gá] [[àrⁿùŋ †wó] tέgέ nà Def.InanSg] 3SgS rain.fall] before] [yesterday in] [[rain [?516 †ná] $n \acute{o} - z \grave{\varepsilon} = b \grave{\varepsilon} - m$ [house go.in-RecPf=Past-1SgS Loc 'Yesterday, before the rain fell, I had (already) gone into the house.'
 - b. [nìŋ 'wó] tédé-mà-n]
 [mat Def.InanSg] lay.out-Hort-PlAddr]
 [nònònzù-m=ó:] bò wó mérⁿá]
 [guest-AnPl = Def.AnPl] 3Pl come before]
 'Let's set out the mats before the guests come.'
 - c. [nà gó mérⁿá] [[sáŋ wò] pídò] [3SgS go.out before] [[door Def.InanSg] shut.Imprt] 'Shut-2Sg the door, before he/she comes out.'

Representative forms of the verb with *mérⁿá* are in (638).

(638)		bare stem	'before'	gloss
	a.	gó	gó mér ⁿ á	'go out'
		yέ	yé mér ⁿ á	'weep'
		tá	tó mér ⁿ á	'slash earth (to sow)'

	nó	nó mér ⁿ á	'go in'
	nó	nó mér ⁿ á	'hear'
b.	wó	wó mér ⁿ á	'come'
υ.	wó	wó mer a wó mér ⁿ á	'see'
	dó	dó mér ⁿ á	'arrive, reach'
	dó	dó mér ⁿ á	'insult'
c.	zó	zó mér ⁿ á	'bring'
	zĭn	zín mér ⁿ á	'take away'
d.	tó:	tó: mér ⁿ á	'spit'
	ká:	kà: mér ⁿ á	'shave'
	nă:	nà: mér ⁿ á	'spend night'
	<i>?ຈຸກຮ໌</i>	?án€ mér ⁿ á	'eat (meal)'
	?ślé	?∕álé mér ⁿ á	'go up'
	úbś	úbó mér ⁿ á	'pour'
	ńdέ	ńdé mér ⁿ á	'give'
	tóló	tóló mér ⁿ á	'pound (in mortar)'
	óbí-yó	óbí-yó mér ⁿ á	'sit'
e.	mă:	má: mér ⁿ á	'make (bricks)'
	dèr ⁿ €́	dér ⁿ é mér ⁿ á	'spend day'
	gàlá	góló mér ⁿ á	'do farm work'
	dìyé	díyé mér ⁿ á	'carry on head'
f.	ún	ún mér ⁿ á	ʻgo'
g.	símbé	símbé mér ⁿ á	'roast, grill'
	cézó	cézó mér ⁿ á	'cut (slice)'
h.	tábú	tábú mér ⁿ á	'touch'
	năm	nám mér ⁿ á	'grind (into flour)'
	mànú	mánú mér ⁿ á	'cook'

Of course [[before X] Y] can also be rephrased as [Y [then X]]. Translation cues with 'before ...' are often rephrased in this way when the two clauses have the **same subjects**. (639a) makes use of the same-subject ('and.SS') subordinator $-\epsilon$; which specifies temporal sequencing (§15.2.3). (639b) likewise contains the 'and then' subordinator -y, in its same-subject function (§15.2.2).

- (639) a. [bìdé bìd-é:] [zá ʔɔ́nà-m-ìy]
 [work(n) work-and.SS] [meal eat-Impf-1PIS]

 'We'll work and then we'll eat.' (= 'We'll work before we eat.')
 - b. [bìdé bìdé-zé-y] [zá L²-ànè-Ø]
 [work(n) work-RecPf-until.SS] [meal Leat.Perf-3SgS]
 'He/She finished working and then ate.'
 (= '...finished working before eating')

See also the discussion of the immediate future form -zà- in §10.3.2.3.

(820) in Text 3 has an interesting combination of instrumental postposition *mì* with a complement consisting of a relativized 'begin' clause, in the sense 'as X was about to VP'.

15.3.5 Nonpast durative -*n* clauses

A clause with suffix -n on the verb is found in durative clauses preceding 'until' clauses, when the time frame for the overall construction is imperfective, i.e. future (640a) or present (640b). Corresponding constructions referring to past time intervals have imperfective -m (640c).

- (640) a. [bìdé yé bìdà-n] [hálè tê: Lwò-m-ù]
 [work(n) 1PlS work-NonPDur] [until tea Lcome-Impf-3SgS]
 'We will work until the tea comes.'
 - b. [ìzèn^L cêm] bìdέ bìdà-n] yé [day^L all] work(n) 1PIS work-NonPDur] Lwò-m-ù] [hálè tê: ^Lcome-Impf-3SgS] [until tea 'Every day, we work until the tea comes.'
 - c. [nìŋà: yè bìdá-ḿ] [hálè tê: Lwè-Ø]
 [yesterday 1PIS work-**Impf**] [until tea Lcome.Perf-3SgS]
 'Yesterday we worked until the tea came.'

The durative clause and the 'until' clause may have **disjoint subjects** as in (640a-b). If the subject of the durative clause is nonpronominal, a **resumptive** preverbal subject pronoun is required. Therefore 'children' requires a 3Pl subject proclitic pronoun in (641). In the disjoint-subject construction, L-toned proclitic pronouns shift to H-tone in this construction, hence 1Pl yé in (640a-b)

above and 3Pl $b\acute{o}$ in (641). The verb is also {L}-toned before -n in this construction.

Alternatively the two clauses may have **coindexed subjects**. In this case, the subject is not expressed in the durative clause (though a topical NP may be preposed to the entire construction). The verb stem with -n has **lexical tones** in the coindexed-subject construction (642).

(642) [bìdé bìdá-ń] [hálè éw Ldɔà-m-iy]
[work(n) work-NonPDur] [until tomorrow Larrive-Impf-1PIS]
'We will work until we arrive at tomorrow (=until tomorrow).'

See also (651) in §16.2.. In (702a) in §17.6.4, *dé* (presumably the 'if' morpheme) follows *-n*.

Representative forms of verb with -n are in (643). The verb has lexical tones in the coindexed version, $\{L\}$ overlay in the disjoint version. The vocalism is that of the A/O-stem. Mediopassive $-y\hat{v}$ - is dropped before -n unless this would result in a monosyllabic stem ('lie down').

NonPDur if subjects are...

gloss

(643) Verbs with nonpast durative subordinator -n

	disjoint	coindexed	
a. monosyllabic			
-ATK tọć	tọà-n	tọá-ń	'sow'
yέ	yà-n	yá-ń	'weep'
+ATR			•
jé	jè-n	jé-ń	'dance'
tó:	tò:-n	tó: -ń	'spit'
Ca:			
ká:	kà:-n	ká: -ń	'shave'

b. bisyllabic or longer -ATR

stem

```
bìdέ
               bìdà-n
                               bìdá-ń
                                                'work'
                                                'sing'
  ກນ້າງວ໌
               nùŋà-n
                               nùŋá-ń
+ATR
  nìyé
               nìyo-n
                               nìyó-ń
                                                'sleep'
  kúbó
                               kúbó-ń
                                                'eat (meat)'
               kùbò-n
                               dí:zó-ń
                                                'file'
  dí:zé
               dì:zò-n
                               mèngúró-ń
                                                'roll into a ball'
  mèngíré
               mèngùrò-n
mediopassive -yv- omitted
                                                'sit'
  óbí-yó
               òbò-n
                               óbó-ń
                                                'lie down'
  bì-yó
               bì-yò-n
                               bì-yó-ń
  nùndí-yé
               nùndò-n
                               nùndó-ń
                                                'listen'
CaC(u) etc.
  năm
               nàmà-n
                               nàmá-ń
                                                'grind'
```

15.4 Spatial and manner adverbials

15.4.1 Spatial adverbial clause ('where ...')

The basic 'where ...' adverbial clause is a relative clause headed by $\frac{\partial m\delta}{\partial t}$ 'place', which of course drops tones as relative head. Because it is inanimate, the relative clause generally ends in inanimate singular definite $\frac{\partial m\delta}{\partial t}$. In (644a), the relative clause functions as a NP, and specifically as subject of the adjectival predicate. In (644b-c), a similar NP is complement of the locative postposition $\frac{\partial m\delta}{\partial t}$, and the PP as a whole functions as a spatial adverbial clause.

```
(644) a. [mòmbîl àmò<sup>L</sup> mòdìyè-zó wò]
[vehicle place<sup>L</sup> be.stuck-Perf2.Rel Def.InanSg]
wàjú-m bò-Ø
distant-Adj be-3SgS
'The place where the vehicle got stuck is far away.'
```

```
b. [[\hat{\partial}\cdots]^L m\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\cdots\hat{\partial}\c
```

```
òmò<sup>L</sup>
c. [[gòy<sup>n</sup>è-mù
                          †wó]
                                                              mì
                          Def.AnPl]
                                               place<sup>L</sup>
                                                              1SgS
     [elephant-Pl
                                                          ^{\mathrm{L}}kònà-m-\varnothing
     wέ
                          wò1
                                               nà]
                                                          Lgo.back-Impf-1SgS
     see.Perf.Rel
                          Def.InanSg]
                                               Loc]
```

'I will go back to the place where I saw (the) elephants.'

d. $\frac{\partial m\partial^L}{\partial m\partial^L}$ $\frac{\partial m\partial^L}{\partial m}$ $\frac{\partial m\partial^L}{\partial m}$

15.4.2 Manner adverbial clause ('how ...')

A relative clause of the type 'the way/manner ...' has *gìdè* or syonym *àŋăy* 'manner' (§8.4.5) as head NP, in low-toned form *gìdè* or *àŋăy* (645a). A clause of this type may function as a regular NP argument in its clause, such as the object NP in (645b). To convert this into a manner adverbial clause, a clause-final *yèŋ* 'like' or variant is needed, as in (645c) here and in (787) in Text 1.

- (645) a. nìŋà: dòm àŋày^L ó dàmé wò
 yesterday talk(n) manner^L 2SgS speak.Perf.Rel Def.InanSg
 'the way you-Sg talked yesterday'
 - b. [dòm àŋày^L ó dàmà-ŋ^L kó]

 [talk(n) manner^L 2SgS speak-Impf.Rel.InanSg^L NearDist.InanSg]

 èbù = là-m

 want=it.is.not-1SgS

 'I don't like the way you-Sg talk.'
 - c. [[àŋày^L dàmé] yèn] [[manner^L speak.Perf.Rel] 3SgS like H_{lá]} ^Ldàmà-m-Ø $k\hat{o}y^n$ [mì Htoo] thus Lspeak-Impf-1SgS [1Sg 'I speak like he/she speaks.' [lit.: "Like the way he/she speaks, I too speak like that."]

15.4.3 Headless adverbial clause as spatiotemporal or manner clause

Other Dogon languages that construct manner and spatiotemporal adverbial clauses as relatives ('where/when/the way ...') generally allow the implied head to be omitted. A possible textual example is (646), where 'he went' has relative form but appears to have no overt head NP.

(646) [zòmó kóy bò-m] [nà úrⁿé là] [hare just.over.here be-Impf] [3SgS go.Perf.Rel too] [[zùwó kàndà] doà-lì-Ø kôy]
[[week even] arrive-PerfNeg-3SgS Emph

'(Since) Hare was there and had gone away, not even a week had elapsed.' (excerpt from (778) in Text 1)

15.4.4 'From X, until (or: all the way to) Y' (háli)

The regionally widespread particle *hálì* 'until, all the way to' can precede a spatial or temporal expression, emphasizing completeness and distance of the trajectory. Depending on the verb, the translation may be allative ('to, until') or ablative ('from, since').

- (647) a. [hálì bàmàkó nà] [nà: †mí] ùn-m-ìy
 [until Bamako Loc] [foot Inst] go-Impf-1PlS
 'We will walk all the way to Bamako.'
 - b. [nà: †mí] [hálì bàmàkó nà] ùn-m-ìy
 [foot Inst] [until Bamako Loc] go-Impf-1PIS
 'We walked (here) all the way from Bamako.'

16 Conditional constructions

The 'if' particle is $d\hat{e}$, in clause-final position following the verb or other predicate. Its phonological tone is usually low, but the high tone of perfective negative 3Sg - $1\hat{i}$ - \varnothing (which drops its vowel in this combination) and 3Pl - \hat{n} - \varnothing is realized on the 'if' particle. Like other clause-final subordinators, $d\hat{e}$ is subject to additional intonational effects.

16.1 Hypothetical conditional with dè 'if'

When the antecedent denotes a single hypothetical future event, or the negation of such an event, its verb takes **perfective** form (648a-b). The consequent is most often a clause with imperfective verb (648a), though it is occasionally perfective as in (648b) where the verb in question is generally perfective in form (denoting the state of safety after a dangerous close call). The consequent may also be an imperative, hortative, etc.

- (648) a. [6-ý yà wé-Ø dè] [6 dèmá-m-ù]
 [2Sg-Acc Real see.Perf-3SgS if] [2Sg hit-Impf-3SgS]
 'If she sees you-Sg, she'll hit you.'
 - b. [ó-ý wà-l-Ø †dé] [yà pá:bí-yé-w]
 [2Sg-Acc see-PerfNeg-3SgS if] [Real protect-MP.Perf-2SgS]
 'If she doesn't see you-Sg, you will safe (=will have been protected).'

The antecedent may denote a recurrent activity, and in this case its verb takes imperfective form (649).

- (649) a. [zá ?óɲà-m-ùw dè] ámà-m-ùw
 [meal eat-Impf-2SgS if] be.goodsized-Impf-2SgS
 'If you-Sg eat, you'll grow (to a good size).'
 - b. [zá ʔə̄nɛ̀-rán-ù dè] dòná-m-ù [meal eat-ImpfNeg-2SgS if] be.skinny-Impf-2SgS 'If you-Sg don't eat, you'll become skinny.'

Conditional 'if' often shades into future-oriented temporal 'when'. In (774) in Text 1, $y\hat{e}$ appears to be a variant of $d\hat{e}$.

16.2 Alternative 'if' particles

```
16.2.1 'Even if ...' (dàn, kàndà, dè là)
```

There are a few ways to express 'even if', i.e. to assert that the actualization of the antecedent condition would have no bearing on that of the consequent.

Purposive-causal dàn (§8.3.2) can replace dè. The pragmatic sense is to claim that the consequent is causally independent of the antecedent. The free translation is 'even if ...'.

The examples with *dàn* that were obtained in elicitation regularly use the **perfective-2** form of the verb in the antecedent clause.

- (650) a. $ar^n u\eta$ [dìyá †gá] tégé-zó dàn] rain [big Adv] rain.fall-Perf2-3SgS even] [[mènè $\delta-\eta$ nà] gò-rán-∅ [[field 2SgP-InanSgl Locl go.out-ImpfNeg-3SgS] 'Even if rain falls heavily, your-Sg field won't yield (much).' [lit.: "... it won't come out in your field"]
 - b. [zá ?śɲɛ́-z-ɛ́: dàn] àm-náp-ɛ́
 [meal eat-Perf2-3PIS even] be.goodsized-ImpfNeg-3PIS
 'Even if they eat, they don't grow (to a good size).'
 - c. [wò-z-é: dàn] [ŋgí zá ʔɔ̄nɛ̀-rán-é] [come-Perf2-3PlS even] [here meal eat.meal-ImpfNeg-3PlS] 'Even if they come, they won't eat here.'

16.2.2 'As soon as ...'

I did not find any 'as soon as' particles replacing $d\hat{e}$ at the end of the antecedent clause, emphasizing the immediacy of the consequent eventuality on the actualization of the antecedent condition. Cues with French $d\hat{e}s$ que were rendered by ordinary conditional clauses with $d\hat{e}$.

An explicit 'as soon as' requires a significant rephrasing using a stative form $dimb\dot{a}$ - from the verb $dimbi-y\dot{\epsilon}$ 'follow'. Both the substantive verb and 'follow' appear with nonpast durative subordinator -n (§15.3.5).

```
(651) wó-n ná dìmbà-n,
go-NonPDur 3SgS follow.Stat-NonPDur,
zá ?śpà-m-ìy
meal eat.meal-Impf-1PIS
'As soon as he/she comes, we'll eat.'
```

Another rephrasing is to relativize both clauses with covert inanimate head, and conjoin them. An example is (652), literally "(the time/situation) where they see each other and (the time/situation) where they fight," i.e. they are one and the same situation. This construction describes recurrent eventualities.

```
(652)
                     tòmù]
                                                                   mi \rightarrow 1
        [[á
                                 bò
                                          wá-η
        [[3Refl
                     Recip]
                                 3PlS
                                          see-Ppl.Impf.InanSg
                                                                   and]
        [bò
                     zá:níyá-ŋ
                                               mì→]
        [3PIS
                     fight-Ppl.Impf.InanSg
        '(Whenever) they see each other, they fight.'
```

16.3 Willy-nilly and disjunctive antecedents ('whether X or Y ...')

In a willy-nilly conditional, two mutually exclusive antecedents that together exhaust all possibilities are juxtaposed, with dying-quail intonation on both, and with optional final $p\vec{u} \rightarrow$ 'all'. There is no final $d\vec{e}$ 'if'. Usually the two antecedents are paired positive and negative clauses, the second one being reduced to a single negative verb. The consequent has its normal (i.e. most often imperfective) form, and is understood to be asserted regardless of which of the two antecedents turns out to be true.

```
(653)
        ľbó
               wò-z-έ∷∴
                                     wò-ń-Ø∴
                                                             pú→]
               come-Perf2-3PIS
        [3P1
                                     come-PerfNeg-3PIS
                                                             all]
        [yé
                [pédù
                                                   kár<sup>n</sup>à-m-ìy
                           yè-ŋ]
                           1PIS-Poss.InanSg]
        [1P]
                [feast
                                                   do-Impf-1PIS]
        'Whether they come or not, we're going to have our feast.'
```

In a true disjunctive antecedent, where either of two antecedents can serve as the condition for the consquent, the antecedent has the usual form of a clausal disjunction, followed by a single occurrence of $d\hat{e}$ 'if', as in (654). If spoken without a prosodic break, the second (postpausal) 'or' may be omitted.

(654)
$$[\hat{n}j\acute{u} \quad \hat{o}n\acute{u}-\emptyset \quad m\^{a}\rightarrow], \quad [m\grave{a}\rightarrow \quad \hat{n}j\acute{u} \quad b\check{a}n=\therefore \quad d\grave{e}]$$
[water not.be-3SgS or], [or water red=it.is if]
$$[[b\grave{i}d\^{o}:^{n} \quad {}^{L}\grave{n}j\grave{u} \quad w\grave{o}] \quad n\grave{i}y^{n}\acute{a}-m-\grave{i}y]$$

[[can Lwater Def.InanSg] drink-Impf-1PIS] 'If there is no water or (the) water is brown, we'll drink the water of (=in) the can.'

16.4 Counterfactual conditional

In a counterfactual, where the antecedent proposition is understood not to have occurred, both the antecedent and the consequent are expressed with conjugated **past clitic** $=b\varepsilon$. The antecedent clause is **past perfect**, and the consequent is **past imperfective**. For example, (655a) is of the literal type "if (they) had come, they were eating (or: were going to eat)."

- (655) a. *[bó* nò-nó:-mù íyé wà: wò] person-two-AnPl Def.AnSg] today [3P1 morning $w\grave{o} = b - \acute{a}$ cíndá kúbò:=b-àdè, come=Past-3PIS if, liver eat.meat.Impf=Past-3PlS 'If the two of them had come this morning, they would have eaten some liver.'
 - b. [kà:-mú wò-n-Ø=b-á dè],

 [grasshopper-AnPl come-PerfNeg-3PlS=Past-3PlS if,

 yé yú: bèlâ:=bè-y

 1Pl millet get.Impf=Past-1PlS

 'If the locusts hadn't come, we'd have gotten (=harvested) millet.'

17 Complement and purposive clauses

17.1 Quotative complement

Quoted speech and thought is expressed by one or more of the following features:

- inflectable 'say' verb dăm or găn (§11.3.1-2), preceding or following the quotation, but often omitted;
- uninflectable quotative particle wà following a quoted clause and usually also following a referentially specific subject (subject quotative), §17.1.3;
- instead of wa, a clause-final subjunctive particle m in propositional belief complements (§17.1.4);
- clause-initial subject pronouns instead of pronominal-subject suffixes on verbs (§17.1.2);
- **3Logophoric** pronouns substituting for (original) first person pronouns (§17.1.1 and §18.2.1.1);
- logophoric subject is also expressed by a suffix on the verb that has the form (but not function) of a 1Sg subject suffix (§18.2.1);
- original addressee is expressed by regular third person pronominals (§17.1.1).

Overt 'say' verbs are frequently omitted in favor of the quotative particle. Inflectional verb categories are not changed in quotative complements. In particular, aspect-negation and mood categories are preserved.

There is no 'that' complementizer other than the quotative and subjunctive particles.

17.1.1 Pronominal conversions in quotative complements

If the original speaker and addressee are disjoint to the current speaker and addressee, original first person pronouns are converted into 3Logophorics, and original second person pronouns are usually merged with regular third person. For example, original 'I will give it to you' is quoted as 'LogoSg will give it to 3Sg (him/her)'. In (656), the initial 3Sg pronoun denotes the original addressee, while the original speaker is referred to by the (dative) 3Logophoric.

†zámnè-y] (656)[nà wá→1 [pàl [3Sg Quot] [sesame steal-Past.and.then] bérⁿá] [sàdù sádù nà] wò-zò-Ø wà. Γá [LogoSg Dat] [question ask Locl come-Perf2-3SgS Ouot, "You-Sg stole some sesame and you have come to me to ask (questions)," she said.' (excerpt from (818) in Text 3)

As a result, regular (nonlogophoric) third person pronouns in quotative clauses are ambiguous between original-addressee reference and reference to any other referent.

When true first and second person pronouns occur in quoted speech, they normally refer to the current speaker and addressee, respectively (657).

Exceptionally, in (793) in Text 1, the original 2Sg δ is preserved in subject quotative $[\delta \ w\acute{a} \rightarrow] \ n\grave{i}$. Interrogative topic marker $n\grave{i}$ makes the translation roughly 'how about you, ...?', and this may account for the unusual direct quotative aspect.

17.1.2 Clause-initial subjects

Nonpronominal subject NPs are already clause-initial in nonquotative indicative clauses, except that they may be preceded by temporal-setting adverbs like 'yesterday'. In quotative clauses, pronominal subjects are also expressed by clause-initial proclitics, and the usual pronominal-subject suffixes on verbs are omitted. The proclitic pronouns are Clause-initial subjects in quotations have Quotative particle wa, which is optional for nonpronominal NPs with specific reference and more or less obligatory for pronouns. wa cliticizes to and contracts with pronouns ending in a (3Sg na, 3Logophoric a). Quotative subjects are often set off prosodically from the remainder the sentence, and post-subject wa may be prolonged intonationally especially after pronominals; if so, this is indicated by \rightarrow . Adverbs like 'yesterday' follow quotative subjects.

(658) a. [săydu (wà)] nìŋà: pè: yà sémé wà
[Seydou (Quot)S] yesterday sheep Real slaughter.Perf Quot
'(X) said, "Seydou slaughtered a sheep yesterday."

- b. [6 wà(→)] nìŋà: pè: yà sémé wà
 [2SgS QuotS] yesterday sheep Real slaughter.Perf Quot
 '(X) said, "you-Sg slaughtered a sheep yesterday."
- x. $\acute{a} = \grave{a}(\rightarrow)$ $w\acute{o}-\grave{m}-\varnothing$ $w\grave{a}$ LogoSg=QuotS come-Impf-LogoS Quot 'He_x said that he_x was coming.'

Pseudo-subjects in certain fixed subject-verb collocations are not treated as true subjects for this purpose. They are not directly followed by $w\hat{a}$ and they may follow temporal-setting adverbs. See §11.1.4 for examples.

Quotative subject marker $w\hat{a}$ may be followed by certain discourse-functional particles that have scope over the subject NP: $l\hat{a}$ 'also, too' (802) in Text 2, topic marker $g\hat{a}y$ (859) in Text 5.

17.1.3 Quotative particle wà

Quotative particle $w\hat{a}$ is not inflected for pronominal category. In a quoted indicative sentence, it regularly occurs twice, once with the subject and once at the end of the clause (preceding, however, clause-final particles like $k\hat{o}y$ §19.5.1). For the post-subject occurrence, see the preceding section.

With an indicative clause, $w\hat{a}$ can have hearsay evidential quality ('allegedly, supposedly'), but for the most part it can be thought of as an audible quotation mark, and it can be used with quoted imperatives and other non-indicative clauses (§17.1.5). It can also be used in clarification requests with any word or phrase: $X w\hat{a}$ '(did you say) "X"?'

wà is used when the implicit 'say' predication is positive ('X said'). The clitic is omitted on quoted clauses that are immediately followed by an inflected 'say' verb (§11.3.1.2).

17.1.4 Subjunctive *nì* in propositional belief complements

Subjunctive *nì* occurs clause-finally in clauses that denote a proposition formulated mentally by a referent. The proposition may be a belief, a hope, or an intention. The current speaker does not vouch for the truth of the proposition.

```
(659)
        a. [[má:nú
                            bó-ŋ]
                                              nà]
                            3PlP-InanSg]
             [[thought
                                              Loc
             săydu
                        [dàmá
                                     nà] ur^n \varepsilon - \emptyset
                                                                    zw-έ:.
                                                           nì
             S
                        [village
                                    Loc]go.Perf-3SgS
                                                           Sbinct have-3PIS,
```

gà: $n a r^n a = l a - \emptyset$ but truth=it.is.not-3SgS 'In their belief, Seydou went to the village, but it isn't true.'

b. [gòlò yà gòló-z-à nì]
[farming Real do.farm.work-RecPf-3PlS Sbjnct]

Lange - m
Lhear.Perf-1SgS

'I heard (=was told) that they had finished farming.'

For subjunctive ni as complement of 'begin', see §17.6.1.2. For ni after imperfective negative verb in a negative purposive clause, see §17.6.3.

I see no clear semantic relationship between this subjunctive particle and interrogative-topic particle \vec{n} (§19.1.2), which I suspect is a reduced variant of \vec{n} : 'now' (the latter is often topical). However, subjunctive \vec{n} may be related to \vec{n} : 'intending', see (773) in Text 1, cf. also $\vec{l} \approx \vec{l} \approx \vec{l}$

17.1.5 Jussive complement (reported imperative or hortative)

17.1.5.1 Quoted imperative

As with other reported utterances, reported imperatives have a final quotative verb ($g\check{u}n$, $d\check{a}m$) or particle. The verb takes invariant imperative singular form (§10.7.1.1). A pronominal subject is expressed at the beginning of the clause and is not obligatory. Quotative subject morpheme $w\grave{a} \rightarrow$ (with pronominals) or $w\grave{a}$ (with nonpronominal NPs) is regularly present.

- (660) a. [nà †wá→] pè: sémá Lgùnè-m [3Sg QuotS] sheep slaughter.Imprt Lsay.Perf-1SgS 'I told him/her to slaughter a sheep.'
 - b. [bò †wá→] pè: sémá Lgùnè-m
 [3Pl QuotS] sheep slaughter.Imprt Lsay.Perf-1SgS
 'I told them to slaughter a sheep.'
 - c. [săydù wà→] pè: sémá ^Lgùnè-m [3Pl QuotS] sheep slaughter.Imprt ^Lsay.Perf-1SgS 'I told Seydou to slaughter a sheep.'
 - d. [m] ${}^{\dagger}w\acute{a} \rightarrow J$ $w\acute{o}$ ${}^{L}g\grave{u}n-\grave{a}$ [1Sg QuotS] come.Imprt L say.Perf-3SgS

'They told me to come.'

Reported prohibitives are illustrated in (661). The verb takes singular-addressee prohibitive form (§10.7.1.2).

(661) a.
$$[mi]$$
 ${}^{\dagger}w\acute{a} \rightarrow J$ $w\grave{o}$ - $I\acute{a}$ $w\acute{a}$ [1Sg QuotS] come-Prohib Quot '(He/she/they) told me not to come.'

17.1.5.2 Embedded hortative

In a **reported hortative**, the usual paraphernalia of quoted speech (final quotative verb or particle, quotative subject form at the beginning of the clause) is present. The verb takes invariant hortative form with -ma (§10.7.2).

(662) a.
$$[m]$$
 ${}^{\dagger}w\acute{a} \rightarrow J$ $\acute{u}n-m\grave{a}$ $w\grave{a}$ [1Sg QuotS] go-Hort say '(He/she/they) told me, let's go!'

A **reported hortative negative** clause is in (663). The verb is in the regular hortative negative form (§10.7.3).

17.2 Factive (indicative) complements

A factive clause corresponds to a 'that ...' complement in English with a verb like 'know' or 'see/hear' that denotes or implies a mental representation of a proposition. The factive clause has the same form as a main clause. However, it functions syntactically like a NP, and it may be followed by inanimate singular definite $w \grave{o}$.

NPs in factive complements are not subject to logophoric anaphora. In (664a), the 3Sg object pronoun may or may not be coindexed with Seydou. By contrast, in quotative complements such indexation is explicit. In (664b), the object is coindexed with Seydou, and in (664c) it is not.

- - b. $s \check{a} y du$ [mì ${}^{\dagger} w \check{a} \rightarrow$] $\check{a} \check{y}$ $w \grave{o} = b \acute{e}$ $w \grave{a}$ S [1Sg QuotS] Logo-Acc see=Past say 'Seydou_x says/said that I saw him_x.
 - c. $s \check{a} y du$ [$m \grave{i}$ ${}^{\dagger} w \acute{a} \rightarrow$] $n \acute{a} \acute{y}$ $w \grave{o} = b \acute{e}$ $w \grave{a}$ S [1Sg QuotS] 3Sg-Acc see=Past say 'Seydou_x says/said that I saw her_v.

17.2.1 'Know that/whether ...' complement clause

When not negated or questioned, the verb 'know' takes a factive complement, in the same form as a main clause but often followed by definite $w \grave{o}$ (665).

- (665) a. [wò-rán-ù wò] zùwá-m-Ø [come-ImpfNeg-2SgS Def.InanSg] know-Impf-1SgS 'I know that you-Sg are not coming.'
 - b. [săydu [dàmá nà] yà úrⁿε-Ø wò]
 [S [village Loc] Real go.Perf-3SgS Def.InanSg]
 zùwá-m-ùw
 know-Impf-2SgS
 'You-Sg know that Seydou went to the village.'

When 'know' is **negated or questioned**, the complement takes **polar** interrogative form with clause-final particle $m\grave{a} \rightarrow (\S13.2.1)$. There is no

distinction between e.g. 'he doesn't know that she died' (presupposing the truth of the embedded proposition) and 'he doesn't know whether (or not) she died', and the Yanda Dom phrasing follows the modal quality of the latter translation. For example, in (666a) 'I am here' is clearly true, but the syntax is parallel to that in (666b).

```
(666) a. [[mì 'wá→] ŋgí yà bó mà→] zùwò-rán-Ø

[[1Sg QuotS] here Exist be Q] know-ImpfNeg-3SgS

'He/She doesn't know that/whether I am here.'
```

```
b. [gòlò yà gòló-z-à mà→]
[farming Real do.farm.work-RecPf-3PlS Q]
zùwò-rá-m
know-ImpfNeg-1SgS
'I don't know whether they have finished farming.'
```

17.2.2 'See that ...'

'See' takes a factive complement with definite *wò* when the context is that the observer has used visual evidence to draw a conclusion, generally of a situation, such as the completion of an activity.

```
    (667) a. [bìdε yà bìdε-z-à wò]
        [work(n) Real work-RecPf-3PIS Def.InanSg]
        yà wε-m
        Real see.Perf-1SgS
        'I saw that they had finished the work.'
```

```
b. [[tê: wò] yà íjé-Ø wò]
[[tea Def.InanSg] Real be.finished.Perf-3SgS Def.InanSg]
wà-m bò-m
see-Impf be-1SgS
'I see that the tea is finished (=we're out of tea).'
```

17.2.3 'Find (=discover) that ...'

The transitive verb *témbé* 'find (by accident)' is used with a factive complement in contexts such as '(I went there and) I found (=discovered, learned) that ...', with reference to a completed event. Definite *wò* is absent in the attested examples.

- (668) a. [[yú: wò] téyá-lì-Ø] Ltèmbè-m
 [[millet Def.InanSg] sprout-PerfNeg-3SgS] Lfind.Perf-1SgS
 'I found that the millet had not sprouted.'
 - b. [[mì Hdé:] yà gó-zè-Ø] Ltèmbè-m
 [1SgP Hfather] Real go.out-RecPf-3SgS] Lfind.Perf-1SgS
 'I found that my father had gone out.'

For the morphology of verbal nouns, see §4.2.2. Verbal-noun complements may include nonsubject arguments and adverbs.

17.3 Verbal-noun complement

A verbal-noun complement is a subjectless verb phrase. In addition to the verb itself, nonsubject arguments and adjuncts may occur. (669a) shows a direct object for 'hit'. However, if the object is generic (and therefore undetermined) it is often incorporated as a {L}-toned compound initial.

- (669) a. [[èné á-mù] bùndó-le] yà dògé-∅ [[children 3ReflSg-Poss.AnPl] hit-VblN] Real leave.Perf-3SgS 'He/She has ceased beating his children.'
 - b. *ìnjù-níy-∅ yà dògé-∅* water-drink-VblN Real leave.Perf-3SgS 'He/She has ceased drinking water.'

17.3.1 'Dare' (dàdú, nàmíyé) with verbal-noun complement

These essentially synonymous verbs take nominal complements. In (670a), either of two types of verbal noun occur in the complement. In (670b), a relative clause with implied inanimate singular head is used.

- (670) a. *njí* wò-y/wó-lé yà nàmíyé-Ø dàdé-Ø
 here come/come-VblN Real dare.Perf-3SgS 'He/She dared to come here.'
 - b. [ó-ý dạá-ŋ] yà nàmíyé-Ø 2Sg-Acc insult-Impf.Rel.InanSg Real dare.Perf-3SgS

'He/She dared to insult you-Sg.'

17.3.2 'Cease' ($d\partial g \delta$) with verbal-noun complement

dògó is a simple transitive meaning 'leave, abandon'. It can also be used with a verbal-noun (or other nominal) complement in the sense 'cease (doing), desist from (doing)'.

- (671) a. $t\hat{e}$:- $n\hat{t}y^n$ - \mathcal{O} $y\hat{a}$ $d\hat{o}g\hat{e}$ - \mathcal{O} tea-drink-VblN Real leave.Perf-3SgS 'He/She has ceased to drink tea.' $(t\hat{e})$
 - b. $k\acute{u}$ -bà $g\grave{o}l\grave{o}$ $y\grave{a}$ $d\grave{o}g$ -á there farming Real leave.Perf-3PIS 'They have ceased to farm there.'
 - c. bòn-băn-Ø yà dòg-á tomtom-beat-VblN Real leave.Perf-3PlS 'They have ceased to beat (=play) tomtoms.'

17.3.3 'Forget' (*idé*) with verbal-noun complement

This verb takes nominal complements, ranging from simple NPs (672a) to verbal-noun complements with covert coindexed subjects (672b).

- (672) a. [dàmá á-ŋ] yà ídé-∅ [village 3ReflSg-Poss.InanSg] Real forget.Perf-3SgS 'He_x forgot his_x village.'
 - b. $[[[d\grave{a}m\acute{a} \qquad \acute{a}-\eta] \qquad \qquad n\grave{a}] \qquad {}^{\dagger}\acute{u}n-\varnothing] \qquad \qquad \acute{u}n-l\acute{e}]$ $[[[village \qquad 3ReflSg-Poss.InanSg] \qquad Loc] \qquad go-VblN] \qquad y\grave{a} \qquad \acute{t}d\acute{e}-\varnothing$ Real forget.Perf-3SgS 'He_x forgot to go to his_x village.'

'Forget' can also take finite factive complements (673).

(673) [yà tíb-á wò] $id\hat{\epsilon} = b\hat{\epsilon} - m$ [Real die.Perf-3PIS Def.InanSg] forget=Past-1SgS

'I forgot that they had died.'

17.3.4 Predicative *tílày* or *wá:zìbù* 'obligation' with verbal-noun subject

A noun meaning 'obligation, duty', either tilay or wa:zibu, takes impersonal predicative form. The required action is expressed as a verbal-noun or similar nominal complement, with a possessor denoting the agent. The 'it is' clitic = \therefore (§11.2.1.1) is present, one presumes, but it is usually not audible.

(674) [[bàmàkɔ´ nà]
$$ù$$
n-Ø ná-ŋ] t ilày(= ::) w á:zìb \hat{u} (= ::) v in-le v 674) [[Bamako Loc] go-VblN 3Sg-Poss.InanSg] obligation=it.is 'He/She must go (=is obligated to go) to Bamako.'

17.3.5 'Be afraid to' (*ibi-yê*) with verbal-noun complement

The transitive verb 'be afraid of X' can also be used with a verbal-noun complement as in (675). The experiencer is expressed as main-clause subject and does not appear in the complement.

If the lower subject is not coindexed to the matrix subject, the complement is a finite polar interrogative clause, with an imperfective verb (assuming that the feared eventuality is not yet actualized).

'Be afraid that' is logically different from 'be afraid to' since it does not involve the subject's future agency. (843) in Text 5 is a good example of 'be afraid that', and has a subjunctive (ni) complement.

17.3.6 'Help' (*bàdú*) with verbal-noun adjunct or chained verb

bàdú 'help' may be a special sense of **bàdú** 'add, increase', in the sense that the agent adds himself/herself to a joint action. The person who is helped is expressed as a direct object of **bàdú**. In (677a), a subjectless verbal-noun or other complement is added as an adjunct, roughly '...helped me [in walking]'. In (677b), the two verbs are chained, roughly '...tie-help you'.

- (677) a. $\partial z \hat{u}$ - $[u \emptyset]$ $m \hat{u}$ -y $b \hat{a} d \hat{u} = b \hat{e}$ -y road-[go-VblN] 1Sg-Acc help=Past-3SgS 'He/She helped me to walk.'
 - b. [nà: †gɛ̃] ó(-ý) kómó bàdà-m̀-Ø
 [cow Def.AnSg] 2Sg(-Acc) tie help-Impf-1SgS
 'I will help you-Sg tie up the cow.'

17.4 Directly chained VP as complement

Direct verb chains are those with no overt subordinator on the nonfinal verbs (§15.1). In some cases the verbs simply describe different aspects of a single event. However, there are also some verbs that regularly combine with other VPs in a semantically specialized manner. One can speak informally of the chained VP as a complement for the specialized verb.

17.4.1 tádú 'try to VP' with preceding chained VP

 $t\acute{a}d\acute{u}$ 'try' is chained to a preceding VP ending in bare-stem verb in the sense 'try to VP' or 'see if one can VP'. The rather common imperative form is $\{L\}$ -toned $t\grave{a}d\grave{a}$. The historical relationship, if any, of this verb to mediopassive $t\acute{a}d\acute{l}$ - $y\acute{e}$ 'be posted (affixed), be on (wall)' is unclear.

tádú usually forms a direct chain with the other verb.

- (678) a. [nà: †gé] yà kómó tàdè-m [cow Def.AnSg] Real tie try.Perf-1SgS 'I tried to tie up the cow.'
 - b. *nò* †*tádà* hear try.Imprt 'Try-2Sg to hear!'

tóló 'begin to VP' (§17.6.1.2) can also be used in contexts roughly translatable as 'try to VP', as when one attempts/begins to lift a large rock and fails to complete the act.

17.4.2 'Be able to, can' (bèlé) with preceding or following chained VP

As a simple transitive verb, **bèlé** means 'get, obtain'. With a preceding chained VP it means 'be able to, can (do)'.

- (679) a. [kóŋò nà] ?álέ bὲlá-m-ùw mà→
 [mountain Loc] go.up get-Impf-2SgS Q

 'Can you-Sg go up on (=climb) the mountain?'
 - b. [bàmàkó nà] ó ní:ndé] bèlè-ná-m (~bè:-rⁿá-m)

 [[B Loc] 2SgO accompany] get-ImpfNeg-1SgS
 'I cannot accompany you-Sg to Bamako.'
 - c. [bá yà gó dè] gòlò gòló Lbèlà-m-Ø [next year] farming do.farm.work Lget-Impf-1SgS 'Next year I'll be able to farm.'
 - d. [gòl †gá] tòŋ tó bèlà-lú-m [last.year Loc] sowing sow get-PerfNeg-1SgS 'Last year I was unable to sow (=plant the seeds).'

In some examples, a preceding chained verb that normally ends in a high-toned syllable (in the bare stem) is heard with low tones, followed by an initial high tone on the relevant form of *bèlé*. This is seen in (680), and cf. (681), below.

```
(680) zòbò †bélà-lú-m
run be.able-PerfNeg-1SgS
'I was not able to run.' (zòbó)
```

Although the semantic connection between 'get, obtain' and 'be able to' seems stretched to westerners, a construal of 'be able to' as 'get' makes sense if one supplies an object such as '(the) means'. This accounts for examples like (681a), where bèlé precedes rather than follows the other verb. Using his practical experience, the speaker apparently reasoned that 'be unable to farm' implies 'be unable to obtain the resources (seedstock, tools, transportation, and/or workforce) to farm'. In this reading, it is reasonable (iconically) to

position $b\grave{e}l\acute{e}$ 'get' before 'do farm work'. A textual example of $b\grave{e}l\acute{e}$ before a chained verb is (681b). Here the other animals were dissuaded from entering Hare's field by sounds of (apparent) danger.

```
(681) a. [gòl †gá] gòlò bèlè †gólà-lú-m

[last.year Loc] farming get do.farm.work-PerfNeg-1SgS

'Last year I was unable to farm.'
```

```
^{\mathrm{L}}m\grave{\varepsilon}n\grave{\varepsilon}
b. [[[zòmɔ́
                                                    wò]
                                                                       nà]
                       \eta
                                    <sup>L</sup>field
     [[[hare
                      Poss]
                                                    Def.AnSg]
                                                                       Loc]
     bèlè
                   †tíηà-ń-Ø
     get
                   cross-PerfNeg-3PlS
     'They could not cross over into hare's field.'
     (excerpt from (838) in Text 4)
```

As these examples show, $b\grave{e}l\acute{e}$ appears as $\{L\}$ -toned $b\grave{e}l\grave{e}$ in this construction, as is regular for $\{LH\}$ -toned verbs in nonfinal position in chains. The final verb has $\{HL\}$ stem tones and H-toned suffix, regardless of lexical tone. The initial H-tone is arguably conditioned by the preceding $\{L\}$ -toned verb and so is marked with $^{\uparrow}$.

An example of the usual 'be able to' construction with in a relative clause is (682). The verb 'go' and 'be able' are fused in a compound-like sequence, so the preverbal subject pronominal precedes both of them.

17.4.3 'Finish, complete' (*ídé*, *kílíyé*, *íjé*) with preceding chained VP

The usual expression of 'have finished VP-ing', referring to an activity, is by adding recent perfect suffix $-z\hat{e}$ - (§10.3.1.4) to the verb. It is possible to argue that this is really a chained verb rather than a suffix, cf. §10.1.1. In this analysis, one could take the preceding material as constituting a subordinated clause.

Alternative constructions involve adding a final chained verb *idé* or *kílíyé* 'finish, bring to an end (an activity)', or *íjé* 'cease' (the latter can be used for inanimate subjects, e.g. 'rain has stopped falling'). All three of these combine with a preceding chained verb (i.e. VP). It is likely that *íjé* and *ídé* are historically related (transitive versus mediopassive), but the morphology is now obscure.

idé will serve as illustration. This verb is also used with NP object in the sense 'finish up, run out of, deplete (e.g. one's supply of sugar)', and it is probably historically related to intransitive *ijé*, which is found in contexts like '(film) be finished, be over' and '(sugar, tea) be depleted, be used up'. Examples of *idé* with clausal complement are in (683).

- (683) a. $\acute{e}w$ [[?\acute{e}n\acute{e} gê] Lnàmà] kúbó] idè-m-iy tomorrow [[goat Def.AnSg] Lmeat] eat.meat] finish-Impf-1PIS 'Tomorrow we will finish eating the meat of the goat.'
 - b. [láyà dś mérⁿá] nà [feast.of.ram 3SgS arrive before] [[?áló ónzó] ìdò] finish.Imprt] [[house build] 'Finish-2Sg building the house, before the Feast of the Ram (arrives)!'

A relative-clause example is (684).

(684) izèn^L nàmà mì kúbó ídé wò day^L meat 1SgS eat.meat finish.Perf.Rel Def.InanSg 'the day (when) I finished eating the meat'

As an alternative to the direct-chain construction, *idé* 'finish' may also take a complement with -y subordinating suffix on the verb. This suffix indicates that the eventuality denoted by its clause precedes in time the eventuality denoted by the main clause. This arguably makes sense in the case of 'finish', as in 'I ate the meat and then finished'. The relative clause (684), above, can therefore also be expressed as (685). Note that the subject pronoun *mi* in (685) does intervene between the two verbs, which is not possible in the direct-chain construction (684).

(685) izèn^L nàmà kúbó-y
day^L meat eat.meat-Past.and.then
mì ídé wò
1SgS finish.Perf.Rel Def.InanSg
'the day (when) I finished eating the meat'

17.4.4 'Nearly (do)' (nèmá-lí) with preceding chained verb

The verb $n \ge m \epsilon$ 'taste' has a regular perfective negative $n \ge m \epsilon - l \epsilon$ (did not taste', with {LH} stem tone, see (349b) in §10.2.2.4. With a preceding chained VP, the sense is 'nearly (VP)', 'not miss (VPing) by much'.

```
(686) pílé nèmá-lú-m
fall taste-PerfNeg-1SgS
'I nearly fell.' (lit. "I didn't taste fall").
```

17.5 Other complements

17.5.1 'Consent' ($\acute{a}\acute{b}\acute{l}-y\acute{\epsilon}$) with relative complement

The common verb for 'consent, agree (to do something)' is <u>ábí-yé</u> 'accept, receive'. The equivalent of the English infinitival complement is expressed as a headless imperfective relative in inanimate singular form (suffix -ŋ). A literal rendering would be of the type "X accept [(fact/situation) that ..." A final definite wò is optional.

Examples with same-subject complements are in (687). In this construction, there is no overt marking of the pronominal subject in the complement clause.

- (687) a. wó-ŋ yà ábí-yε-Ø come-Impf.Rel.InanSg Real accept-MP-3SgS 'He/She has agreed (=consented) to come.'
 - b. [[pɛ̂: †gɛ̂] ɛ́bá-ŋ] yà ábí-y-á
 [sheep Def.AnSg] buy-Impf.Rel.InanSg] Real accept-MP-3PIS
 'They have agreed (=consented) to buy the sheep-Sg.'

Examples (688a-b) show the different-subject version of the construction. The subject in the complement is expressed by a preverbal pronoun, even when it is also expressed by a full NP (688b).

```
Hdé:]
(688)
       a. [mì
                            [[bàmàkɔ́
                                        nà]
                                              mì
                                                      ún-úŋ
           [1SgP Hather]
                           [B]
                                        Loc | 1SgS
                                                      go-Impf.Rel.InanSg
           wò]
                                     ábí-yέ-Ø
                          yà
           Def.InanSg]
                          Real
                                     accept-MP-3SgS
           'My father has agreed that I (may) go to Bamako.'
```

```
b. [mì Hdé:] [sǎydù [[bàmàkó nà] nà
```

```
[1SgP Hather] [S [[B Loc] 3SgS \frac{\dot{u}n-\dot{u}\eta}{\dot{u}n} \frac{\dot{w}\dot{o}}{\dot{v}} \frac{\dot{v}\dot{o}}{\dot{v}} \frac{\dot{a}\dot{b}\dot{u}-\dot{v}\dot{e}-\dot{\omega}}{\dot{v}} go-Impf.Rel.InanSg Def.InanSg] Real accept-MP-3SgS 'My father has agreed that Seydou (may) go to Bamako.'
```

17.5.2 'Want' ($\grave{\epsilon}b\grave{a} = b\acute{o}$ -) with $-\acute{e}$: $\sim -\acute{\epsilon}$: or relative complement

 $\grave{\epsilon}b\grave{a} = b\acute{o}$ - (for the forms see §11.2.4) can take a NP complement. Alternatively it can take a clausal complement. When the complement clause has the **same subject** as the main clause, the **same-subject subordinator** $-\acute{e}: \sim -\acute{e}:$ (§15.2.3) occurs on the complement verb. There is no pronominal marking of the subject in the complement clause (689). Since $\grave{\epsilon}b\grave{a} = b\acute{o}$ - is usually nonfocal in this construction, the clitic $b\acute{o}$ - is usually heard as L-toned.

- (689) a. [$\partial d\partial$ -ninjù $?\partial p$ - ε :] $\dot{\varepsilon}b\dot{a} = b\dot{o}$ - \varnothing [baobab-sauce eat.meal-and.SS] want=be-3SgS 'He/She wants to eat millet cakes (with baobab sauce).'
 - b. [[dàmá †ná] $ù r^n \varepsilon$:] $\dot{\varepsilon}b\dot{a} = b\dot{o} m$ [[village Loc] go-and.SS] want=be-1SgS 'I would like to go to the village.'
 - c. [[[dàmá á-ŋ] nà] $\dot{u}r^n$ - $\dot{\varepsilon}$:] $\dot{\varepsilon}b\dot{u} = l\dot{a}$ - \varnothing [[[village 3ReflP-InanSg] Loc] go-and.SS] want=it.is.not-3SgS 'He doesn't want to go to his (own) village.'

If the **subjects are disjoint**, the complement takes the form of a headless **imperfective relative** clause with inanimate singular agreement (-ŋ on the verb), with or without definite wò. The subject must be represented as a preverbal subject pronoun (690).

- (690) a. [m] [1SgP] [1SgP] [1father] [[dama'
 fina] mi irin-inj (wo)] [[village Loc] 1SgS go-Impf.Rel.InanSg (Def.InanSg)] $bai = bai \emptyset$ want=be-3SgS

 'My father wants me to go to the village.'
 - b. [èné [gòmú nà] bò nọá-ŋ [children [courtyard Loc] 3PlS go.in-Impf.Rel.InanSg

wò] \(\xi\text{\vec{\vec{\vec{\vec{\vec{v}}} = \vec{\vec{\vec{\vec{\vec{\vec{v}}}}} = \vec{\vec{\vec{\vec{\vec{v}}}}} \)}{\text{unt-it.is.not-1SgS}} \\ \text{'I don't want children to enter the courtyard.'} \end{array}

17.5.3 'Prevent, obstruct' (gàpú) with juxtaposed clause

Cues of the type 'X prevent Y from [Y...]' were rephrased with negated causative verbs. Thus 'X prevented Y from [Y bring ...]' was phrased as 'X didn't make (=let) Y bring ...'. If the verb g a p u 'obstruct' is present, it is in a juxtaposed clause (691a).

- (691) a. [àr"ùŋ mì-ý Lgànè-Ø]
 [rain 1Sg-Acc Lobstruct.Perf-3SgS
 [yú: wò] mì-ý zó-má-lì-Ø
 [millet Def.InanSg] 1Sg-Acc bring-Caus-PerfNeg-3SgS
 'The rain obstructed me, it didn't let me bring the millet.'
 - b. [pè: ¹gé] mì-ý sémé-má-lì-∅
 [sheep Def.AnSg] 1Sg-Acc slaughter-Caus-PerfNeg-3SgS
 'He/She prevented me from slaughtering the sheep.'

17.6 Purposive and causal clauses

17.6.1 Purposive clause with *ná* (same-subject, positive)

17.6.1.1 Simple adjoined purposive clauses

The purposive morpheme $n\acute{a}$, arguably a special case of the high-toned form of locative postposition $n\grave{a}$ (§8.2.3), occurs clause-finally after a {L}-toned nominalized form of the verb. To avoid confusion it will be glossed "Purp" in interlinears in this construction. An object NP or other clausal constituent, in its regular form, may precede the verb (692a-b), but no such constituent is required (692c). The purposive clause may be nested within the main clause, following some of the latter's constituents such as locative adverbs (692a-b). The subject of the purposive clause is understood to be coindexed with that of the main clause. The main clause is usually a verb of motion ('go', 'come').

- (692) a. [dàmá nà] [[mì Hdé:] tìgè Lná] Lùrnù-m-Ø [village Loc] [[1SgP Hfather] visit Purp] Lgo-Impf-1SgS 'I'm going to the village to visit my father.'
 - b. [dàmá nà] [[mì Hní:] bàdù Lná] Lùrnù-m-Ø [village Loc] [[1SgP Hmother] help Purp] Lgo-Impf-1SgS 'I'm going to the village to help my mother.'
 - c. [sùmù L ná] L ùrnù-m-Ø [rest L Purp] L go-Impf-1SgS 'I'm going over there to rest.'

The form of the purposive (nominal plus $n\hat{a}$) for representative verb stems is given in (693). It consists of a low-toned form of the stem with no further suffix. The two basic verbs of conveyance, 'bring' and 'take away', have high tones and are followed by low-toned $n\hat{a}$ (693c). These are also the only two verbs that have this tonal pattern in the imperfective negative (§10.2.1.8, §10.2.1.12).

(693)		bare stem	purposive	gloss
	a.	gó	gò ^L ná	'go out'
		yέ	yè ^L ná	'weep'
		tó	tò ^L ná	'slash earth (to sow)'
		nớ	nò ^L ná	'go in'
		nó	nò ^L ná	'hear'
	b.	wó	wò ^L ná	'come'
		wś	wò ^L ná	'see'
		d5	dò ^L ná	'arrive, reach'
		d5	dò ^L ná	'insult'
	c.	zó	zó nà	'bring'
		zĭn	zín nà	'take away'
	d.	tó:	tò: ^L ná	'spit'
		ká:	kà: ^L ná	'shave'
		<i>່າວຸກ</i> ຂ໌	?èɲè ^L ná	'eat (meal)'
		<i>?કીર્દ</i>	?∂lè ^L ná	'go up'
		úbś	ùbò ^L ná	'pour'
		ńdέ	ǹdὲ ^L ná	'give'
		tóló	tòlò ^L ná	'pound (in mortar)'

	óbí-yó	òbì-yò ^L ná	'sit'
e.	mă: nă: dèr ⁿ é gòló dìyé	mà: ^L ná nà: ^L ná dèr ⁿ è ^L ná gòlò ^L ná dìyè ^L ná	'make (bricks)' 'spend night' 'spend day' 'do farm work' 'carry on head'
f.	ún	ùn ^L ná	ʻgo'
g.	símbé cézó	sìmbè ^L ná cèzò ^L ná	'roast, grill' 'cut (slice)'
h.	tábú năm mànú	tàbù ^L ná nàm ^L ná mànù ^L ná	'touch' 'grind (into flour)' 'cook'

The low-toned verb forms are subject to Rhythmic Tone-Raising when preceded within the clause by a low-toned constituent, such as a cognate nominal. In this case the postposition takes low-toned form $n\hat{a}$ (694a-b).

In (818) in Text 3, [sàdù †sádù L nà] wò-zò- \mathcal{O} '(you) have come to ask questions' is another example with a cognate noun-verb sequence (sàdù 'question[n]'). In (814) in the same text, in [[[[dùnú wò] dùnò L] ná] úr"ú-m' 'she went around to do the (re-)search', dùnú is a cognate nominal with definite marking; similar elicited examples are in the comments to (814).

17.6.1.2 Purposive complement with 'begin' (tóló)

The transitive verb 'begin' is t616 (695a). It has an intransitive counterpart with mediopassive suffix t616-yé (695b).

```
work(n) Real begin.Perf-3PIS 'They have begun the work.'
```

b. bìdé yà tớlí-yé-Ø
work(n) Real begin-MP-3SgS
'The work has begun.'

When the complement is clausal, it must have the same subject as the main clause. There are two distinct complement constructions. In one, the clause-final subordinating morpheme is purposive $n\acute{a}$ (arguably related to the locative postposition), after a low-toned verb with the vocalism of the [+ATR] stem. In other words, the complement clause is purposive in form; see the preceding section.

- (696) a. [zá ?ǝnè¹ ná] yà tɔ́lé-∅ [meal eat.meal¹ Purp] Real begin.Perf-3SgS 'He/She has begun to eat (the meal).'
 - b. èné [yàŋ †yé^L nà] yà tól-á
 children [weeping weep^L Purp] Real begin.Perf-3PlS
 'The children began to weep.'

The alternative construction is with subjunctive ni (§17.1.4) following a verb ending in imperfective -m. The verb has {HL} tones.

```
(697) [văv]
                         [ίyέ
                                  là]
       [there.Def
                         [again
                                 too]
        kéné
                    kúndò-m
                                     nì]
                                                  tólà-m-ù
        mouth
                    put.in-Impf
                                     Sbjnct]
                                                  begin-Impf-3SgS
        '(The dog) would again begin to put his mouth in there.'
        (excerpt from (807) in Text 2)
```

17.6.2 Purposive clause (different-subject, positive)

One construction that is used in (translation equivalents of) different-subject purposive clauses is a manner adverbial clause, either headless (698a) or with explicit head noun $\grave{a} m \grave{a} m \grave{b} m m$ 'manner' (low-toned form) (698b). The clause ends in an imperfective relative verb with -m suffix agreeing with 'manner' (inanimate singular), with no following determiner (698). The construction is literally of the type "(in) such a manner that ...," compare English so that ... The purposive clause may precede or follow the main clause.

```
(698) a. [gìděn [síyé †gá] bò nìyó-ŋ]
[sleep [good Adv] 3PlS sleep-Impf.Rel.InanSg]

màtlá tèdà-m-Ø

mattress Llay.out-Impf-1SgS

'I'll lay out the mattress(es), so they may sleep well.'
```

```
b. [[zá wò] zô:]
[[meal Def.InanSg] bring.Imprt]
[àŋày L ŋgí yè ʔśɲá-ŋ]
[manner here 1PIS eat-Impf.Rel.InanSg
'Bring-2Sg the meal, so we may eat here!'
```

A second construction is based on a verb with suffix -mà. This resembles the hortative suffix, but the tone of the verb is not always the same in the two contexts. The subject of the purposive clause appears in the form of a preverbal pronoun, even when it is also specified by a full NP. An example is (699).

```
(699)
        [àràjó:
                        já]
       [radio
                        kill.Imprt]
        [săydù
                                                            †níndíyó-mà]
                   tèlèfôn
                                [síyέ
                                          †gá]
                                                   nà
        [S
                   telephone
                                [good
                                          Adv]
                                                   3SgS
                                                            listen-Purp]
        'Turn off-2Sg the radio, so Seydou can listen to (=hear) the telephone
        well!'
```

Examples of the purposive with -mà, plus the hortative for comparison, are in (700). In (700a-b), the two forms differ tonally, but in (700c-d) there is no audible difference. The purposive forms that do not already begin with a high tone are subject to Tone-Raising after a low-toned subject pronominal, as in (699), above.

(700) Purposive -mà

	bare stem	hortative	purposive	gloss
a.	wź	wò-má	wó-mà	'see'
	gó	gò-má	gó-mà	'go out'
	yέ	yè-má	yé-mà	'weep'
	nś	nò-má	nó-mà	'hear'
	d5	dò-má	dó-mà	'arrive, reach'
	dèr ⁿ €	dèr ⁿ è-má	dèr ⁿ €-mà	'spend day'
	gàlá	gòlò-má	gòló-mà	'do farm work'

dìyé	dìyè-má	dìyé-mà	'carry on head'
mànú	mànù-má	mànú-mà	'cook'
nìndíyó	nìndìyò-má	nìndíyó-mà	'listen'
mǎ:	mà:-má	mă:-mà	'make (bricks)'
ńdέ	ǹdè-má	ńdé-mà	'give'
<i>?કીર્દ</i>	?èlè-má	?álé-mà	'go up'
úbó	ùbò-má	úbó-mà	'pour'
ábú	àbù-má	ábú-mà	'accept, receive'
nó	nó-mà	nó-mà	'go in'
tớ	tó-mà	tó-mà	'slash earth (to sow)'
d ó	dó-mà	dó-mà	'insult'
zó	zó-mà	zó-mà	'bring'
tóló	tóló-mà	tóló-mà	'pound (in mortar)'
tábú	tábú-mà	tábú-mà	'touch'
óbí-yó	óbí-yó-mà	óbí-yó-mà	'sit'
nǎ:	nă:-mà	nă:-mà	'spend night'
<i>ີ່ າວຸກ</i> ຂ໌	?ອ໌ກέ-mà	?ຈ໌ກέ-mà	'eat (meal)'
	mànú nìndíyó mă: ńdé ?ślé úbó ábú nó tó dó zó tóló tábú óbí-yó	mànú mànù-má nìndíyó nìndìyò-má mă: mà:-má ńdé ǹdè-má ?៦lé ?៦lè-má úbó ùbò-má ábú àbù-má nó nó-mà tó tó-mà zó zó-mà tóló tóló-mà tábú tábú-mà óbí-yó óbí-yó-mà nă: nă:-mà	mànú mànù-má mànú-mà nìndíyó nìndíyò-má nìndíyó-mà mă: mà:-má mă:-mà ndé ndê-má ndé-mà ?ólé ?òlè-má 2ólé-mà úbó ùbò-má úbó-mà ábú àbù-má ábú-mà nó nó-mà tó-mà tó tó-mà dó-mà zó zó-mà zó-mà tóló tóló-mà tóló-mà tábú tábú-mà óbí-yó-mà nă: nă:-mà nă:-mà

17.6.3 Purposive clause with -ná-m plus nì or dàn (same subject, negative)

In a negative purposive clause with same subject as the main clause, two constructions are observed.

In the first, the verb takes a suffix $-n\acute{a}-m \sim -r\acute{a}-m$. This is morphologically the 1Sg subject form of the imperfective negative. Here it is really a pseudo-1Sg form functioning to mark the subject as logophoric (i.e. coindexed with the attributed author of the thinking). This verb is followed by either subjunctive $n\acute{a}$ indicating an intention (§17.1.4), or purposive-causal postposition $d\grave{a}n$ 'like'.

An example is (701), where \vec{n} and \vec{dan} are interchangeable. The only difference is that subjunctive (Sbjnct) \vec{n} directly reports the protagonist's thought process.

```
(701) [gòlò gòlò-ná-m nì / dàn]
[farming do.farm.work-ImpfNeg-LogoS Sbjnct / Purp]
[gálè nà] Lùr^nè-Ø
[city Loc] Lgo.Perf-3SgS

'He went away to the city in order not to do farm work.'
```

17.6.4 Negative purposive clause with verbal noun plus dàn (same subject)

A construction that can function somewhat like a negative purposive clause involves purposive-causal *dàn* following a verbal noun with suffix *-lé*. The core sense is approximately 'instead of VPing'.

```
nìyé-lé
(702)
       a. [gìděn
                                                dàn]
            [sleep(n)
                             sleep-VblN
                                                Purp]
            [[sé:zù
                       nà]
                              óbó-n
                                           dé
                                               nà:-m-ù]
                                                spend.night-Impf-3SgS]
            [[chair
                       Loc] sit.Stat
                                           if
            'He/She will spend the night sitting in a chair instead of sleeping.'
```

```
    b. bò-ý gànú-lé dàn,
    3Pl-Acc disturb-VblN Purp,
    cém→ wàjì-ndìy-é: bìyò-m-ù
    a.little far-Inch-NonP.and.SS lie.down-Impf-3SgS
    'In order not to bother them, he will go some distance away and lie down (to sleep).'
```

17.6.5 Other negative purposive clauses

Some constructions involving logically disjoint subjects can be converted into same-subject constructions by causativizing the verb of the purposive clause. An example is (703), where 'we'll replaster the wall, so it won't fall' is phrased as 'we'll replaster the wall, in order (for us) not to make/have/let it fall'.

```
(703) [[gágábú wò] sùwò-mè-ná-m nì]
[[wall Def.InanSg] go.down-Caus-ImpfNeg-LogoS Sbjnc]

Ltàdà-m-ìy

Lplaster-Impf-1PIS

'We'll replaster the wall, so it won't come down.'
```

Prohibitive $-l\hat{a}$ may also be used in negative purposive contexts. Adverbial $g\hat{a}$ occurs clause-finally. The conversion to same-subject using the causative is found in (704a), while in (704b) the two clauses keep their disjoint subjects.

```
(704) a. [[èné gè] dómdá]
[[child Def.AnSg] console.Imprt]
[yàŋ †yé-mè-là †gá]
[weeping(n) weep-Caus-Prohib Adv]

'Console-2Sg the child, so it won't weep.' (< yè-mè-lá)
```

```
b. [[dèbù †wó] [súwó-là gà]
[[roof Def.InanSg] [go.down-Prohib Adv]

Ltàdà-m-ìy]

Lreplaster-Impf-1PIS

'We'll replaster the roof so it (=roof) won't fall.'
```

In (705), the purposive clause is positive and imperfective in form but negative pragmatically (cf. 'lest' clauses). Adverbial *gà* is again present.

```
(705) [?śló tádá] [súwò-m-ù gà]

[house plaster.Imprt] [go.down-Impf-3SgS Adv]

'Replaster-2Sg the house, lest it fall' ('otherwise it will fall')
```

Another strategy to form a negative purposive clause is to phrase it as a manner adverbial clause with 'manner' as head and negative imperfective relative verb (706).

17.6.6 Causal ('because') clause (dàn)

Purposive *dàn* can be used in 'because' clauses (generally retrospective) as well as in purposive 'for' clauses (generally prospective). Causal clauses are in (707).

```
Hdé:1
(707)
        a.
             [[mì
                                       séllá-lì-∅
                                                                        dàn]
                          Hfather]
                                       be.healthy-PerfNeg.3SgS
             [[1SgP
                                                                        Purp]
             [[dàmá
                                          \acute{u}r^n\grave{u}-m-\varnothing
                             nà]
             [[village
                             Loc]
                                          go-Impf-1SgS
              'I'm going to the village because my father is ill.'
```

```
b. [[n\grave{a} \quad ^{H}d\acute{e}:] \quad n\grave{a}-\acute{y} \quad y\grave{a} \quad l\grave{a}l\acute{t}-y\acute{e}-\varnothing \quad d\grave{a}n] [[3SgP \quad ^{H}father] \quad 3Sg-Acc \quad Real \quad chase-MP-3SgS \quad Purp] \grave{n}j\acute{t} \quad ^{L}w\grave{e}-\varnothing here \quad ^{L}come.Perf-3SgS
```

'He/She came here because his/her father drove him/her out.'

c. móndò bò-ý gàṇà-n-Ø †dán,
motorcycle 3Pl-Acc disturb-PerfNeg.3PlS Purp,
òc-í:n Lw-ò
fast-Adj Lcome.Perf-3PlS
'Since the motorcycles didn't disturb them (i.e. didn't break down),
they came early.'

17.6.7 'Because of' (*dàn*)

Purposive-causal postposition dan can be used with a NP complement in the sense 'because of', 'on account of'.

(708) [[àr^nùŋ †wó] dàn] [?áló †ná] Lnɔè-Ø [[rain Def.InanSg] **Purp**] [house Loc] Lgo.in.Perf-3SgS 'He went into the house because of the rain.'

18 Anaphora

The key linguistic form in this chapter is \acute{a} , which functions as a third person reflexive (3Refl), a third person subject-to-subject coindexation indicator, and a third person logophoric (3Logo). In all of these constructions, \acute{a} marks coindexation to a preceding antecedent.

Also covered in this chapter is the reciprocal construction, and emphatic forms of pronouns.

18.1 Reflexive

(709) a. $y e^{-y}$

18.1.1 Reflexive object (accusative pronominal, 3Reflexive (a-y))

Reflexive objects can be expressed by simple accusative-marked pronouns. The 1st/2nd person forms are identical to those used in nonreflexive contexts, i.e. with non-coindexed subjects.

césé-ý

yà

For third person subject, singular or plural, the object is expressed by the accusative form of 3Reflexive \acute{a} .

(710) a.
$$\acute{a}$$
- \acute{y} \acute{c} eśó- \acute{l} - \acute{o}
3Refl-Acc cut-PerfNeg-3SgS 'He/She didn't cut himself/herself.'

b. á-y césó-n-Ø
3Refl-Acc cut-PerfNeg-3PlS
'They didn't cut themselves.'

18.1.2 Reflexive object (1Sg *kó:-mú* etc.)

Marked reflexive object forms can also be used. They are based on possessed forms of $k\acute{o}$: 'head', so that e.g. 'I hit myself' is expressed literally as 'I hit my head'. The 1Sg form is contracted from $k\acute{o}$: $?\acute{o}m\acute{o}$ to $k\acute{o}$:- $m\acute{u}$. The other forms are regular in form, but 2Sg $k\acute{o}$: \acute{o} - $\acute{\eta}$ can contract to $k\acute{o}$:- $\acute{\eta}$, and $k\acute{o}$: in the remaining combinations can be shortened to $k\acute{o}$. I will transcribe all of the forms as single words.

(711)	category	Reflexive O	Reflexive Object		
	1Sg 2Sg	kó:-mú kó:-ó-ŋ́	~ kó:-ŋ		
	1Pl 2Pl	kó:-yé-ŋ́ kó:-wó-ŋ́	~ kó-yé-ŋ́ ~ kó-wó-ŋ́		
	3Sg, 3Pl	kó- á-ŋ́	~ <i>kó-á-</i> ŋ́		

Some examples are in (712).

c. $\grave{e}n\acute{e} = w\grave{o}$ $k\acute{o}(:)-\acute{a}-\eta$ $y\grave{a}$ $c\acute{e}z-\acute{o}$ children=Def.AnPl **3Refl** Real cut.Perf-3PlS 'The children cut themselves.'

18.1.3 Simple and marked reflexives as postpositional complements

The same options described above for direct objects are also available for complements of postpositions that are coindexed to the clausemate subject.

Simple possessor pronouns are in (713), with a complex postposition 'behind X' expressed as 'at [X's rear]'. For third person subject, the 3Refl form \acute{a} - $\acute{\eta}$ is used.

- (713) a. [gòdú wò] [[tùnù ?źmó] nà] Ltèmbè-m
 [hat Def.InanSg] [[rear 1SgP] Loc] Lfind.Perf-1SgS
 'I found the hat behind me.'
 - b. [gòdú wò] [[tùnù á-ŋ] nà] Ltèmbè-Ø [hat Def.InanSg] [[rear 3ReflP] Loc] Lfind.Perf-1SgS 'He/She found the hat behind himself/herself.'

Marked reflexive pronouns based on possessed forms of 'head' are in (714).

- (714) a. [kó:-mú mì] dàmbé-m [1SgRefl Inst] speak.Perf-1SgS 'I spoke to/with myself.'
 - b. [kó:-á-ý mì] Lbìdà-m-ù
 [3Refl Inst] Lwork-Impf-3SgS
 'He/She works for himself/herself.'

18.1.4 Reflexive possessor (third person *a*)

18.1.4.1 Reflexive alienable possessor

When the clausemate subject is a 1st/2nd person pronoun, a coindexed possessor on the direct object (for example) has its usual form, with no special reflexive marking. Therefore 'my dog' has the same form in (715a) and in (715b).

- (715) a. [ìnjè mí-yⁿè gè] yà dèmé-mí [dog **1SgP**-AnSg Def.AnSg] Real hit.Perf-1SgS 'I hit-Past my (own) dog.'
 - b. ènè [înjè mí-yⁿè gè] yà dèmé-Ø child [dog 1SgP-AnSg Def.AnSg] Real hit.Perf-3SgS '(The) child hit my dog.'

For third person subject, a coindexed nonsubject possessor is marked by the appropriate possessor form of 3Refl \acute{a} , i.e. \acute{a} - \acute{n} , \acute{a} - $\emph{y}^n\grave{e}$, or \acute{a} - $\emph{y}^n\grave{e}$ - $\emph{m}\grave{u}$ depending on agreement with the possessed NP. Compare the reflexive possessor based on \acute{a} in (716a) with the nonreflexive possessor based on 3Sg $\emph{n}\grave{a}$ in (716b).

(716) a.
$$[inj\hat{\epsilon} \quad \acute{a}-\emph{y}^n\hat{\epsilon} \quad g\hat{\epsilon}]$$
 yà dèm $\hat{\epsilon}-\mathcal{O}$

[dog **3ReflP**-AnSg Def.AnSg] Real hit.Perf-3SgS 'He_x hit his_x (own) dog.'

b. [injè ná-yⁿè gè] yà dèmé-mí [dog **3SgP**-AnSg Def.AnSg] Real hit.Perf-1SgS 'I hit-Past his/her dog.'

Forms based on \acute{a} are used for plural as well as singular possessor. In (717), there is still just one dog but now it is possessed by the individuals referred to by the subject NP.

(717) èné [înjè á-yⁿè gè] yà dèm-á children [dog **3ReflP**-AnSg Def.AnSg] Real hit.Perf-3PlS '(The) children_x hit their_x (own) dog.'

18.1.4.2 Reflexive inalienable possessor

As explained in §6.2.3, inalienable pronominal possessors precede the noun (a kin or relationship term) and do not agree morphologically with the possessed noun. Allowing for this, reflexive possessors follow the pattern described above for alienables. For 1st/2nd persons, the usual possessor pronoun appears (718a). For third persons, the possessor takes the 3Refl form \acute{a} if it is coindexed to the subject (718b-c), and a nonreflexive form (i.e. 3Sg $n\grave{a}$, 3Pl $b\grave{o}$) otherwise (718d-e).

- (718) a. [m] $\stackrel{\text{H}}{=} \text{d} \acute{e}: J$ $w\grave{\partial} = b\acute{e} m$ $[1 \text{SgP} \quad \text{Hather}]$ see=Past-1SgS 'I saw my father.'
 - b. [á $\frac{\text{H}}{\text{d\'e:}}$] $w\grave{\partial} = b\acute{\epsilon} \emptyset$ [3RefIP $\frac{\text{H}}{\text{father}}$] see=Past-3SgS 'He/She_x saw his/her_x (own) father.'
 - c. [á $\frac{\text{H}}{\text{d\'e:}}$] $w\grave{\partial} = b-\acute{a}$ [3ReflP $\frac{\text{H}}{\text{father}}$] see=Past-3PIS 'They_x saw their_x (own) father.'
 - d. [$n\grave{a}$ $^{H}d\acute{e}$:] $w\grave{o} = b-\acute{a}$ [3SgP H father] see=Past-3PIS 'They saw his/her father.'

e. [bò
H
 dé:] $w\grave{\partial} = b\acute{\varepsilon} - m$ [3PIP H father] see=Past-1SgS 'I saw their father.'

18.1.4.3 Antecedent for reflexive is in higher clause

Ordinarily the antecedent of $3Refl\ \acute{a}$ or of any marked reflexive (with $k\acute{o}$: 'head') is the clausemate subject. However, the antecedent can occasionally be in a higher clause. In (719), the younger sibling is usually understood to be that of the higher subject Seydou, not that of the unknown attacker. An assistant was very clear on the form and meaning of this example, and this was confirmed as the preferred reading by another assistant. The context is favorable to the higher-antecedent interpretation, since one would have to construct an unusual context for a reading like 'X doesn't know who-Y hit Y's (own) younger sibling'.

In a more favorable context, the reflexive can easily be construed as having the clausemate subject as antecedent (720).

(720)
$$[no^{L}]$$
 $[á]$ $[a]$ $[a]$

18.1.5 Emphatic pronouns

Emphatic pronouns ('I did it myself', etc.) are not anaphoric but I describe them here to clarify their distinctness from true anaphorics.

In one type of emphatic, the excluded possibility is of the agent being assisted by others (§18.1.5.1). In another, the excluded possibility is of someone other than the agent undertaking an action (§18.1.5.2).

18.1.5.1 With tùmà 'only'

In (721), the speaker indicates that he will perform a job singly, instead of as part of a larger action group. This is expressed by combining the a proclitic pronoun with $t \tilde{u} m \tilde{a}$ 'only' (§19.4.1), cf. $t \tilde{u} m \tilde{a} \rightarrow$ 'one'.

```
(721) [bìdé ?ớmó] [mì †túmà] Lbìdà-m-Ø [work(n) 1SgP.InanSg] [1SgP only] Lwork-Impf-1SgS 'I will do my work (by) myself (=alone).'
```

1st/2nd person forms are *mì* †*túmà* (1Sg), *yè* †*túmà* (1Pl), *ó tùmà* (2SgS), *wò* †*túmà* (2Pl). The L-toned proclitic pronouns trigger Rhythmic Tone-Raising, affecting the first syllable of *tùmà*.

In this construction, a 3rd person subject requires 3Refl á before tùmà (722). This shows that the emphatic phrase with tùmà is adverbial, so the possessor can meaningfully said to be coindexed with the clausemate subject.

An example with á tùmà coindexed to a plural subject is (723).

```
(723) èné=wò [á tùmà] [cìn 'wó]
children=Def.AnPl [3ReflP only] [stone Def.InanSg]
tógó bèlè-nán-è
pick.up be.able-ImpfNeg-3PlS
'The children are unable to pick up the rock by themselves.'
```

18.1.5.2 Proclitic pronoun plus kò-bàndà or kò mì

A proclitic pronoun may be followed by $k\hat{o}$ - $b\hat{a}nd\hat{a}$ or by $k\hat{o}$ $m\hat{i}$ to form another emphatic pronoun. $k\hat{o}$ is presumably a variant of $k\hat{o}(:)$, possessed form of $k\hat{o}$: 'head (abstractly)'. Compare the short-voweled compound initial in $k\hat{o}$ - $t\hat{o}g\hat{o}r\hat{o}$ 'head (body part)'. The final element in $k\hat{o}$ - $b\hat{a}nd\hat{a}$ is equatable with that in $d\hat{a}r^n\hat{a}$ - $b\hat{a}nd\hat{a}$ 'head (body part)', cf. $d\hat{a}r^n\hat{a}$ 'head, top'. The other attestation of compound final $b\hat{a}nd\hat{a}$ is $t\hat{e}r\hat{e}$ - $b\hat{a}nd\hat{a}$, an emphatic near-synonym of $t\hat{e}r\hat{e}$ 'unwelcome surprising event, mishap'. $m\hat{i}$, on the other hand, is the instrumental postposition 'with'.

In both combinations, $k\hat{o}$ - becomes $^{\dagger}k\acute{o}$ - by Rhythmic Tone-Raising after L-toned proclitic pronouns: $1\text{Sg }m\grave{i}\ ^{\dagger}k\acute{o}$ -bàndà and $m\grave{i}\ ^{\dagger}k\acute{o}$ $m\grave{i}$, compare $2\text{Sg }\acute{o}$ $k\grave{o}$ -bàndà and \acute{o} $k\grave{o}$ $m\grave{i}$. H-toned $^{\dagger}k\acute{o}$ - can also resurrect the original long vowel in $k\acute{o}$: 'head', as in $m\grave{i}\ ^{\dagger}k\acute{o}$:-bàndà and $m\grave{i}\ ^{\dagger}k\acute{o}$: $m\grave{i}$.

These emphatic pronouns are normally focalized subjects, as in (724a-b). There is a (resumptive) preverbal subject pronoun in addition to the clause-initial emphatic pronoun. For the subject focalization construction, see §13.1.1.

```
(724) a. [mì †kó:-bàndà] mì †úrnô:
[1SgP Emph] 1SgS go.Impf.SFoc
nà→ nò-ý tò-rá-m
Advers person-Acc send-ImpfNeg-1SgS
'It's I myself who will go, I won't send someone (else).'
```

```
b. [nà ¹kó:-bàndà] nà ¹úrnò:
[3SgP Emph] 3SgS go.Impf.SFoc
nà→ nò-ý tò-rán-Ø

Advers person-Acc send-ImpfNeg-3SgS
'It's she herself who will go, she won't send someone (else).'
```

18.1.5.3 With *té*→ 'precisely'

The adverbial $t\acute{e} \rightarrow$ 'exactly, precisely, specifically, personally' (§8.4.3.4) can also be used as a kind of emphatic, when one referent is identified and another that might have been expected is excluded (725). This construction is probably favored when the NP in question is not the clause subject.

```
(725)
        [ènè
                   mi-y^n \hat{\varepsilon}
                                     gè]
                                                     yàndà-lí-Ø,
                                                     call-PerfNeg-3SgS,
        [child
                   1SgP-AnSg
                                    Def.AnSg]
                                 <sup>L</sup>yàndè-∅
        [mì-ý
                     té→1
                                 <sup>L</sup>call.Perf-3SgS
        [1Sg-Acc exactly]
         'She didn't call my son, (rather) she called me personally
        (=specifically).'
```

18.2 Logophoric and indexing pronouns (3Logo a)

18.2.1 True third person logophoric function

True logophorics are pronouns inside verbal or thought quotations that are coindexed to the attributed author of the quotation. In the original utterance or

thought, the author would have said or thought 'I' or 'we', so a logophoric is a kind of embedded first person pronoun.

In Yanda Dom, explicit logophoric pronouns are used for third person quoted authors, so the label used here is 3Logo. 3Logophorics can be singular (original 'I/me') or plural (original 'we/us'), but since they are coindexed to an antecedent it is unnecessary to mark plurality (as with reflexives).

The basic 3Logo pronoun is \acute{a} . It can appear in a range of grammatical functions within its clause, such as accusative direct object (726a), complement of a postposition (726b), or possessor (726c). For subject function, see the following section.

- (726) a. $[\acute{o} \quad {}^{H}w\acute{a}\rightarrow] \quad \acute{a}-\acute{y} \quad {}^{L}d\grave{e}m\grave{e} \quad w\grave{a}$ [2Sg $\, {}^{H}QuotS$] 3Logo-Acc $\, {}^{L}hit.Perf$ say 'He_x says that you-Sg hit him_x.'
 - b. èné [á Hbérná] Ldàm-à wà children [3Logo Dat] Lspeak.Perf-3PlS say 'Shex says that the children told herx.'
 - c. [înjɛ á-mù] ó-ý cédá-n-Ø wà [dog **3LogoP**-AnPl] 2Sg-Acc bite-PerfNeg-3PlS say 'He_x says that his_x dogs didn't bite you-Sg.'

An explicitly plural 3Logo form is $\acute{a}-y\grave{e}-m\grave{u}$ (accusative $\acute{a}-y\grave{e}-m\grave{i}-y$). Morphologically, this resembles the 3Logo possessor form for animate plural possessed NP, which has a full form $\acute{a}-y^n\grave{e}-m\grave{u}$ but is usually reduced to $\acute{a}-m\grave{u}$ as in (726c) above.

18.2.1.1 Logophoric as clause subject

When a logophoric pronoun is subject of its clause, it may appear with the quotative subject particle $w\hat{a}(\rightarrow)$ (§17.1.2), which contracts somewhat irregularly with 3Logophoric \acute{a} as $\acute{a}\rightarrow$, with exaggerated prolongation (727a). The explicitly plural 3Logophoric \acute{a} - $\gamma \grave{e}$ - $m\grave{u}$ is optionally preposed to $\acute{a}\rightarrow$ (727b).

- (727) a. $\acute{a} \rightarrow \r{y\grave{a}} \r{p\'il\acute{e}-m} \r{w\grave{a}}$ 3Logo.QuotS Real fall.Perf-LogoS say 'He_x said that he_x fell.' or 'She_x said that she_x fell.'
 - b. \acute{a} - $y\grave{\varepsilon}$ - $m\grave{u}$ $(\acute{a}\rightarrow)$ $y\grave{a}$ $p\acute{l}\acute{e}$ -m $w\grave{a}$ 3LogoP-An-AnPl (3Logo.QuotS) Real fall.Perf-LogoS say

'They_x said that they_x fell.'

For logophoric subject suffix -m, see the following section.

18.2.1.2 Pseudo-1Sg verbal agreement with logophoric subjects

The verb in a logophoric-subject clause has a pronominal-subject suffix -m that is glossed "LogoS" in interlinears but that is identical in form to the 1Sg suffix in nonquotative main clauses. This **pseudo-1Sg** -m indicates coindexation of the subject of the quoted clause with the author. Unlike 3Logo pronoun á, LogoS -m suffix is not limited to third persons. In quoted indicative clauses, if the subject is not coindexed with the author, the verb has invariant **pseudo-3Sg** subject inflection.

The identity in form between nonquotative-clause 1Sg subject -m and quotative-clause LogoS -m does not in fact lead to ambiguity. In parsing, the listener observes a) whether or not there is a clause-initial subject pronoun, and if so whether or not it is phrased with the Quotative subject particle, b) the pronominal-subject suffix category on the predicate (pseudo-1Sg or pseudo-3Sg), and c) the subject of the 'say' verb. Consider the examples in (728). In (728a-c), the author is not coindexed to the subject. In (728d-f), the two are coindexed.

- (728) a. [?ènè †nî:] [ó Hwá:] wó-m-ù Lgùr^bê-Ø [why?] [2Sg HQuotS] come-Impf-3SgS Lsay.Perf-2SgS 'Why did you-Sg say I was coming?'
 - b. [?ènè †nî:] [mì Hwá:] wó-m-ù Lgùr^è-w [why?] [1Sg HQuotS] come-Impf-3SgS Lsay.Perf-2SgS 'Why did you-Sg say I was coming?'
 - c. [?ènè †nî:] [nà Hwá:] wó-m-ù Lgùr^ê-w [why?] [3Sg QuotS] come-Impf-3SgS Lsay.Perf-2SgS 'Why did you-Sg say he/she was coming?'
 - d. [?ànè †nî:] (6) wó-m̀-Ø Lgùr^è-w [why?] (2Sg) come-Impf-LogoS say.Perf-2SgS 'Why did you-Sg say you-Sg were coming?'
 - e. [?ènè †nî:] (mí) wó-m̀-Ø Lgùr^è-m [why?] (1Sg) come-Impf-LogoS Lsay.Perf-1SgS 'Why did I say I was coming?'

```
f. [?ènè †nî:] (á→) wó-m̀-Ø Lgùr^è-Ø [why?] (3Logo.QuotS) come-Impf-LogoS Lsay.Perf-3SgS 'Why did he<sub>x</sub> say he<sub>x</sub> was coming?'
```

The clues as to the identity of the subject and to its relationship with the author (i.e. the subject of 'say') for the noncoindexed (728a-c) and coindexed (728d-f) cases are summarized in (729).

```
(729) a. clause-initial subject pronoun noncoindexed:

subject pronoun obligatory, with QuotS <sup>H</sup> wá→

if 3rd person, nonanaphoric forms (3Sg nà, 3Pl bò)

coindexed: optional, and without QuotS in 1st/2nd persons if 3rd person, 3Logo form with QuotS
```

b. pronominal-subject suffix on verb noncoindexed: (pseudo-)3Sg coindexed: (pseudo-)1Sg

These clues are sufficient to permit accurate parsing. In particular, note that the (pseudo-)1Sg suffix on the verb cannot be misconstrued as referring to the speaker, unless the speaker is quoting himself/herself.

18.2.2 Subject-to-subject coindexation function of 3Refl pronouns

If the **subject of a relative** (or other subordinated) clause is coindexed with the third person subject of a higher clause (e.g. the main clause), the 3Refl[exive] form is used to express this coindexation. In (730a), both clauses have 1Sg subjects but no explicit marking of coindexation occurs (or is necessary). In (730b), the two clauses have coindexed 3rd person subjects and the 3Refl pronoun is required. In (730c), the regular 3Sg form is used since there is no subject coindexation.

```
(730) a. [mì gòr<sup>n</sup>á-ŋ] <sup>L</sup>kàr<sup>n</sup>à-m-∅ [1SgS be.able-ImpfRel.InanSg] <sup>L</sup>do-Impf-1SgS 'I will do what I can.'
```

b. [á gòrⁿá-ŋ] Lkàrⁿà-m-ù
[3ReflS be.able-ImpfRel.InanSg] Ldo-Impf-3SgS
'He_x will do what he_x can.'

c. [nà gòr ná-ŋ wò] wá-m-Ø
[3Refl be.able-ImpfRel.InanSg Def.InanSg] see-Impf-1SgS
'I will see what he/she can (do).'

I did not observe the 3Refl pronoun in topic-indexing constructions. In (731a-b), a topic is established, but it is resumed in the following backgrounded clause by nonanaphoric pronominal subject suffixes.

- (731) a. mí gày, [dàná nà] yà úrⁿé-m dè pú→
 1Sg **Top**, [hunt Loc] Real go.Perf-**1SgS** if all,
 nàmà bèlá-mò-Ø
 meat get-Impf-1SgS
 'As for me, whenever I go on a hunt, I get meat.'
 - b. [mì Hdé:] gày, [dàná nà] yà úrⁿé-Ø dè pú→, [1SgP Hfather] **Top**, [hunt Loc] Real go.Perf-**3SgS** if all, nàmà bèlá-m-ù meat get-Impf-3SgS
 'As for my father, whenever he goes on a hunt, he gets meat.'

Likewise, in (732a-b), the objects in the following backgrounded clause refer back to the preposed topic, but have nonanaphoric form.

- (732) a. [mí gày], [nò mì-ý yà dèmé-Ø dè],
 [1Sg Top] [person 1Sg-Acc Real hit.Perf-3SgS if]

 [nà-ý já-m-Ø]
 [3Sg-Acc kill-Impf-1SgS]

 'As for me, if somebody hits me, I'll kill him.'
 - b. [mì Hdé: gày], [nò nà-ý yà dèmé-Ø dè], [1SgP Hfather Top], [person 3Sg-Acc Real hit.Perf-3SgS if] [nà-ý já-m-ù]
 [3Sg-Acc kill-Impf-3SgS]
 'As for my fatherx, if somebody hits himx, hex'll kill him.'

18.3 Reciprocal

18.3.1 Simple reciprocals (tò-mù)

The noun $t \hat{o} - m \hat{u}$ is always combined with a plural possessor pronoun. It expresses reciprocal action where the protagonists exchange subject-object roles. For 1Pl and 2Pl the possessor pronoun is low-toned, as in the **inalienable-possessor** paradigm (§6.2.3.1, §4.3.3). An informant rejected accusative -y in reciprocal objects.

The low-toned possessor pronoun induces Rhythmic Tone-Raising on the first syllable of the noun. For 3Pl, the possessor is 3Reflexive (3Refl) á.

```
(733) a. [yè †tó-mù] w\hat{\beta} = b\hat{\epsilon} - y [1Pl Recip] see=Past-1PlS 'We saw each other.'
```

- b. [wò †tó-mù] $w\grave{\partial} = b\acute{\varepsilon}-y$ [2Pl Recip] see=Past-2PlS 'You-Pl saw each other.'
- c. $[\acute{a}$ $t\grave{o}-m\grave{u}]$ $w\grave{o}=b-\acute{a}$ [3Refl Recip] see=Past-3PIS 'They saw each other.'

There is no difference in form depending on whether the number of reciprocating individuals is two or more than two.

```
(734) á-nù [[á tòmù] sà:-mù] zìyé-z-è:
An-two [[ReflP Recip] sister-AnPl] marry.woman-Perf2-3PlS
'The two (men) married each other's sisters.'
```

tò-mù also occurs as a possessed plural noun meaning 'peers, agemates' or 'neighbors, fellow villagers'. Inalienable possessive morphosyntax is obligatory, as in mì †tó-mù 'my peers', $s\check{a}yd\grave{u}$ $n\grave{a}$ †tó-mù 'Seydou's peers', and \acute{a} tò-mù 'his/her neighbors' (804). In this sense the noun can also be singular, in the form tò: (with long vowel), as in $m\grave{i}$ †tó: 'my agemate', $s\check{a}yd\grave{u}$ $n\grave{a}$ †tó: 'Seydou's agemate', \acute{a} tò: 'his/her agemate', and \acute{o} tò: 'your agemate'. Rhythmic Tone-Raising is observed in the 1Sg possessor examples just cited. The singular form tò: can have reciprocal-like sense when combined with a distributively quantified subject NP, as in (735).

(735)
$$[ni: k\grave{a}y]$$
 $[[n\grave{o} f\acute{u}\rightarrow] w\grave{o}-z\acute{o}-\varnothing$ $d\grave{e}]$

```
[[person
       Top]
                                  come-Perf2-3SgS
                                                       if]
now
                          all]
Γá
               tò:]
                             pódó-zó-Ø
                                                dè]
[3ReflSgPoss
               agemate]
                             greet-Perf2-3SgS
                                                if]
'Now each one came and greeted his fellow.'
(excerpt from (780) in Text 1)
```

18.3.2 'Together' (tùmàyⁿ gá)

There is no high-frequency adverb or grammatical category for 'together'. The unusual pronouns like 1Pl $y\hat{a}$: 'all of us' (§6.6.1) are often understood in context to imply mutual activity (736a), but this is not baked into the meaning. An adverbial phrase $t\hat{u}m\hat{a}y^n$ † $g\hat{a}$ appears to mean 'together, in a single place' in examples like (736b). Cf. $t\hat{u}m\hat{a} \rightarrow$ 'one', $t\hat{u}m\hat{a}y$ -túmáy 'one at a time' (distributive iteration), and adverbial morpheme $g\hat{a}$ §8.2.15.

```
(736) a. y-â:

1Pl-all.together

'We all worked together.'

Lbìdè-y

Lwork.Perf-1PlS
```

```
b. y-\hat{a}: [t\hat{u}m\hat{a}y^n ^{\dagger}g\hat{a}] \acute{o}b-d\hat{o} ^{\dagger} 1Pl-all.together [together at] sit-Caus.Imprt ^{\dagger} (Please) have-2Sg us all sit together!
```

In $t umay^n g a$ the y^n is strongly nasalized, unlike y in t umay - t umay and related forms based on the numeral '1'.

18.4 Restrictions on reflexive antecedents

18.4.1 No antecedent-reflexive relation between coordinands

A left coordinand cannot serve as antecedent for a reflexive possessor in the second coordinand. (737) comes out the same way whether or not Amadou is coindexed to the possessor of 'father'.

```
(737) [á:madù mì→] [nà Hdé: mì→] yà w-6
[A and] [3SgP Hfather and] Real come.Perf-3PlS
'Amadou<sub>x</sub> and his<sub>x</sub> father came.'
'Amadou<sub>x</sub> and his/her<sub>y</sub> father came.'
```

19 Grammatical pragmatics

19.1 Topic

```
19.1.1 Topic (k\grave{a}y \sim g\grave{a}y, optional plural y\grave{e})
```

The Topic particle was recorded as $k\grave{a}y$ in elicitation, but in texts it is heard as $g\grave{a}y$ (occasionally reduced to $g\grave{a}$). It is commonly found in clause-initial (or preclausal) position at a topic switch point. After a {L}-toned NP, it undergoes Rhythmic Tone-Raising: $\grave{e}n\grave{e}^{\dagger}k\acute{a}y$ 'as for a child'. A L-toned pronoun takes (H-toned) independent form before $k\grave{a}y$ (1Sg $m\acute{i}$ $k\grave{a}y$, 3Sg $n\acute{a}$ $k\grave{a}y$, etc.). In (738b) there is a second apparent occurrence as clause-final $g\grave{a}$, but it might be that this is just a variant of French clause-final quoi which is common nowadays in Malian languages.

```
(738) a. w\grave{a}z\grave{e}-m\grave{u}={}^{\dagger}w\acute{o} y\grave{a} u\acute{n}-\varnothing, remainder-AnPl=Def.AnPl Real go.Perf-3PlS, [m\acute{n} k\grave{a}y] w\grave{a}z\acute{a}-\grave{m}-\varnothing [1Sg Top] remain-Impf-1SgS 'The others have gone (away); as for me, I will stay (here).'
```

```
b. [gìdè-ńjú bŏl-bŏl]
[eye-water streaming]
[á→ gày] ún bè:-ná-m gà,
[3LogoSg Top] go get-ImpfNeg-LogoS Top
'With tears streaming down, he said: "As for me, I cannot go."" (excerpt from (832) in Text 4)
```

The topicalized constituent (or its referent) usually functions as subject in the full clause. It can, however, be an object or a PP. Because the Topic particle ends in y, it would be difficult to hear accusative suffix -y, which is optional anyway (§6.7), in examples like (739), making it difficult to determine whether the topicalized NP is preclausal or clause-internal. However, when the referent of the complement of a PP is topicalized, kay can follow the postposition (739b), in which case it is clearly clause-internal, or it may precede the clause, with a resumptive pronominal in the clause-internal PP (739c).

- b. [mì Hbérná kày] [dòm L kámá] dàmà-ń-⊘ [1Sg Dat **Top**] [talk(n)L any] speak-PerfNeg-3PlS 'To me they didn't say anything.'
- c. $[mi \quad k\grave{a}y] \quad [m\grave{\imath} \quad {}^{\rm H}b\acute{e}r^{\it n}\acute{a}] \quad [d\grave{o}m^{\rm L} \quad k\acute{a}m\acute{a}] \quad d\grave{a}m\grave{a}-\acute{n}-\varnothing$ [1Sg Top] [1Sg $^{\rm H}$ Top] [talk(n) $^{\rm L}$ any] speak-PerfNeg-3PlS

'As for me, they didn't say anything to me.'

kày may follow là 'also, too', see §19.1.3 below. ní: kày '(as for) now' is very common in texts, where it can be translated as a weak 'now' or 'then'.

In (769) in Text 1, a single occurrence of particle $y\hat{e}$ appears to have topicalizing force. It seems to be used only in plural reference.

19.1.2 Interrogative topic (*ni*)

When a constituent is topicalized at the beginning of a question ('what about X, ...?'), the particle used is \vec{n} . It may be a reduced variant of \vec{n} : 'now', which often appears in narrative texts as \vec{n} : \vec{k} \vec{a} y '(as for) now'. It has the same phonological form as subjunctive clause-final particle \vec{n} (§17.1.4), but I see no clear semantic relationship between them.

(740) is a fragment of a two-speaker (A, B) dialogue.

```
(740) A: p\hat{\epsilon}:-m\acute{u} = w\grave{o} y\grave{a} m\grave{a}d-\acute{a} sheep-AnPl=Def.AnPl Real be.lost.Perf-3PlS 'They sheep have gone astray.'
```

```
B: ?śné-mù = wò nì, ànjă: Lkàrni-yè-Ø goat-AnPl=Def.AnPl QTop, how? Ldo-MP.Perf-3SgS 'What about the goats? What happened (to them)?'
```

A pronoun takes its H-toned independent form: mi nì 'what about me?'. nì may follow la 'also, too', see §19.1.3 just below.

19.1.3 'Also' (*là*)

After a pronoun, NP, or other nonpredicative constituent, the common particle meaning 'also, too' is $l\hat{a}$. Its tone can be raised to high by Rhythmic Tone-Raising (741b) or Post-Pronominal Tone-Raising (741c). Pronouns take the proclitic form, which is L-toned except for $2\text{Sg } \delta$ and $3\text{LogoSg } \delta$.

```
(741) a. n\grave{a}: †g\acute{e} l\grave{a} 'the cow too' \acute{a} ng\grave{e} l\grave{a} 'the man too' 'Seydou too' b. \grave{e} n\grave{e} †l\acute{a} 'a child too' c. m\grave{i} "l\acute{a} 'me too' n\grave{a} "l\acute{a} 'he/she too' \acute{o} "l\acute{a} 'you-Sg too'
```

là follows accusative-marked NPs (742a) and PPs (742b).

```
(742) a. [6-ý là] dèmá-m-ù
[2Sg-Acc too] hit-Impf-3SgS
'He/She will hit you-Sg too.'
```

b.
$$[m]$$
 $Hb\acute{e}r^n\acute{a}$ $l\grave{a}$ $d\grave{a}m = b\acute{e}-\varnothing$

```
[1Sg Dat too] speak=Past-3SgS 'He/She spoke to me too.'
```

là follows a NP, PP, or similar nonpredicative constituent, rather than a clause or predicate. In the parallel clauses of (743), the first *là* occurs on the cognate nominal 'work' rather than on the verb, and the second occurs on the adverb 'here', though the point of contrast between the two clauses is the action described. Efforts to elicit a postverbal *là* were unsuccessful.

```
(743) [bìdé là] ŋgí Lbìdà-m-ù,
[work(n) too] here Lwork-Impf-3SgS,
[ŋgí là] Lnà:-m-ù
[here too] Lspend.night-Impf-3SgS
'He will work her, and he will sleep here.'
```

là may combine with Topic $k \grave{a} y$, in that order: $m \grave{i} \uparrow l \acute{a} k \grave{a} y$ 'as for me too'. It likewise precedes QTopic $n \grave{i}$, as in $m \grave{i} \uparrow l \acute{a} n \grave{i}$ 'what about me too?'.

19.1.4 'Even' (*kàndà*)

là 'also, too' can be translated as 'even' in some discourse contexts. This is not surprising, since the difference between 'I too can climb that hill' and 'Even I can climb that hill' is subtly pragmatic.

A somewhat stronger particle is *kàndà*, which behaves much like *là* syntactically. *kàndà* follows the relevant constituent (744a). If the latter is a pronoun we get the proclitic form, which is L-toned for most pronouns: *mì ¹kándà* 'even I/me'. *kàndà* follows postpositions (744b-c) and accusative-marked NPs or pronouns (744d). *kàndà* is more likely to be translated 'even' than *là* is.

- (744) a. [ènè †kándà] ?ɔ́lé bèlá-m-ù
 [child even] go.up get-Impf-3SgS
 'Even a child can climb up (there).'
 - b. [mi] $Hb\acute{e}r^n\acute{a}$ $k\grave{a}nd\grave{a}]$ $w\grave{o}=b\acute{e}-\varnothing$ [1Sg HDat even] come=Past-3SgS 'He/She came even to me.'
 - c. [[$y\dot{\epsilon}$ $g\dot{\epsilon}$] $b\dot{e}r^n\dot{a}$ $k\dot{a}nd\dot{a}$] $w\dot{o} = b\dot{\epsilon}-\emptyset$ [woman Def.AnSg] Dat **even**] come=Past-3SgS 'He/She came even to the woman.'
 - d. [ó-ý kàndà] dèmá-m-ù
 [2Sg-Acc even] hit-Impf-3SgS
 'He/She will even hit you.'

After a $\{L\}$ -toned NP, $k \grave{a} n d \grave{a}$ undergoes Rhythmic Tone-Raising to ${}^{\dagger} k \acute{a} n d \grave{a}$, as in (744a). Only the first syllable is affected.

kàndà is common in negative clauses ('not even') (745).

(745) a. [mì-ý kàndà] pódó-lì-Ø [1Sg-Acc even] greet-PerfNeg-3SgS 'He/She didn't even greet me.'

- b. [nà tùmá→ kàndà] wò-lí-Ø
 [time one even] come-PerfNeg-3SgS
 'He/She didn't come even once.'
- c. [bù:dù tùmá→ kàndà] mì-ý ndà-lí-∅ [riyal one even] 1Sg-Acc give-PerfNeg-3SgS 'He/She didn't give me a red cent.'

'Even X' can also be expressed by *hálè*, on which see §19.2.1 below. *hálè* can be added at the beginning of a positive clause with *là* or *kàndà* like those in (744) above with little change in meaning.

For 'even if' conditional antecedents, see §16.2.1.

19.2 Preclausal or clause-initial particles

19.2.1 'All the way to, until, even X' (hálè)

Clause- or phrase-initial *hálè* is the Yanda Dom form of a regionally widespread particle with senses like 'all the way to' and 'until' as well as 'even', see also §8.2.14. Forms of this particle are also found in Fulfulde, Songhay, etc. Preposed *hálè* readily combines with postposed *là* 'also' or *kàndà* 'even' (746).

(746) [hálè ènè †lá] bìdé bèlá-m-ù [even child too] work(v) get-Impf-3SgS 'Even a child can work.'

hálè can appear at the beginning of 'until' phrases and clauses. The preceding clause has nonpast durative subordinator -n (§15.3.5) for nonpast time frames (747a-b), and imperfective -m (§15.2.1) for past time frames (747c). There is no difference between same- and different-subject constructions.

- (747) a. [bìdé bìdá-n] [hálè éw Ldô-m-ìy]
 [work(n) work-NonPDur] [until tomorrow Larrive-Impf-1PlS]
 'We will work until (we arrive at) tomorrow.'
 - b. [bìdé yé bìdà-n] [hálè tê: Lwò-m-ù]
 [work(n) 1PlS work-NonPDur] [until tea Lcome-Impf-3SgS]
 'We will work until the tea comes.'
 - c. [nìŋà: yè bìdá-m]
 [yesterday 1PIS work-Impf]
 [hálè ìzìgè-[píló-ŋ]
 [until sunset (§4.2.4)
 'Yesterday we worked until the sunset arrived (=until sunset).'

However, postposted particle $b\check{a} \rightarrow$ can also be used in 'until' expressions, see §8.2.4.

```
19.2.2 'Well, ...' (háyà ~ hà:)
```

háyà 'well, ...' (variant hà:) is a discourse marker that occurs at the beginning of speaking turns and paragraph-like segments in narratives. Many examples occur in our YD texts. It occurs twice in textual passage (748), taken from (817) in Text 3.

```
[nà Hbérná] wò-zò-m
(748)
        háyà
                                                                  wà.
                3LogoSg [3Sg <sup>H</sup>Dat]
                                           come-Perf2-LogoS
        well,
                                                                  Quot,
                             <sup>H</sup>wá→1
        háyà
                  [nà
                             HOuotS1
        well,
        [[[á
                                                      tàdà
                                                                   wà],
        [[[3LogoSg HDat]
                               thing<sup>L</sup> be]
                                              look try.Imprt
                                                                   Quot]
        '(She) said: "Well, I have come to you; well, you try to look at (=determine)
        what there is for me (=what my problem is)."
```

19.2.3 'But ...' (*gà:*)

This particle occurs at the junction between two clauses that have some type of adversarial relationship, as when the first proposition would ordinarily imply the opposite of the second. gà: can be grouped prosodically either with the preceding or following clause.

```
(749) [[bámákò nà] úr"ù-m-ìy] gà: yòmò-nán-ìy

[[B Loc] go-Impf-1PIS] but stay.long-ImpfNeg-1PIS

'We will go to Bamako but we won't stay (there) long.'
```

See also *kásórò* (Bambara 'it happened that') in the context 'whereas in fact...' in (786) in Text 1.

19.2.4 Adversative *nà*→ 'rather'

This particle can occur at the junction of two clauses denoting propositions in an truth-conditionally adverse relationship, compare English 'rather' or 'instead'. Elicited examples include (724a-b) in §18.1.5.2, 'It's I myself who will go, I won't send someone (else)', and (498) in §12.3, 'I can't (even) walk, not to mention (=much less) run'. Textual examples follow.

In (750), the two propositions are contradictory (truth-conditionally disjoint).

```
(750)
                       bò
                                    nà→]
        ľkó
         [InanSgS
                       be
                                    Advers]
                        [[àmà<sup>L</sup>
         Γkό
                                      wàjù]
                                                      †ná]
                                                                ònú-Ø]
                        [[place<sup>L</sup>
         [InanSgS
                                      distant]
                                                      Loc
                                                                not.be-3SgS]
         '(He said:) It's there (i.e. around here), it is not in a distant place.'
         (excerpt from (789) in Text 1)
```

In (751), the adverse relationship is more diffuse, between 'X get food' and the catastrophic reality of famine. This example is closer to the 'not to mention' case mentioned above.

(751)
$$\begin{bmatrix} \acute{a}r^n \acute{a} - k\grave{u} s\grave{u} & w\grave{o} \end{bmatrix}$$
 $\begin{bmatrix} \acute{d}am\acute{a} & {}^{\dagger}n\acute{a} \end{bmatrix}$ [year Def.InanSg] [village Loc]

```
kár<sup>n</sup>έ-y
jà:
           †n5
                                                  fó→
                                                            \dot{u}r^n\dot{\varepsilon}-v,
                     nà
hunger
                     3SgS
                              do-Past.and.then until
                                                           go-Past.and.then,
           enter
[kún
                       nò-mè-rá-n
            səá:dú]
                                                      nà-
                       hear-Pass-ImpfNeg-3SgS Advers
[mortar
            sound]
[zà-[běl-Ø]
                         d\grave{o}m = l\check{a}:
                                              wá],
[food-[get-VblN]
                        speech=not.be
                                              Quot],
'The (=a certain) year, famine entered into the village to such an extent that
one did not (even) hear the sound of mortars. There was no talk (=question)
```

(752) is more complex. This $n \grave{a} \rightarrow$ comes at the end of an indirect thought quotation, and is unrelated to the following narrative segment. It is not immediately clear whether the adverse relationship is in the quoted character's mind or in the current speaker's mind. The belief that butterflies were infesting the cow-peas is false (the "butterflies" were colorful cow-pea flowers), and I suspect that the adversity is between this belief and the reality.

of getting food, it is said.' (excerpt from (799) in Text 2)

```
(752)
       kó
                 [[nim
                                wò]
                                                 nà]
       that
                 [[cowpea
                                Def.InanSg]
                                                 Loc
       [pì-pírù]-mù
                            [nĭm
                                           á-ŋ]
       [butterfly-AnPl
                                           3LogoSg-Poss]
                            [cowpea
                                            nà→]
       yámná-m
                            jèlà-yè
       damage(v)-Impf
                             Prog-3PlS
                                            Advers
       'So in the cow-peas, (he thought) that butterflies were infesting his cow-
       peas.' [end of a narrative segment, followed by 'well, he came and spoke to
       ...'] (excerpt from (830) in Text 4)
```

19.3 Pragmatic adverbs or equivalents

19.3.1 'Again', 'not again', 'on the other hand'

'Again' is expressed a $iy \in {}^{\dagger}l\acute{a}$, arguably containing $l\grave{a}$ 'too', but rather frozen and arguably a single word. It is common in texts at the beginning of a clause. It is audibly distinct from $iy \in l\grave{a}$ 'today also'.

wànà 'other' can occur as an adverb in a negated clause in the sense '(not) again' or '(no) longer'.

```
(753) a. [íyế †lá] yǎy ún-m-ù [again] there.Def go-Impf-3SgS 'He/She will go there again.'
```

b. wànà tê: nìyè-ná-m
 other tea drink-ImpfNeg-1SgS
 'I no longer drink tea.'

19.4 'Only' particles

In addition to the particles presented here, there is a a construction of the type 'Neg [if it is not X]' that can be roughly translated as 'only X'.

19.4.1 'Only' (tùmà, sày)

'Only' particles follow a NP or clause. *tùmà* appears to be the older form, while *sày* may have been borrowed from Jamsay. Dogon cognates of *tùmà* are the numeral '1' or pragmatic variants thereof, but YD *tùmà* can be used after nonsingular NPs and after clauses, which are inconsistent with singular cardinality. For *tùmà*, see also §18.1.5.1.

A constituent with 'only' is normally focalized (754).

```
(754) a. [?ánɛ́ tùmà] Lèbè-m
[goat only] Lbuy.Perf-1SgS
'I bought only a goat.'
```

```
b. [nò-núm tùmà] Lw-ò [person-five only] Come.Perf-3PlS 'Only five people came.'
```

'Only' particles are rarely clause-final since there is a strong preference to attach them to a NP or a noun-like adverb (755a). However, if there is no such NP the particle may appear clause-finally (755b).

```
(755) a. [zá từmà] L²ðṇ-à
[meal only] Leat.Perf-3PIS
'They only ate.' (i.e. they didn't also spend the night)
```

```
b. [bìdé bìdè-náŋ-Ø]
[work(n) work-ImpfNeg.3SgS]
[gìděn tùmà] Lnìyè-m-ù
[sleep(n) only] Lsleep-Impf-3SgS
'He/She doesn't work, he/she just sleeps.'
```

```
b. yà wé-Ø tùmà
Real come.Perf-3SgS only
'He/She only came.'
```

Pronouns take the proclitic form before tùmà, and independent form before sày. For example, 'only me' is mì ' $t\acute{u}m\grave{a}$ with L-toned pronominal proclitic (which triggers Post-Pronominal Tone-Raising) or $m\acute{i}$ sày with H-toned independent pronoun $m\acute{i}$.

```
19.4.2 'Just (one)' (léŋ→)
```

As an alternative to the usual 'only' particles ($t \hat{u} m \hat{a}$, $s \hat{a} y$), see the preceding section, $l \hat{e} \eta \rightarrow$ may be used as an emphatic for $t \hat{u} m \hat{a} \rightarrow$ 'one'. The pragmatic force is to mimimize the quantify.

```
(756) [?\partial n\hat{e}^{L} \quad t\hat{u}m\acute{a} \rightarrow l\acute{e}n \rightarrow] = l\check{a}: \qquad d\acute{e} \qquad z\grave{o}:-\acute{n}-\varnothing
[goat^{L} \quad one \quad just.one] = it.is.not \quad if \quad have-StatNeg-3SgS
'He/She has just one (lousy) goat.'
```

léŋ→ can be stretched to co-occur with '2', but is uncommon with higher numerals.

19.5 Phrase-final emphatics

19.5.1 Clause-final emphatic *kòy* (confirming)

Clause-final $k \partial y$ emphasizes the truth of an assertion in a non-contradicting manner. A clause with $k \partial y$ may be used to confirm the truth of what an interlocutor has said (cf. English preverbal *sure*). (757) is a two-person exchange.

```
(757) A: úzú yà bó-∅
hot.weather Real be-3SgS
'It (weather) is hot.'
```

B:
$$\partial^n h \partial^n$$
, úzú yà bó- \emptyset kòy uh-huh, hot.weather Real be-3SgS Emph 'Uh-huh, it sure is hot.'

kòy can also be used for an emphatic positive answer to a polar interrogative. In (758), kòy might be used when there has just been a heavy rain. kòy is not routinely used in nonemphatic answers to polar interrogatives.

(758) A:
$$[w\acute{o}-\eta \quad b\grave{a}] \quad \grave{ar}^n\grave{u}\eta \quad t\acute{e}g\acute{e} = b\acute{e}-\varnothing \quad m\grave{a}$$
 [2PlP-InanSg Loc] rain(n) rain.fall=Past-3SgS Q 'Did it rain over where you-Pl area?'

B:
$$t\acute{e}g\acute{e} = b\acute{e} - \varnothing$$
 $k\grave{o}y$ rain.fall=Past-3SgS Emph 'It sure did rain.'

19.5.2 Clause-final emphatic *dè* (admonition)

Clause-final *dè* can be used to add a warning note to a positive or negative imperative. In (759), A's statement could lead to either the B or C response from a concerned interlocutor.

```
(759) A: [[zăŋ wò] bà] Lùrnù-m-Ø [[fight(n) Def.InanSg] Loc] Loc] Lgo-Impf-1SgS 'I'm going to the fight.'
```

19.6 Greetings

Typical simple time-of-day greeting and response sequences are in (760). A is the initiator and B responds. At each turn there are usually two variants depending on the number (singular/plural) of addressee(s) and on the sex of the speaker.

```
A: (wà:) nă:-má
                                             'good morning' (sg)
         (wà:) nă:-má-n
                                             'good morning' (pl)
     B: áwà
                                            (woman speaking)
         ô→
                                            (man speaking)
    B: ó
              sé:w nà-y<sup>n</sup>è-w
                                             'Did you-Sg sleep well?'
                                            'Did you-Pl sleep well?'
         wó sé:w nà-y^nè-y
    A: séw này<sup>n</sup>è-m
                                             'I slept well.'
         séw này<sup>n</sup>è-y
                                             'We slept well.'
b. mid-day and afternoon (and general default greeting)
    A: pŏ:
                                             'Greeting' (sg)
                                             'Greeting' (pl)
        pŏ:-ỳ
    B: áwà
                                            (woman speaking)
         ô→
                                            (man speaking)
    B: ó
              sέ∶W
                      bò-w
                                             'Are you-Sg well?'
                                             'Are you-Pl well?'
         wó sé:w bò-y
    A: sέ:w bò-m
                                             'I am well.'
         sé:w bò-y
                                             'We are well'
c. evening and night (retrospective)
    A: dèr<sup>n</sup>è-má
                                             'good evening' (sg)
         dèr<sup>n</sup>è-má-n
                                             'good evening' (pl)
    B: áwà
                                            (woman speaking)
         \hat{o} \rightarrow
                                            (man speaking)
    B: \acute{o} s\acute{\varepsilon}:w d\grave{e}r^n\grave{e}-w
                                             'Did you-Sg have a good day?'
         wó sé:w dèr<sup>n</sup>è-y
                                             'Did you-Pl have a good day?'
                                             'I had a good day.'
    A: s \dot{\varepsilon} : w \ d \dot{e} r^n \dot{\varepsilon} - m
         s\acute{\epsilon}:w d\grave{e}r^n\grave{\epsilon}-y
                                             'We had a good day.'
d. morning (prospective 'good day')
    A: amba [den^{L}siye] ndi
                                        'May God give a good day!'
or:
         [síyé †gá] yè dèr né-má
                                        'May (God) make us pass the day well!'
                                        'Amen'
    B: àmí:nà
e. night (prospective 'good night')
                                        'May God give a good night!'
    A: àmbà nàyè-n síyé ndí
         [síyé †gá] yè ná:-má
                                        'May (God) make us pass the night
or:
                                        well!'
    B: àmí:nà
                                        'Amen'
```

a. from dawn until late AM (retrospective)

(760)

As often in Dogon greetings, the morphology is somewhat unusual. $n\check{a}$: 'spend the night' (760a,e) and $d\grave{e}r^n\acute{e}$ 'spend the mid-day' (760c,d) are recognizable. Nevertheless, $-m\acute{a}$ (plural $-m\acute{a}$ - \mathring{n}) is morphologically hortative, see §10.7.2 above. In the default greetings (760b), $p\check{o}$: has a 2Pl form with $-\grave{v}$ but does not add -w for 2Sg.

Some embellishments can be worked into the sequences above. For example, in the morning greetings (761) can replace B's second turn. $=b\dot{o}$ - is evidently a cliticized form of $b\dot{o}$ - 'be', but the morphosyntax is obscure.

```
wó n\check{a}: = b\grave{o}-y \grave{e}n\acute{e}= w\grave{o} n\check{a}:-b-\grave{e}: 'Did you-Pl and the children sleep well?'
```

In addition to the time-of-day and default greetings above, there are situation- and place-specific greetings. In (762), a noun (δl 'fields', $inj\hat{u}$ 'water', or $\ell b\hat{u}$ 'market') precedes $p\delta$: (or plural-addressee $p\delta$:- \hat{y}). (762b) is literally 'you-Sg and work'. The basic response to all of these greetings is $\delta w\hat{v}$ (women) or $\hat{o} \rightarrow$ (men).

```
(762) a. ŏl pŏ: (to sb in a field)
ínjú pŏ: (to sb at or returning from well)
ébá pŏ: (to sb at or returning from a market)
b. [ŏ Hmí→] [bìdé mì→] (to sb at work)
```

Travel-related greetings and wishes are in (763). No response is needed for (763a). For (763b-c) the response is the usual $\hat{a}w\hat{o}$ (women) or $\hat{o} \rightarrow$ (men).

```
a. to departing traveler (bon voyage)
[bò Hwá→] pŏ: wà 'Greetings to them.'
b. to returner traveler (welcome back)
àmbà ò-ý zóyè-Ø 'God has brought you-Sg.'
àmbà wò-ý zóyè-Ø (plural)
c. to an arriving guest (welcome)
[?áló †ná] d₂á 'Arrive-2Sg at the house!'
[?áló †ná] d₂á-n (plural)
```

After a death, people go (often to a neighboring village) to present condolences to the survivors (764).

```
a. to one leaving home to present condolences elsewhere (2 versions)
[bò Hwá→] pòr bǒ: wà 'Crisis greetings to them.'
[wàzè-mù wá→] pŏ: wà 'Greetings to those remaining.'
b. to relatives (B) of the deceased (3-part sequence)
A: [gòw †mí→] pŏ: 'Greetings with the cold (=misfortune).'
B: ô→
A: mà:ndìyé ná yá:bá 'Have courage to pardon him/her.'
```

On the two major Muslim holy days or on New Years Day, wishes for the following year take the two-sentence form in (765).

```
(765) [àmbà bá gò-nd-è] 'God has taken away the (just ended) year. bá-gọè: gìdè dámdá May (He) show (us) next year.'
```

A woman who has just given birth is greeted as in (766).

```
Làbè.
(766)
        àmbà
                     ó
        God
                     2Sg(O)
                                       <sup>L</sup>take.Perf-3SgS,
        àmbà
                   [bárgè
                               mì]
                                          koá
        God
                   [blessing
                               Inst]
                                          raise.Imprt
        'God has taken (=spared) you. May God raise (the child) with blessings.'
```

20 Texts

Yanda Dom texts recorded 2011, transcribed by Jeffrey Heath

```
Tape references
2011.01b.01 Hare and Donkey (tale)
2011.01b.02 Monitor lizard and Dog (tale)
2011.01b.03 Cat and Mouse (tale)
2011.01b.04 Hyena and Hare (tale)
2011.01b.05 Abandoned twins (tale)
Text 1 Hare and Donkey (tale)
(tape reference: 2011.01b.01)
(767) A: s\acute{e}v^n.:
            [story-opening word]
        B: màté:n
            [audience-confirmation word]
(768)
        A: [òy-nàmà-mú
                                    fú→1
                                             mù:mbì-y-έ:
            [outback-meat-AnPl
                                             assemble-MP-NonP.and.SS
                                   all]
        уú
                      gòlò-mà
                                         †wá,
        millet
                      cultivate-Hort
                                         say,
        [òy-nàmà-mú
                               fú→]
                                         mù:mbì-yὲ-y,
        [outback-meat-AnPl
                               all]
                                         gather-MP-Past.and.then,
        [yú
                gòlè-y]
                                         [[c\acute{e}m \rightarrow = l\grave{a}:
                                                         d\hat{e}] b\hat{e}l\check{a}-n-\varnothing],
        [millet cultivate-Past.and.then] [[a.little=not.be if] get-PerfNeg-3PIS,
            'All of the wild animals got together, saying: "Let's cultivate
        millet!" The wild animals all got together and cultivated millet, (but) all
        they got was a little bit.'
            [mediopassive
                              (MP) suffixal
                                                 derivation
                                                              §9.3.1;
        hortative -mà §10.7.2, §17.1.5.2; quotative wà §17.1.3; past 'and
```

 $= l \check{a}$ - 'it is not' §11.2.1.2]

then' -y with coindexed subjects §15.2.2.2; $c \in m \rightarrow$ 'a little' §8.4.2;

```
[what.little<sup>L</sup>
                                     3PIS
well.
                                                  get.Perf.Rel
                                                                         Def.InanSg]
          \acute{a}-v^n\grave{\varepsilon}-m\grave{u}
[[kó
                                    yè]
                                                 [zèr<sup>n</sup>à-pánù
                                                                               gà]
[[Inan
        3Logo-AnPl-AnPl Top.Pl]
                                                [rainy.season-meal
                                                                               Adv]
vè:dè
              †bézè-zó-m
                                                  dè.
              leave-Perf2-LogoS
                                                  if.
store(v)
```

'Well, what little (millet) they had gotten, that (millet) of theirs, (they said) "we will store that (millet) as our rainy-season meals."

[$d\grave{a}g\grave{a}-m\grave{a}$ end of §8.4.1; perfective object relative §14.1.7.1, §14.3; 3Logophoric $\acute{a}-y^n\grave{e}-m\grave{u}$ §18.2.1; optional plural topic marker $y\grave{e}$ §19.1.1; adverbial $g\grave{a}$ §8.2.15; pseudo-1Sg logophoric subject -m §18.2.1.2; Perfective-2 -zo- §10.3.1.2; $y\grave{e}:d\grave{e}$ † $b\acute{e}z\grave{e}$ - direct verb-chain with both verbs lexically {LH}/{L}-toned, compare (602b,d) in §15.1; conditional $d\grave{e}$ §16.1]

(770)Гпò fú→] ìzì-bàrⁿà vàlìvè-zó-m dè. if, go.around-Perf2-LogoS person all] dry.season [[pànù á-ŋ] dùnó-dùnò] [?áná-n á bò-n1 [[meal 3Refl-Poss] Iter-look.for] [eat-NonPDur 3ReflS be-NonPDur] [bá yà dọέ-Ø dè] [rainy.season.edge Real arrive.Perf-3SgS if ſw-ě: mù:mbì-y-έ: [come-NonP.and.SS assemble-MP-NonP.and.SS [dàgà-mà^L bó wò1 ?ánέ-má wà], [what.little^L be Def.InanSg] eat-Hort say]

'We will all go around during the dry season, looking for their meals (=something to eat) and will be eating (that), (then) when the rainy season arrives we will come back together and eat what little there is (from the harvest) (they said).'

[$n\grave{o}$ $f\acute{u}\rightarrow$ 'everyone' §6.6.1.1; reflexive possessor \acute{a} - η §18.1.4; $d\grave{u}n\acute{o}$ - $d\grave{u}n\grave{o}$ verb-stem iteration with noninitial iterations {L}-toned §15.1.6; -n nonpast durative §15.3.5; $b\acute{a}$ in subject-verb collocation §11.1.4; realis $y\grave{a}$ in positive perfective clause §11.2.2.1; nonpast same-subject 'and (then)' (w- \acute{e} :, $m\grave{u}$: $m\grave{b}$ -y- \acute{e} :) §15.2.3]

(771)†má→ ní: săppè àm-í: 'ndà-m-ὲ wà, key who?-Acc give-Impf-3PIS Q now say, háyà sănnè zòmź 'ndì wà, rabbit give.Imprt well, key say, †bézè-v1 [săṇnè zòmó-ỳ give.Perf^L leave-Past.and.then] rabbit-Acc [key

'Now who should they give the key (to the collective granary) to?, it was asked. "Well, give the key to Hare!" they said. They gave the key to Hare.'

[ni: 'now' as topic (272a) in §8.4.6.1; \grave{am} 'who?' §13.2.2.1; polar interrogative $m\acute{a} \rightarrow$ §13.2.1; quoted imperative (jussive) §17.1.5.1; $\grave{b}\grave{e}z\acute{e}$ 'leave' is common as a final chained verb, cf. (602a-d)]

```
(772)
        [[ní:
                     kày]
                               [nò
                                            fú→]
                                                       ìzì-bàr<sup>n</sup>à
         [[now
                     Top]
                               [person
                                            all]
                                                       dry.season
         [[àmà<sup>L</sup>
                                 ěΠ
                                                    nà]
                                                              ún-zó-∅
                                                                                     dè]
         [[place<sup>L</sup> 3LogoSg
                                be.pleasing]
                                                    Loc
                                                              go-Perf2-3SgS
                                                                                     if]
         [[dùnó-dùnò
                                ?ápá-n]
                                                    bò
                                                               bò-n],
         [[Iter-look.for
                               eat-NonPDur]
                                                    3PlS
                                                               be-NonPDur]
```

'Now, in the dry season everyone will go to wherever it pleases (them), and they will look (for food) and will be eating it.'

[$k\grave{a}y$ topic §19.1.1; 'place' as relative head §15.4.1; locative $n\grave{a}$ §8.2.3]

[zèrⁿà súyé-Ø (773)háyà dè] yà go.down.Perf-3SgS well, [rainy.season Real if] ſw-ě: mù:mbì-yè-mà †nî:] [come-NonP.and.SS assemble-MP-Hort Sbjnct] [săppè [zòmó Hbérná] dògò-y] [òy-nàmà-mú fú→] [rabbit HDat] leave-Past.and.then] [bush-meat-AnPl all] [key $k\hat{\mathfrak{I}}v^n$ $^{L}\dot{n}n-\dot{\partial}l$ [gìnnè-y [òy †nál Lgo-Perf.3PIS] [disperse-Past.and.then [outback Loc] thus

'Well, intending to come (back) together when the rainy season arrived, they left the key with Hare, and all the (other) wild animals went and dispersed into the outback like that (=as planned).'

[$h\acute{a}y\grave{a}$ 'well, ...' §19.2.2; † $n\^{i}$: variant of subjunctive $n\grave{i}$ in sense 'intending' §17.1.4; $\grave{o}y$ † $n\acute{a}$ 'in the bush (outback)' (237b) in §8.3.3; contracted $k\^{o}y^n$ 'thus' (70a) in §3.8.4.1]

```
(774)
        [zòmź
                  [săṇnè wò]
                                            nà
                                                   †gélà-∅]
                                                                       dàn,
                                           3SgS hold.Stat-3SgS]
                                                                       because,
        [hare
                  [key
                           Def.InanSg]
        zòmź
                           ún-lì-Ø,
                           go-PerfNeg-3SgS,
        hare
                                                     †ná]
                                                                ur^n \varepsilon - v
                     [nò-mó
                                       [wàjù
        zòmś
                     [person-AnPl
                                       [far
                                                               go-Past.and.then]
        hare
                                                     Loc]
                          bò
                                          dùnó-m]
        [pànù
        [meal
                          3PIS
                                         look.for-Impf]
        [zòmó kóy
                                               biy\hat{\varepsilon}-m=\hat{\sigma}:I,
                                  á
```

[hare just.over.here 3ReflSgS remain-Impf=Def.InanSg], [[yú wò] pɔśmbɔ-zo-Ø yè] ʔə́pà-m-ù, [[millet Def.InanSg] plunder-Perf2-3SgS if] eat-Impf-3SgS,

'Because Hare held the key, Hare did not go (to the outback). Hare, when the people (=animals) had gone far away, looking for meals, Hare was staying there (in the village), and raided the millet and ate it.'

[$d\hat{a}n$ 'because' clause §17.6.6; $w\hat{a}j\hat{u}$ 'distant'; $-\hat{m}$ and $-m = \hat{o}$: imperfective clauses §15.2.1, §15.2.1.4; $y\hat{e}$ here is a variant of conditional $d\hat{e}$ 'if' §16.1]

ìzèn^L nà (775)[[yú wò] gò-ndó-zò cêm fú→] [[millet Def.InanSg] day^L 3SgS go.out-Caus-Perf2 all all] [zàmtùrù-sùwà [yènd-íyè mì] bă: bàl-zó-Ø dè] [donkey-shit [basket-Dimin Inst] be.full gather-Perf2-3SgS if] [[[gɔà: †wól nà] kúndó-zó-Ø dè] dúndò-m-ù, [[[granary Def.InanSg] Loc] put.in-Perf2-3SgS if] lay-Impf-3SgS

'Each day on which (=whenever) he took out (some of) the millet, he would gather some donkey dung and fill a basket (with it), then he would lay it down inside the granary.'

[*ízèn* 'day' as temporal locator, not 'day(time)' versus 'night' or 'day(s)' as unit of elapsed time; diminutive -(*í*)yè §5.1.8; instrumental mì §8.1.2]

(776)háyà $\int k \hat{\mathfrak{I}} y^n$ kárⁿá-m] [nà kárⁿá-m] [nà kárⁿá-m] nà well. [thus 3SgS do-Impf] [3SgS do-Impf] [3SgS do-Impf] *[[vú* wò1 [ní: $k \dot{a} v l$ $c \dot{e} m \rightarrow s \dot{a} v \rightarrow = l \dot{a}$: dè1 Def.InanSg] [now Top] a.little only=not.be [[millet if] wàsà-lí nà $k\acute{a}r^n\acute{\varepsilon}$ -v, be.left-PerfNeg 3SgS do-Past.and.then, zòmź zàbà-y yà bán-j ε - \emptyset , run-Past.and.then Real hide-MP.Perf-3SgS, hare

'Well, he kept doing thus. The millet now, when only a little was left, Hare fled and hid.'

[$k\acute{a}r^n\acute{e}$ -y 'did and then' after a conjugated verb is common in these texts in subject-switching contexts, cf. §15.2.2.1]

(777)fú→] [â: [3.all.together all] kúrⁿú-m] [bò kúrⁿú-m] kúrⁿú-m] [kú-bà bò [bò [there.Def 3PIS be.in-Impf] [3PIS be.in-Impf] [3PIS be.in-Impf] kày] [dòrù^L bò dàmέ wò1 [now Top] [moment^L 3PIS speak.Perf.Rel Def.InanSg]

```
đὸ
            nà
                              kár<sup>n</sup>έ-y,
                             do-Past.and.then,
arrive
            3SgS
                        w\grave{o}^{\mathrm{L}}
[tùmày-túmáy
                                       ná]
                                                                tól-á,
                                                    yà
                        come<sup>L</sup>
[Iter-one
                                       Purp]
                                                   Real
                                                               begin.Perf-3PIS,
```

'All of them (=other animals) were (still) being there (in the outback). Now, when the time that they had spoken of arrived, they began to come (back) one by one.'

[\hat{a} : $f\acute{u} \rightarrow \S4.3.1.2$; $t\grave{u}$ m \grave{a} y- $t\acute{u}$ m \acute{a} y $\S4.7.1.6$; 'begin to VP' construction $\S17.6.1.2$]

[ìzèn^L (778)[ní: kày] sé:dé-má gùní-yà wò] [day^L **[now** Top] set-Hort say-Pass.Rel Def.InanSg] kárⁿέ-y, đὸ nà arrive 3SgS do-Past.and.then, hávà [òv-nàmà-mú fú→1 bò wó-v. come-Past.and.then, [outback-meat-AnPl all] 3PIS well, [zòmɔ́ kóy bò-m] [nà úrⁿ€ là] [hare just.over.here be-Impf] [3SgS go.Perf.Rel too [[zùwó kàndà] doà-lì-Ø kôy], [[week arrive-PerfNeg-3SgS Emph], even zòmź wò-lí-Ø. hare come-PerfNeg-3SgS,

'Now, the day that had been set arrived. Well, all the wild animals came. (Since) Hare was there and had gone away, not even a week had elapsed. Hare didn't come (back).'

[gùní-yà passive relative §14.1.7.8, see also dàmí-yà in (779) just below; kàndà 'even' §19.1.4; kòy clause-final emphatic §19.5.1]

- $f\tilde{u} \rightarrow | [iz\hat{e}n^L \ d\hat{a}m\hat{i}-y\hat{a}]$ (779)[òy-nàmà-mú wò] all] speak-Pass.Rel [outback-meat-AnPl [day^L Def.InanSg] [wò-y yà dɔ-á] [come-Past.and.then Real arrive-Perf.3PIS] [zòm5 d₂à-lí-Ø], wò-y [hare come-Past.and.then arrive-PerfNeg-3SgS], 'All the wild animals, on the day that was spoken of they came
- (back). (But) Hare did not come (back).
- (780)é→ [zòmɔ́ [wàjì-ndìyè-zó- \emptyset] badú-mu = wo,wà] hey [hare Quot] [far-Inch-Perf2-3SgS] owner-AnPl=AnPl, [ní: [[nò fú→] wò-zó-Ø kày] dè] [now Top] [[person all] come-Perf2-3SgS if] pódó-zó-Ø Γá tò:] dè]

```
[3ReflSgPoss
                                         greet-Perf2-3SgS
                       agemate]
                                                                      if]
[[àmà<sup>L</sup>
                                                                       dàmé]
                                        goé]
[[place<sup>L</sup>
                3LogoSgS
                                        go.out.Perf.Rel]
                                                                       speak.Perf]
[[cì<sup>L</sup>
                               kár<sup>n</sup>έl.
                kámá1
[[thing<sup>L</sup>
                any]
                                do.Perf],
```

'(There were) some who said hey, Hare has gone far away. Now each one came and greeted his fellow, and said where he had come from, and did whatever (else).'

[quotative wà after clause subject §17.1.2; deadjectival inchoative wàgí-ndí-yé ~ wàjí-ndí-yé 'become (=go) far away' (310b) in §9.5; bàdú 'owner' §5.1.10, here with a clause in the sense 'those who...'; tò: 'agemate', here '(his) fellow, counterpart', related to reciprocal forms, see (735) in §18.3.1; cì^L kámá 'anything, whatever' §6.6.2]

```
(781)
                       kár<sup>n</sup>€-y]
        [nà
                       do-Past.and.then]
        [3SgS
                     [[ùmùlò<sup>L</sup>
         zòmź
                                   pèy]
                                           †ná]
                                                   ńjú
                                                             kúndé-y,
                     [[waterbag<sup>L</sup>
                                  old]
        hare
                                           Loc] water
                                                             put.in-Past.and.then,
         cébí-càbì-cébí-càbì-cébí
                                          [òy-nàmà-mú
                                                                       fú→]
         with.short.quick.steps
                                          [outback-meat-AnPl
                                                                      alll]
                                                    bò
         [wò
                      d<sub>2</sub>ε-y]
                                                                gờηá-m,
                      arrive-Past.and.then]
                                                   3PIS
        come
                                                               go.around-Impf,
```

'When that was done (=meanwhile), Hare put some water into a word-out (goatskin) waterbag, and (came) walking with short quick steps (as though hurrying). All the wild animals came and made a circle (awaiting Hare).'

[cébí-càbì-... iterated expressive adverbial with vowel shift to a §8.4.7.6]

```
zòmź
                    bá-này<sup>n</sup> €y<sup>n</sup>→
(782)
                                      [[ní:
                                                  kày]
                                                              ὴgó
                                      [[now
         hare
                    overdue
                                                  Top]
                                                              here
         [[ná-ŋ
                       'ngó]
                                   gày]
                                            [[dùnú
                                                            gŏ-ŋ]
        [[3Sg-Gen
                       this.Inan] Top]
                                            [[searching
                                                            go.out-Impf.Ppl.InanSg]
         yà
                    dɔέ-Ø
                                          wà]
         Real
                    arrive.Perf-3SgS
                                          Quot]
                                      nò L
         [[[àmà<sup>L</sup>
                             kún]
                                                   sò:
                                                                 bèlé]
                     nà
                     3SgS be.in]
        [[[place<sup>L</sup>
                                      person<sup>L</sup>
                                                   awareness
                                                                 get.Perf.Rel]
                          mà→]
         yà
                   bó
         Exist
                          Q]
                                                  sádá-m
         [nò-mó
                          [kìbâl
                                                               bò
                                                                      bó-m,
                                    nà-ŋ]
         [person-AnPl
                          [news
                                    3Sg-Poss]
                                                 ask-Impf
                                                               3PIS be-Impf,
```

'Hare was overdue. (Some animals) said, as this (situation) of his, (the time) has come for going out and looking (for him). Is there anyone who is aware of the place that he is in (=where he is)? The people (=animals) were asking for news of him.'

[$b\acute{a}$ - $n\grave{a}y\acute{e}y^n \rightarrow$ 'late' (expressive adverbial with final prolongation, irregularly related to $b\acute{a}$ $y\grave{a}$ $n\grave{a}y^n\acute{e}$ - \varnothing 'day has broken', cf. (431a) in §11.1.4; $g\check{o}$ - η inanimate imperfective relative-clause verb form §14.1.7.2; progressive - \acute{m} $b\grave{o}$ -§10.5.2.3]

```
(783)
                   ìzìgè
                           téjé-mέ
         zòmź
                                                      dà:-nd\vec{\vec{\vec{\vec{v}}}}-y,
         hare
                           sun.beat.down-Caus be.well-Caus-Past.and.then,
                   sun
         zòmź
                                               wó-m-ù,
                      yà
         hare
                      Presentative
                                              come-Impf-3SgS,
         [wò
                           d\mathfrak{z} \dot{\varepsilon}-y]
         [come
                           arrive-Past.and.then]
                                fú→-ỳ]
                                                   pódé-y,
         [â:
         [3.all.together
                                all-Acc]
                                                   greet-Past.and.then,
```

'Hare let the sun beat down well (=waited until mid-day), then there was Hare coming. When he came, he greeted all of them.'

[causative $t\acute{e}j\acute{e}-m\acute{e}$ 'cause (sun) to beat down', i.e. 'wait until the sun is beating down', here in a direct chain with $d\acute{a}:-nd\acute{e}$ '(do) well'; presentative $y\grave{a}$ with imperfective; accusative $-\grave{y}$ §6.7]

(784)kárⁿέ-y, [†]mâ→ [ní: kày] kìbâl ànjă: wà, [now Top] news do-Past.and.then. how? Q Quot, [àmbá: = ∴ bè-Ø [†]mâ→ wà1 [where?=Foc be.Past-3SgS O Quot] ^Hwá→ [nà gày] ^HOuotS [3Sg Top] wàjì-ndìyè-zó-Ø bìyà-m-ù wà kŏy, far-Inch-Perf2-3SgS happen-Impf-3SgS Quot Emph, тì $gùr^n \varepsilon - y$, $z \grave{o} m \acute{o} \grave{o}^n h \acute{o}^n$ wàgì-ndìyè-zó-m 1SgS say-Past.and.then, hare uh-huh far-Inch-Perf2-LogoS say,

'Now, news was exchanged: how is it? Where were you? It happens (=seems) that you went far away, I (=an animal) said. Here said: uhhuh, I went far away.'

[ànjā: 'how?' §13.2.2.5, àmbā: 'where?' §13.2.2.3; 3Sg pronoun nà for original addressee in quoted clause, §17.1.1; wàgì-ndìyè-zó-m with logophoric subject -m §18.2.1.2; emphatic kòy §19.5.1]

(785) ní: [àmbá: mì] [àmbá: mì] [àmbá: mì] now [where and] [where? and] [where? and]

```
bè-Ø
                     †mâ→
                                 wà,
be.Past-3SgS
                     Q
                                 Quot,
                            [tí→

úr^n \varepsilon - y,

\acute{a} = \grave{a},
                                         nà]
3LogoSg=QuotS,
                                         Loc]
                                                       go-Past.and.then,
                            [Ti
[tí→
             nà]
                            goè-y,
[Ti
             Loc
                            go, out-Past.and.then,
[tâ:
       nà]
                 \dot{u}r^{n}\dot{\varepsilon}-v,
                                          [tâ:
                                                 nà]
                                                              goè-y,
                                          [Ta
[Ta
       Loc
                 go-Past.and.then,
                                                Loc
                                                              go.out-Past.and.then,
[nû:
             nà]

úr^n \varepsilon - y,

                           go-Past.and.then,
Nou
             Loc
```

'Now, where and where and where were you, they asked. He said, I went to Ti, then I left Ti and went to Ta, then I left Ta and went to Nou.'

[$b\hat{\epsilon}$ 'was' §11.2.5.1; $\acute{a}=\grave{a}$ contracted from \acute{a} wà with 3Logophoric \acute{a} and quotative \grave{wa} after subject §17.1.2-3; locative $n\grave{a}$ with place name §8.2.4]

(786)zòmź [nà lígílá-m] [nà lígílá-m] [nà lígílá-m] hare [3SgS cite-Impf] [3SgS cite-Impf] [3SgS cite-Impf] **[kàlè** zó:-n] kásórð. [limit have-StatNeg.Rel] nevertheless, [[àmà^L ún-lì-Ø, kámá] nà là] [[place^L any] Loc too go-PerfNeg-3SgS

'Hare kept citing (place names), without limit, although in fact he had not gone to any (such) place.'

['it has no limit' is a common phrase for 'lots'; $k\acute{a}s\acute{o}r\grave{o}$ < Bambara 'it happened that', here something like 'whereas in fact'; $\grave{o}m\grave{o}^L$ $k\acute{a}m\acute{a}$ '(not) anywhere' §6.6.2]

(787)háyà wò-v [ní: kày] [now well, go-Past.and.then Top] $k\hat{\mathfrak{I}}y^n$ yà bìνέ-Ø dè, thus Real happen.Perf-3SgS if, [[gɔ̯à: á-ŋ] 3LogoSg-Poss] [[granary [[gìdè^L $d \partial g \epsilon$ $y \hat{\varepsilon} y^n$ †mâ→] á bò-Ø [[manner^L 3LogoSgS leave.Perf.Rel] like] be-3SgS Q, [ní: kày] sáŋ dàgì-lè *†tádà* wà, **[now** lock-Revers try.Impf Quot, Top] door

'(Hare) went and said: "well, now that it (=the situation) has come to be thus, (let's see) whether my granary is (still) the same way I left it; now unlock the door and try (=see)."'

[manner adverbial relative headed by $gid\hat{e}$ 'way, manner', with following postposition $y\hat{e}y^n$ (variant of $y\hat{e}\eta$ 'like'), see (645c) in §15.4.2; $d\hat{a}g\hat{i}-l\hat{e}$ reverside 'unlock' (291) in §9.1; $t\hat{a}d\hat{a}$ 'try!' with directly chained VP, idiosyncratic {L}-toned imperative §17.4.1]

```
(788)
         zòmź
                       ur^n \varepsilon - v
                                                n<sub>2</sub>έ-y
         hare
                       go-Past.and.then
                                                enter-Past.and.then
         săppè
                         tóyé-y
                                                        wò-y,
         key
                         take-Past.and.then
                                                       come-Past.and.then,
         săppè
                      Γá
                                      gàyl
                                                 njí,
         key
                      [3LogoSg
                                      Top]
                                                 here,
         [[ìzèn<sup>L</sup>
                                                                  Lbà:-ndɛl
                     kó]
                                           'njí
                                                    á
                                                    3LogoSgS Lhide-Caus.Perf]
         [[day<sup>L</sup>
                     that.NearDist]
                                           here
         gò-mè
         go.out-Caus
                                    SS.
                                                            úr<sup>n</sup>έ
                                            á
         [dògò
                    té-y
                                                                         wò]
         [leave
                    Perf-Past.and.then 3LogoSgS
                                                            go
                                                                         Def.InanSg]
         [[àmà<sup>L</sup>
                                      dògé]
                                                             bèdù
                                                                        kóy]
         [[place<sup>L</sup>
                                     leave.Perf.Rel]
                                                             near
                     3LogoSgS
                                                                        just.over.here]
```

'Hare went and went in (where he hid the key) and picked up the key and came (back). (He said:) The key, as for me, here, ever since I hid it here on that day, the place where I left it and went away, the place where I had left it is near here.'

[ìzèn^L kố 'that day' with near-distant demonstrative in recent discourse-definite function §4.4.2.1; transitive bá:-ndé 'hide' (295b) in §9.1 and (303) in §9.3.1.2; gò-mè ná 'since (doing)', lit. "to cause to go out and then ..." with ná after {L}-toned verb §17.6.1; té perfective auxiliary verb associated with dògó 'leave' and a few other verbs, including sá: 'destroy' (later in this text) §15.1.7]

```
nà→]
(789)
         ľkó
                         bò
         [InanSgS
                                   Advers]
                          [[àmà<sup>L</sup>
         [kó
                                      wàjù]
                                                            ònú-Ø]
                                                  †ná]
                          [[place<sup>L</sup>
        [InanSgS
                                     distant]
                                                  Loc
                                                            not.be-3SgS]
        [[àmà<sup>L</sup>
                       bò
                                 má:ná-lí]
                                                          nà]
        [[place<sup>L</sup>
                       3PIS
                                 think-PerfNeg.Rel]
                                                         Loc]
         kóy
                          kó
                                      dù:-ndè-y
                                                                gèlá-m
                                                                                 wà,
        just.over.here InanSg
                                     lay-Caus-Past.and.then hold-LogoS
                                                                                 Quot,
             '(Hare:) It's there, it is not in a distant place. I put it and kept it
         around here, in a place that they (=people) didn't think of.'
```

[adversative $n\grave{a} \rightarrow \S19.24$; $\grave{o}n\acute{u}$ 'not be' somewhere $\S11.2.2.2$; in $k\acute{o}y$ $k\acute{o}$ $d\grave{u}$:- $nd\grave{e}$ -y, $k\acute{o}y$ refers to the location and $k\acute{o}$ is a pronoun referring to the key]

háyà, [sàṇṇè^Lkó] (790)tóyé-y wò-y, well, [key^L that.NearDist] pick.up-Past.and.then come-Past.and.then, [[sáŋ dàgú-lá-m] dìmbá-m] [[door lock-Rev-Impf] follow-Impf] [[céné á-η] dêbù→ kárⁿé-y]] ReflSg-Poss] covering.mouth do-Past.and.then]] [[mouth 'Well, he picked up that key and came (back). As soon as he had unlocked the door, he covered his mouth (feigning amazement). $[d\hat{\epsilon}b\hat{u}\rightarrow \text{expressive adverbial (281e) in } \$8.4.7.4]$

Llègùbè-Øl. (791)[zòmź kòdù ò ò. ^Lvocalize.Perf-3SgS, oh! cry(n) oh! oh! oh! oh! oh!, [hare [zàmtúrú gày] Top] [donkey т́bà *?źló* tè-Ø yà sá: wà, destrov Perf-3SgS around.here house Real Quot, †tígà [[zàmtúrú *[wò* wà] gày] look.Impf [[donkey [come Quot] Top] *?516* tè-Ø yà sá: gà], house Real destroy Perf-3SgS Presentative]

'Hare let out a scream: oh-oh-oh-oh-oh-oh! As for Donkey, he has destroyed the structure (=granary) here. Come and look! As for Donkey, look, he has destroyed the structure.'

[mbà 'around here' (112a) in §4.4.3.1; {L}-toned imperative tigà after a chained verb, cf. ún tigà 'go look!'; tè- perfective auxiliary §15.1.7; gà appears to have presentative sense here]

(792)háyà [wò-y ὲjjὲ bò $tig \varepsilon - y \rightarrow 1$ well, [come-Past.and.then peek 3PlS look-Past.and.then] [[[gɔà: *†wó1* nà] Def.InanSg] [[[granary Loc bò dàgέ wò] уù 3PIS leave.Perf.Rel Def.InanSg] millet kàndà] kùn-ú→] [zàmtùrù-sùwà cêw kùn- \emptyset], [[tùmá→ [[one.single even] be.in-Neg] [donkey-shit all be.in-3SgS]

'Well, they came and got a peek (through the narrow granary window). (Of) the millet that they had left in the granary, not one (grain spike) was therein, donkey dung was all in it (=filled it up).'

```
[t \dot{u} m \acute{a} \rightarrow 'one' §4.7.1.1; negative k \dot{u} n - \acute{u} 'not be in' and positive k \dot{u} n 'be in' §11.2.3]
```

```
(793)
        háyà [ní: gày] zàmtúrú [yú
                                                  wò1
                                                                nà
                                                                        †?ánè→.
                [now Top] donkey
                                        [millet Def.InanSg] 3SgS eat.Perf,
         well,
         háyà
                [[òy-nàmà-mú
                                         f\acute{u} \rightarrow ] m\grave{u}:mb\grave{\imath}-y\grave{\varepsilon}-y]
                                                assemble-MP-Past.and.then]
         well,
                [[outback-meat-AnPl all]
                                                    <sup>H</sup>wá→1
                            [zàmtúrú
         [ní:
                   gày]
                                           ſό
                                                                nì]
                                                    HQuotS]
         Inow
                   Top]
                           [donkey
                                           [2Sg
                                                                OTopl
                              kàlì-yè-Ø
                                                    †má,
         ní:
                   ànjă:
                   how?
                              happen-MP-3SgS
                                                    Q,
        now
```

'Well now, (they thought) it was <u>Donkey</u> [focus] who ate the millet. Well, all the animals assembled (and asked): now, Donkey, how about you? How did it happen?'

[?ènè \rightarrow perfective subject-focus form §13.1.2.1; 2Sg quotative subject \acute{o} wà \rightarrow not converted to 3Sg §17.1.1-2; $n\grave{i}$ interrogative topic §19.1.2]

nà] cì^L (794)kúndí-yà] háyà [zàmtúrú wànà] [[[kó ná-ŋ] well, [donkey other] [[[head 3Sg-Poss] Loc]thing^L put-Pass.Rel] [zàmtùrù-sùwà kúndí-yà] bàl [donkey-shit put-Pass.Rel] gather bò wànà] [[kó wò] [[InanSg be Def.InanSg] other] †ní→] kàrⁿà-lì Γá [3LogoSgS do-PerfNeg Sbjnct] [àmà^L dàmè-y [[kó ná-η] nà] gọé] [place^L speak-Past.and.then [[head 3Sg-Poss] Loc] go.out.Perf.Rel] ònù-Ø †wá not.be Quot

'Well, (as for) the donkey meanwhile, the thing that was put on his head (=blamed on him), the donkey dung that had been put (there), he couldn't claim that he hadn't done it. There was no place (=way) for him to escape with his head, they said.'

['other' as adverb 'meanwhile'; subjunctive *nì* §17.1.4; *ònù-Ø* † *wá* </ònú-Ø wà/]

(795) B: [á-ŋ kàrà L élí-yá-ŋ]
[3ReflSg-Poss device L escape-MP-Impf.Ppl.InanSg]

kúwò zŏ:-n-Ø

at.all have-StatNeg-3SgS

'He had no way at all to escape.'

[kárá 'means, device, solution (to a problem)', here as head NP; kúwò 'at all' §6.6.3]

```
(796) A: háyà
                      [òy-nàmà-mú
                                                  fu \rightarrow 1
            well,
                                                  all]
                       [outback-meat-AnPl
                                                                      ?ànè→,
            [ní:
                              [yú
                                       wò1
                                                        zàmtúrú
                     gày]
            [now
                     Top]
                              [millet Def.InanSg]
                                                        donkey
                                                                     eat.Perf,
                   [[k\hat{\mathfrak{I}}y^n]]
                           nà] zàmtúrí-y
                                                           kár<sup>n</sup>€-y]
            háyà
                                                 accuser
            well, [[thus
                           Loc] donkey-Acc accuse
                                                           do-Past.and.then]
            [[júgà:rè
                             wò]
            [[penalty
                             Def.InanSg]
                            Ldù:-d-à
            zàmtúrí-y
                                                              wà],
            donkey-Acc
                            <sup>L</sup>carry.on.head-Caus-Perf.3PIS
                                                              Quot]
                 'Well, all the wild animals (thought), now it was Donkey
            [focus] who ate the millet. Well, in that way, (they) accused
            Donkey, and they imposed a penalty on Donkey, it is said.'
```

(797) háyà kóy ^Lsùwò-m-ù wà
well, just.over.here ^Lgo.down-Impf-3SgS Quot
'Well, here it (=tale) goes down.'
[standard story-closing formula]

Text 2 Monitor Lizard and Dog (tale)

(tape reference: 2011.01b.02)

- (798) A: $s \in y^n$.:

 [story-opening word]

 B: $m \land t \in y^n$ [audience-confirmation word]
- (799)A: $[\grave{a}y^n]$ [†]mí→] [njè-zàŋà $\uparrow mi \rightarrow],$ [lizard and] [dog and], [árⁿá-kùsù †ná] wò] [dàmá Def.InanSg] [year [village Loc kárⁿ€-y fó→ $ur^n \varepsilon - v,$ jà: nà do-Past.and.then until go-Past.and.then, enter 3SgS hunger nò-mè-rá-ŋ nà→ [kún sɔáːdú] [mortar sound] hear-Pass-ImpfNeg-3SgS Advers [zà-[běl-Ø] $d\grave{o}m = l\check{a}$: †wá], [food-[get-VblN] speech=not.be Quot],

'(Monitor) Lizard and Dog. The (=a certain) year, famine entered into the village to such an extent that one did not (even) hear the sound of mortars. There was no talk (=question) of getting food, it is said.'

[$mi \rightarrow$ 'and' after both conjuncts §7.1.1; $n \rightarrow m\hat{\epsilon} - r\hat{a} - \eta$ with passive $-m\hat{\epsilon}$ §9.3.2; $f\acute{o} \rightarrow$ 'to such an extent that' §8.2.14; $z\grave{a} - [b\check{\epsilon} l - \varnothing]$ verbal noun with {L}-toned incorporated object §5.1.4; $= l\check{a}$ - 'it is not' §11.2.1.2]

```
bìyέ-y]
(800)
        hà:
               [nà
                                               [njè-zàŋà
                                                          †wá→ nì],
        well,
               [3SgS happen-Past.and.then] [dog
                                                           Quot QTop],
        [nà
                 <sup>H</sup>wá→] [[nò-mó
                                         fú→]
                                                 zá
                                                            bè:-rán-é]
        [3Sg
                 QuotS] [[person-AnPl all]
                                                 food
                                                           get-ImpfNeg-3PIS]
        [njè-zàŋà
                      †wá→
                                nì],
        [dog
                                QTop],
                      QuotS
        ὴgó
                       [ànjǎ:
                                    kán-kàn]
        this.Inan
                       [how?
                                    Iter-do]
        zá
                  bèlá-m
                                gèlà-Ø
                                               <sup>†</sup>mâ→
                                                          wà,
                                Prog-3SgS
        food
                  get-Impf
                                               Q
                                                         Quot,
```

[Well, it having become (like that), (Lizard) said: "(hey) you Dog, none of the (other) people are getting food. Dog, (as for) that (food), by doing what (=how) do you keep getting food?""

[progressive -m $j\dot{\epsilon}l\dot{a}$ - $\sim -m$ $g\dot{\epsilon}l\dot{a}$ - $\S10.5.2.2$; imperfective negative $b\dot{\epsilon}$:- $r\acute{a}p$ - $\acute{\epsilon}$ from $b\dot{\epsilon}l\acute{\epsilon}$ 'get' (390e) in $\S10.3.3.4$]

```
^{\rm H}wá\rightarrow 1
(801)
                      ǹjὲ-zàηà
          háyà
                                        Гnà
                                                   HQuotS]
          well,
                      dog
                                        [3Sg
                                                       sìr^n-\acute{\varepsilon}:
          [[zá
                        ?èη-έ:]
          [[food
                        eat-NonP.and.SS]
                                                       be.satisfied-NonP.and.SS
          \grave{\varepsilon}b\grave{a}=b\acute{o}
                                   dè]
                                   if]
          want=be
                                                 <sup>H</sup>wá→1
                                   [nà
          cêm
                      fú→.
                                                 HQuotS]
          all
                      all,
                                  [3Sg
          [[tùnù
                          á-η]
                                            nà]
                                                       nàn-jà
                                                                                    wà.
                                                       go.up.on-MP.Imprt
          [[back
                          3Sg-Poss]
                                            Loc]
                                                                                   Quot,
```

'Well, Dog said: "(hey) you, if you want to eat and be full (=eat well), you get up on my back."

['want' $\S17.5.2$, $\S11.2.4$; nan-ja {L}-toned imperative, (422) in $\S10.7.1.1$]

```
(802) \acute{a} \rightarrow 3LogoSgS [[[\grave{o}m\grave{o}^L z\acute{a} \acute{a} ?\acute{o}p\acute{a}-\eta w\grave{o}] n\grave{a}]
```

```
[[[place<sup>L</sup> food 3LogoSgS eat-Impf.Ppl.InanSg Def.InanSg] Loc]
                                      <sup>H</sup>wá→ là]
              úr^n ú-m → 1
                            [[nà
á-nù
3Logo-two
              go-Impf]
                             [[3Sg
                                      <sup>H</sup>QuotS too]
[íyé
       kày] zá
                    ?èn-έ:]
                                       Iná bă:-m-ùl
                                                                  wà.
[today Top] food eat-NonP.and.SS] [3Sg suffice-Impf-3SgS Quot,
    "(As for) me, let's the two of us go to the place where I eat food.
You too will eat food today, and you will be satisfied (=full)," he said.'
    [\acute{a}-n\grave{u}] 'the two of them' (226c) in §7.1.2; l\grave{a} 'also, too' §19.1.3
following subject quotative; in ná bă:-m-ù, 3Sg ná can be overtly
accusative (ná-y) before bă: 'be enough, suffice' in the sense 'be
enough for X', hence 'X be satisfied, sated, full (after eating)', but this
"object" seems to have some subject properties, cf. same-subject
marking on 'eat']
```

(803) av^n tómbó-v jump-Past.and.then lizard [[[n]iè-zànà Htúnú] nà] tádí-yé] nà kárⁿέ-y, Hback] Loc] be.on-MP] 3SgS do-Past.and.then, [[[dog //?*àlò*^L $u r^n \varepsilon - m = \lambda:,$ cèw] †ná] á [[house^L first] Loc] 3ReflSg go-Impf-Def.InanSg, Lgùmà] nà] [[án-mú gò-ndè-y, zá Loc] food go.out-Caus-Past.and.then, [[man-AnPl

'After Lizard jumped onto Dog's back, when they went into the first house, they (=women) had taken out out the meal (and put it) into the men's eating bowl.'

[tùnù 'back' (body part), gùmà 'wooden eating bowl']

(804)[án-mú ní:] [bèrèdèyⁿ †ná] [man-AnPl now] [eating.area Loc] $\partial m \partial^{L} b \partial$ ^Lkòrù wò] [[[zá ?áná-n] nà], [[[food place^L 3PIS eat-Impf.Ppl.InanSg] Loc] [[zá gò-ndè-y] $d\hat{\varepsilon}$ - $d\hat{\varepsilon}$ -y] set-Tr-Past.and.then] [[meal go.out-Caus-Past.and.then] [[á tò-mù] dòmá-m bò bó-m], [[3ReflPoss agemate-AnPl] wait-Impf 3PlS be-Impf]

'The men now, in the eating area, in the circular area where they eat food, they (=women) took (it) our and set it (down). They (=men) were waiting for their fellows (=each other).'

[kòrù 'circle, ring'; á tò-mù §18.3.1; dòmá-m ... bó- progressive §10.5.2.3, cf. stative yà dòmá-\angle 'he is waiting' from dòmí-yó 'wait']

(805) [nje-zana wo-y] [[án-mú ^Lgùma wo] na]

```
come-Past.and.then] [[man-AnPl<sup>L</sup>bowl Def.InanSg] Loc]
[dog
                                                  Ltòlè-\emptyset,
kéné
                 kúndò-m
                                   nì]
mouth
                 put-Impf
                                   Sbjnct]
                                                  Lbegin.Perf-3SgS]
[[sàtàrà-è:<sup>L</sup>
                   tùmá→] [tànà<sup>L</sup> bú-búndú] tóyé-y]
                              [stick<sup>L</sup> Rdp-big]
[[youth-child<sup>L</sup>
                                                      pick.up-Past.and.then]
                  one]
                                       <sup>L</sup>tùnù]
[[[njê-zàŋà
                    ^{\dagger}g\varepsilon]
                                                     nà]
                                                                [dăy<sup>n</sup>
                                                                            nì]
                                       Lback]
[[[[dog
                    Def.AnSg]
                                                     Loc]
                                                                [bang!
                                                                            Adv]
            jé-Ø
                                    dè
                                                              fú→]
                                                  cêm
yà
            kill.Perf-3SgS
Real
                                    if
                                                  all
                                                             all]
```

'Dog came and began to put his mouth into the men's eating bowl. A certain young man picked up a big stick (=club) and beat with a bang on (what it thought was) the dog's back.'

[subjunctive complement for 'begin', see (697) in §17.6.1.2; $d\check{a}y^n$ $n\grave{i}$ expresive adverbial plus particle $n\grave{i}$ §8.4.7; $j\acute{e}$ - 'kill' here means 'beat up, beat the crap out of']

```
(806)
         [[[ày<sup>n</sup>
                           †gέ]-ỳ]
                                                     nèmà-m-ù]
         [[[lizard
                           Def.AnSg]-Acc]
                                                     touch-Impf-3SgS]
         [[njɛ-zàŋà
                                                     nèmè-náŋ-Ø
                               \dagger g \varepsilon - \hat{y}
                                                                                      quoi,
                                                     touch-ImpfNeg-3SgS
                                                                                      (particle),
         [[dog
                               AnSg]-Accus
          [kóy
                                                        g u r^n \varepsilon - \emptyset
                           wŏη
                                           yà
                                                                               dè]
         [over.here
                           barking
                                           Real
                                                        say.Perf-3SgS
                                                                              if]
          [z \hat{b} b - \hat{\epsilon}]
                                        gò-m-ù],
         [run-NonP.and.SS
                                        go.out-Impf-3SgS],
```

'He was striking the lizard, it was not striking the dog. He (=Dog) barked, then he was running away.'

[French *quoi* 'what?', here at the end of a clause providing background clarification]

```
[[?àlò<sup>L</sup>
(807)
        ſίγέ
                   là]
                                       wànà]
                                                 †ná]
                                                          ùn-m-ù,
                   too]
                           [[house<sup>L</sup>
                                       other]
                                                 Loc
                                                          go-Impf-3SgS,
        [again
        [[nìnjù-[ès-íyè]
                                       mà→]
                                                  [cí
                                                             mà→]
        [[sauce-[pot-Dimin]
                                       or]
                                                  [thing
                                                             or]
         kár<sup>n</sup>á-n
                            bó
                                       bò-n]
        do-NonPDur
                            3PlS
                                       be-NonPDur]
               témbé-∅
                                dè
                                     cêm
                                             fú→, [njè-zàŋà
                                                                  ^{\dagger}g\epsilon
        Real find.Perf-3SgS if
                                     all
                                             all,
                                                     [dog
                                                                  Def.AnSg]
        [yǎy
                     ſίyέ
                             là]
                                   kéné kúndò-m
                                                                  tólà-m-ù,
                                                         nì]
        [there.Def [again too] mouth put.in-Impf Sbjnct] begin-Impf-3SgS,
```

'Again (=furthermore) he (=Dog) went to other houses. If he found that they were making (=cooking) (in) either an earthenware sauce pot

or something (similar), the dog would again begin to put his mouth in there.'

[diminutive -*iyè* §5.1.8; $m\grave{a} \rightarrow$ 'or' NP disjunction §7.2.1; $y\check{a}y$ discourse-definite 'there' (112c) in §4.4.3.1]

```
[gòmù<sup>L</sup>
(808)
                          là]
         ſίyέ
                                                          kóy]
                                       [courtyard<sup>L</sup>
                                                          there]
         again
                          tool
                          ^{\dagger}garepsilon]
                                          <sup>L</sup>tùnù] nà]
                                                         jέ-zò-m
          [[[njê-zàŋà
                           Def.AnSg] Lback Loc kill-Perf2-Logo Sbjnct
         [[[[dog
                                                               fú→1
          [yà
                       j-á
                                            dè
                                                     cêm
          [Real
                       kill-Perf.3PIS
                                            if
                                                     all
                                                               all]
          [ày<sup>n</sup>
                            ^{\dagger}g\varepsilon]-\dot{y}
                                                     nèmà-m-ù,
         [lizard
                            Def.AnSg]-Acc
                                                     hit-Impf-3SgS
          [ίyέ
                       là]
                                 kóy
                                                zàbà-m-è,
                                                run-Impf-3PIS,
          [again
                       tool
                                 there
```

'Again, when they beat him (=Dog) in the courtyard just over there, intending to beat on the dog's back, it was the lizard that they struck. Again they ran away from there.'

[Demonstrative adverb *kóy* 'there' patterns here as a modifier of 'courtyard', which therefore drops tones §4.4.3.1]

```
k\hat{\jmath}y^n k\hat{\jmath}y^n k\hat{\jmath}y^n
(809)
          thus thus thus
          [[[àmố
                         yè-tá:ndù
                                            vè-césó]
                                                             nà]
                                                                     ur^n \varepsilon - v
         [[[place
                         Inan-three
                                            Inan-four]
                                                            Loc] go-Past.and.then]
                          ^{\dagger}g\dot{\varepsilon}]
                                           \dot{a}y^n - \dot{y}
          [[njê-zàŋà
                                                            j\hat{\varepsilon}-m\hat{\varepsilon}-y]
         [[dog
                          Def.AnSg]
                                           lizard-Acc
                                                            kill-Caus-Past.and.then]
                         kár<sup>n</sup>έ-y,
          nà
                         do-Past.and.then,
          3SgS
                                                                             <sup>H</sup>wá→1
          [ày<sup>n</sup>
                                   w\acute{e}-m = \grave{o}: ]
                                                                    [nà
                     á
                     3ReflSgS come-Impf=Def.InanSg] [3Sg
                                                                             HQuotS]
         [lizard
                         [zá
                                        wò]
                                                              ?áμέ-?àμὲ
          [ŋŋɔ̂y
          [thus
                         [meal
                                        Def.InanSg]
                                                              Iter-eat
          bèlá-m
                          jèlà-Ø
                                               dè
                                                         gày],
                                              if
          get-Impf
                          Prog-3SgS
                                                         Top],
                                                    á-ŋ
                                                                        wò1
          ὴgó
                          dàn,
                                      [jà:
                                     [hunger
          this.Inan
                          than,
                                                    3LogoSg-Poss Def.InanSg]
                              kày
                                               gà]
          á-ý
                                               Top]
          3LogoSg-Acc
                              be.better
          Γγὸηόγ→
                              m\dot{u}y^n\dot{\jmath}
                                                 kán-sò-Ø
                                                                            dè]
          [calm(adv)
                              patience
                                                 do-Perf2-3SgS
                                                                            if
```

[$\dot{m}b\dot{o}$: $n\dot{a}$ $g\dot{u}r^n\dot{\epsilon}-y$] [friend.Voc 3SgS say-Past.and.then]

'In that (same) way they went to three or four places (=houses). The dog would let the lizard get beaten up (each time). Lizard came and said to his counterpart (=Dog): "(hey) you, if this is how you keep getting the food, my hunger (=going hungry) is better than this, if you are calmly patient (=begging your pardon), my pal.""

[numerals with classifier $y\hat{e}$ - §4.7.1.2; $\hat{a}y^n$ - \hat{y} accusative of noun $\hat{a}y^n$ with Rhythmic Tone-Raising §6.7; $\hat{\eta}\eta\hat{o}y$ 'thus, like this' §8.4.1; $\hat{l}\hat{o}p\hat{e}$ - $\hat{l}\hat{o}\hat{p}\hat{e}$ verb iteration §15.1.6; $\hat{d}\hat{a}n$ 'than' §12.1.1; $\hat{k}\hat{a}y$ 'be better (for)' with direct object §12.1.5.2; $\hat{m}b\hat{o}$: 'my friend!', plural $\hat{m}b\hat{o}$:- $y\hat{e}$ 'my friends!', vocative only, an alternative vocative is $\hat{w}\hat{a}y$, plural $\hat{w}\hat{a}y$ - $y\hat{e}$, cf. non-vocative referential $\hat{l}\hat{a}\hat{l}\hat{u}$ - η (- $m\hat{u}$) 'friend(s)']

^Hwá→] (810)[wó→ wà] ſnà [mùvⁿ3 kán-sò-∅ dè1 HQuotS] Quot] [3Sg [patience do-Perf2-3SgS if [yes $\hbox{\it [[\grave{\partial}m\grave{\partial}^{\rm L}}$ á-ý nà bèlé wò] nà] [[place^L 3LogoSg-Acc 3SgS get Def.InanSg] Loc á-ý wà, convey.Imprt 3LogoSg-Acc Quot, $^{L}sir^{n}\dot{u}-\eta$] dàn] [ná-ŋ [ὴgó [3Sg-Poss being.satisfied-Nom] [this.Inan than] ſjà: wò] á-ý kày wà. [hunger 3ReflSgS-Poss Def.InanSg] 3LogoSg-Acc better Quot,

'(Dog) said, "yes?" (Lizard) said: "(hey) you, if you are patient (=begging your pardon), take me (back) to the place where you got me! (As for) your getting full (of food), my hunger is better for me than this."'

[imperative $z\hat{n}$ from irregular verb 'convey' §10.2.1.12; $s\hat{n}^n\hat{u}$ - η isolated nominal form §4.2.4, here in $n\hat{a}$ - $\hat{\eta}$ L $s\hat{n}^n\hat{u}$ - η showing infrequent inversion of pronominal possessor with possessed noun, see (170) in §6.2.1.2]

 $\uparrow mi \rightarrow]$ (811)[njê-zàŋà †mí→] *[àyⁿ* [dog and] [lizard and], ^Lkò:] [[zá nà] wà ὴηᢒ҆҆ӯ Lhappen.Perf-3SgS [[food Lhead] Loc] thus Ouot 'Dog and monitor lizard, it happened like that on (=with respect to) eating food, it is said.'

Text 3 Cat and Mouse (tale)

(tape reference: 2011.01b.03)

[[fortune.teller

```
(812) A: s \neq v^n.:
               [story-opening word]
          B: màté:<sup>n</sup>
               [audience-confirmation word]
          A: Jòyè<sup>L</sup>
                             v \hat{\epsilon}^{\mathrm{L}}
(813)
                                           pèy]
                             woman<sup>L</sup>
               [mouse<sup>L</sup>
                                           old]
          [[ar^nu-nju^L ségú] [[kó:
                                               ná-ŋ]
                                                             nà] yà
                                                                             nàné-Ø]
          [[year<sup>L</sup>
                         many] [[head
                                              3Sg-Poss | Loc | Real pass.Perf-3SgS |
          [ènè
                           †b \epsilon l \hat{a} -l i -\emptyset ],
                           get-PerfNeg-3SgS],
          [child
               'An old female mouse. Many years passed on her, (but) she had no
          child.'
               [ [k\acute{o}: n\acute{a}-\eta] n\grave{a} 'on his/her head' §8.2.6]
(814)
          ľá→
                              ènè
                                           bèlá-m
                                                            mâ→
                                                                          nì]
                                                                          Sbjnct]
          [3LogoSgS
                              child
                                           get-Impf
                                                            Q
                              <sup>L</sup>t∂lὲ-Ø,
          dùnú
                              Lbegin.Perf-3SgS,
          search(n)
                                                    dùnò<sup>L</sup>]
          [[[dùnú
                                wò]
                                                                       ná]
                                                                                   úr<sup>n</sup>ú-m]
                               Def.InanSg]
                                                    search<sup>L</sup>]
          [[[[search(n)
                                                                       Purp]
                                                                                   go-Impf]
                                  Hbérnál
          [[àlmà-kùndù
                                                    ur^n u-m-\emptyset
                                                                                    wà
```

'(She wondered:) "Will I (ever) have a child?" She began to (re-)search. She went around to do the (re-)search. She said (=decided), "I will go to a fortune-teller."

go-Impf-LogoS

Quot

[dùnú... purposive construction §17.6, similar elicited examples with cognate objects are [tìgù †wó] tìgè ná '(went) to look (=take) a look', [nùŋà †wó] nùŋò ná '(went) to sing a song'; Hbérná dative §8.1.1]

- (815) B: [àlmà-kùndù Hbérná] ùrnù-m-Ø wà
 [fortune.teller HDat] go-Impf-LogoS Quot
 A: é→,
 yes,
 B: 'She said (=decided), "I will go to a fortune-teller."
 A: 'Yes.'
- (816) [[[\hat{a} lm \hat{a} - $k\hat{u}$ nd \hat{u} $\dagger g\hat{\epsilon}$] $b\hat{e}r^n\hat{a}$] $\hat{u}r^n\hat{u}$ -m]

HDat]

[[[fortune.teller Def.AnSg] Dat] go-Impf] $[p\grave{a}l$ $^{\dagger}z\acute{a}mn\grave{e}-y$ [sesame steal-Past.and.then $^{L}\grave{u}r^n\grave{e}-\varnothing],$ L go.Perf-3SgS],

'Going to (=on the way to) the fortune-teller, she went to steal some sesame.'

 $ur^n \varepsilon - v$ (817) [pàl *†zámnè-y* steal-Past.and.then go-Past.and.then] [sesame [àlmà-kùndù $^{\dagger}g\dot{\varepsilon}$]- \dot{y} $t \in mb \in -m = \hat{\beta}$:. Def.AnSg]-Acc 3ReflSgS find-Impf=Def.InanSg, [fortune.teller Hbérná] wò-zò-m háyà á→ [nà wà, ^HDatl come-Perf2-LogoS 3LogoSgS [3Sg well, Quot, ^Hwá→1 háyà [nà HQuotS] well, [3Sg Hbérná] cì^L bó1 [[[á tígé tàdà wàl. [[[3LogoSg ^HDat] thing^L be] look try.Imprt Quot]

'She went to steal some sesame, and finding the fortune-teller, she said: "Well, I have come to you; well, you try to look at (=determine) what there is for me (=what my problem is)."'

[analysed in (748) in §19.2.2]

[àlmà^L (818)mánzé- $m = <math>\delta$:, cèw] á [cowry.toss^L first] 3ReflSgS toss.down-Impf=Def.InanSg, ^Hwá→] [nà [pàl †zámnè-y] HOuotS1 **[sesame** steal-Past.and.then] [3Sg Hbérnál [sàdù Γá ¹sádù nà] wò-zò-Ø wà. [3LogoSg ^HDat] [question ask Purp] come-Perf2-3SgS Quot,

'After the first toss of the cowries (for telling fortunes), he (=fortune-teller) said: "You stole some sesame and have come to ask questions of me."'

[bunches of small cowry shells are tossed by the fortune-teller, who then reads the future by interpreting their configuration; sàdù sádù nà] wò-zò-Ø purposive with motion verb §17.6.1.1]

(819) $\partial^n h \hat{\partial}^n \rightarrow \lceil n \hat{a} \rceil$ $^{\rm H}$ wá→] [yà w ε -Ø wà], [á wà] uh.huh [3Sg ^HQuotS] [Real see.Perf-3SgS Quot], [3LogoSg QuotS] jélí-yé-y á wé [thing^L hold-MP-Past.and.then 3LogoSg come.Perf.Ppl Def.InanSg] nà $k\hat{\jmath}y^n \rightarrow$, wà-zò 3SgS see-Perf2 thus, Hbérná] [wàzè^L háyà bó wò là] Γá [remainder^L [3LogoSg ^HDat] well, be Def.InanSg too

 $^{\rm H}$ wá $\rightarrow 1$ Гnà $\int k \hat{\mathfrak{I}} y^n$ wá wà], H QuotS] [3Sg [thus see.Imprt Quot] ènè bèlá-m-Ø mâ→] [bè:-ná-m ſá→ mâ→], [3LogoSgchild get-Impf-LogoS Q] [get-ImpfNeg-LogoS

'(Mouse) said: "Uh-huh, you have seen (=divined) it. In the same way as you have seen what I have brought and come here, well, also see (=divine) the remainder (=other things) that are (happening) to me. Will I have a child, or will I not have (one)?"

[ci^L jélí-yé-y á wé wò 'what I have brought and come', with head noun 'thing' belonging to the chained first VP; wàzè 'remainder'; $m\hat{a} \rightarrow$ in alternative polar questions §13.2.1]

(820)háyà, àlmà-kùndù [àlmá mànzá-m nì] well, fortune.teller [cowry.toss(n) toss.down-Impf Sbjnct] nà tólá-n mì→. 3SgS begin-Impf.Ppl.InanSg Inst, [[mbùl wò] nà] [[door Def] Loc gà:n ?ání-yè-∅ *†wó-ỳ* wà, come-Past.and.then stop-MP.Perf-3SgS cat Ouot,

'Well, as the fortune-teller was beginning to (=was about to) do a cowry toss, a cat came and stopped at the door, it is said.'

[instrumental *mì* after a relativized 'begin' clause in the sense 'as X was about to VP', only example of this construction, see end of §15.3.4]]

wà→] [?ə́ní-yá (821)[[àlmà-kùndù † $g \varepsilon$ wà] [[fortune.teller Def.Sg] QuotS] [stop-MP.Imprt Quot] ^Hdóm [ènè wò] dògò tέ-zò-Ø dè, Hspeech Def.InanSg] leave Perf-Perf2-3SgS if, [child ^Hwá→] [á→ cìnzà-tám yà zó-m mâ→] [nà ^HQuotS] [3LogoSg long.life Exist have-LogoS Q]

'(Mouse) said: "(hey) fortune-teller, stop! Leave (=cease) talking about a child, and (tell me) whether I (will) have long life!"

[ènè Hdóm wò with possessed tone overlay {H} on noun dòm 'talk (about X)', i.e. 'matter, topic of'; dògò té- §15.1.7; cìnzà-tám 'long life', compound with cìnzà- 'nose' and an otherwise unattested final, in some expressions uncompounded cìnzà can mean 'life (longevity)', see (824) below]

(822) $[n\grave{a} \quad \stackrel{H}{w}\acute{a} \rightarrow] \quad m\grave{a}nz\grave{u} \quad ^{\dagger}t\acute{a}d\grave{a} \quad w\grave{a},$ [3Sg $\stackrel{H}{Q}uotS$] cowry.toss(n) try.Imprt Quot,

```
[[àlmà-kùndù
                        †gέ
                                             là]
                        Def.AnSg
[[fortune.teller
                                            too
[kèlè
                                         mánzé-m = \hat{\sigma}:]
            †wó]
            Def.InanSg]
                             3ReflSg
                                         toss-Impf=Def.InanSg]
cowry
              nàr<sup>n</sup>á
[háyà
                            wà]
[well,
              truth
                            Quot]
[cìnzà-tám
                ná-ŋ
                              là]
                                     bad-\acute{e}:=la:
                                                                    wà,
                3Sg-Poss
                              too] add-NonP.and.SS=not.be
[long.life
                                                                   Quot,
```

'(Mouse) said: "You, try a cowry toss!" When the fortune-teller for his part tossed the cowries, he said: "Well, it's true, your longevity is not much (=you don't have long to live)."'

[bàd-é: = lă: 'is not very much', subordinated form bàd-é: from bàdú 'add']

(823)hávà ľkó dàmè-v well, speak-Past.and.then [InanSg nà sú:-ndó-ŋ $mi \rightarrow 1$ go.down-Caus-Impf.Ppl.InanSg 3SgS Inst] kárⁿá-m] tígè→ zòbà-m [nà [gànà nì] run-Impf Sbjnct] [3SgS do-Impf] [look.back look [gà:n † $g \varepsilon$] tómbó-y wò-v [cat Def.AnSg] jump-Past.and.then come-Past.and.then ^Lsùvè-∅ [[kó: ná-ŋ] nà] wà. Lgo.down.Perf-3SgS [head 3Sg-Poss] Loc Quot

'Well, when he spoke and brought it down (=finished speaking), she (Mouse) looked back (over her shoulder) intending to flee. The cat came and jumped and came down (=landed) on her, it is said.'

[causative $s\acute{u}:-nd\acute{o}$ and perfective $s\grave{u}y\grave{e}$ - both $< s\acute{u}w\acute{o}$ 'go down' (305) in §9.3.1.3]

(824)háyà [[ènè-dùnù]-símé wà1 well, [[child-seeking]-excess Quot] [cìnzà †ná] pà:-Ø wà, be.joined.Stat-3SgS [life Loc Quot, ^Lbìyè-∅ $k\hat{\mathfrak{I}}y^n$ hà wà Lhappen.Perf-3SgS well. thus Quot

'Well, trying too hard for a child gets close to life (=is dangerous), it is said. Well, it happened like that.'

[símé 'excess (n)' as compound final; stative $p\hat{a}$: 'be joined (=associated)', negation $p\hat{a}$:- \hat{n} , regular verbs are mediopassive $p\hat{a}$ - $y\hat{y}\hat{e}$ 'become joined, associated' and transitive $p\hat{a}$: 'put together, pair, associate (two things)']

Text 4 Hyena and Hare (tale)

(tape reference: 2011.01b.04)

- (825) A: séyⁿ∴
 [story-opening word]
 B: màté:ⁿ
 [audience-confirmation word]
- (826) A: [tà: ¹mí→] [zòmɔ́ mì→] mù:mbì-yè-y
 [hyena and] [hare and] assemble-MP-Past.and.then
 nìm-mènè gòl-á,
 cowpea-field cultivate-Perf.3PIS,
 'Hyena and Hare got together and cultivated a cow-pea field.'
- [nìm-mènè (827)[á-nù †wó1 gòlè-y] [3Pl-two [cowpea-field cultivate-Past.and.then] Def.InanSg] Γbò bó-m] fó→ $ur^n \varepsilon - v$ [3PIS be-Impf] go-Past.and.then until [[nĭm bó-ŋ] [wèrú wò1 3P1-Poss] [[cowpea greenness Def.InanSg] yé:dí-yé-Ø], yà Real flourish-MP.Perf-3SgS], 'The two of them were cultivating the cow-pea field, until the greenness of their cowpea (plants) was flourishing.'

 $[\acute{a}-n\grave{u}$ 'they two' (226c) in §7.1.2]

- fó→ (828)[wèrú wò1 yè:dì-yè-y [greenness Def.InanSg] flourish-MP-Past.and.then until pùn [[nĭm wò1 nà tólέ-y], [[cowpea Def.InanSg] flower 3SgS begin-Past.and.then], 'The greenness was flourishing to the point that the cowpeas began (to grow) flowers.'
- (829)[ìzèn^L tùmá→] [tà: $i\eta gil \dot{\varepsilon} - m = \dot{\sigma}$: [day^L stand-Impf=Def.InanSg] [hyena one] 3ReflSgS tìgè^L ná] $^{L}\dot{u}r^{n}\dot{\varepsilon}-\varnothing$. [[nìm-mènè †wó1 [[cowpea-field look^L ^Lgo.Perf-3SgS, Def.InanSg] Purp] [[tìgè^Î $ur^n \varepsilon - v$ ná] nà [[look^L 3SgS Purp] go-Past.and.then] [nǐm wò] pùn twí→ nà bó-m, [cowpea Def.InanSg] flower blooming 3SgS be-Impf,

'One day Hyena got up and went to look at the cow-pea field. He went to look, and the cow-peas were in full bloom.'

[purposive $n\acute{a}$ §17.6.1; $tw\acute{i}\rightarrow$ expressive adverbial plus $b\grave{o}$ - §8.4.7]

(830)kó [[n*i*m wò1 nà] Def.InanSg] that [[cowpea Loc] [pì-pírù]-mù [n*i*m á-n] [butterfly-AnPl [cowpea 3LogoSg-Poss] yámná-m jèlà-yè *nà*→], damage-Impf Prog-3P1S Advers],

'So in the cow-peas, (he thought) that butterflies were infesting his cow-peas.'

- (831)[hà: zòmź-ỳ $d\hat{a}m-d\hat{\epsilon}-y$ wò-y [well, come-Past.and.then hare-Acc speak-Tr-Past.and.then] [háyà [dàbúl ná-n] tέ:-má wà, [well, **[action** 3Sg-Poss] take.action-Hort Quot, 'Well, he came and spoke to Hare, saying "well, let's take action of (=about) it!""
- (832)zòmź [[gìd-íyè á-ŋ] nà] 3ReflSg-Poss] hare [[eye-Dim Loc] sàptèrè-púrⁿá $yil\acute{e}-m=\grave{o}:$ á chili-powder 3ReflSgS sprinkle-Impf=Def.InanSg, gày] ún bè:-ná-m [gìdè-ńjú bšl-bšl] ſá→ [eye-water streaming] [3LogoSgTop] go get-ImpfNeg-LogoS Top, 'Hare sprinkled some ground chili pepper into his own eyes (to induce tears). With tears streaming down, he said: "As for me, I cannot go."

[final topic particle *gà* may be a variant of French *quoi*]

^Hwá→1 (833)[nà [yà $\dot{u}r^n\dot{\varepsilon}-\mathcal{O}$ dè] HQuotS] [3Sg [Real go.Perf-3SgS if mà:ndì-yè-zó-Ø [[[ná-ŋ wò1 nà] dè] [[[3Sg-Poss Def.InanSg] Loc] be.energetic-MP-Perf2-3SgS if] [[ná-ŋ wò1 nà] $tiy\acute{a}-m=\grave{a}:$ [[3Sg-Poss Def.InanSg] Loc] perch.Stat-Impf=Def.InanSg, làlíyá wà, chase.way.Imprt Ouot, $k\hat{\mathfrak{I}}y^n$ wò1 dàgà jí-mà wà, [á-ŋ [3LogoSg-Poss Def.InanSg] thus leave go.ahead-Hort Quot, '(Hare) said: "you go and work hard on yours (=your side of the field), drive out (the butterflies) that are perched on yours, but for now (until I join you) just leave mine as it is.""

[stative $tiy\acute{a}$ -m < mediopassive $tiy-y\acute{e}$ '(bird) perch (on branch), (insect) land (e.g. on a plant)'; \acute{a} - η $w\grave{o}$ 'mine' with possessed noun omitted §6.1.4; ji- $m\grave{a}$ with ji- (a kind of auxiliary verb) plus hortative suffix, functions like an imperative, but implies that the speaker will later join in the activity, cf. i-ji- $m\grave{a}$ 'go ahead and eat!' implying that the speaker will eat later]

(834)[[òy-nàmà-mí]-ỳ kúndé- $m = \delta$: jìlέ á [[outback-meat-AnP1]-Acc order(v) 3ReflSg put-Impf=Def.InanSg] [tànà-bèndé á-ŋ wò] 3ReflSg-Poss Def.InanSg] 3LogoSg-Poss-, [stick bir^n -i: n á $k\acute{a}r^n\acute{\varepsilon}-m=\grave{a}:$ 3ReflSgS do-Impf=Def.InanSg, stout-Adi [bùndò^L Ltàlè- \emptyset . úrⁿ€-y ná] [beat^L Lbegin.Perf-3SgS, go-Past.and.then Purp]

'(Hyena) issued a call to the wild animals. His own stick was the thickest, and he went and began beating (the cow-pea plants).'

[$[\dot{\rho}\dot{y}-n\dot{a}m\dot{a}-mi]-\dot{y}$ with accusative $-\dot{y}$ after animate plural $-m\dot{u}$; $b\dot{r}^n-\dot{r}^n$ with adjectival extension $-\dot{r}^n$ §11.4.4]

(835)wò] háyà [[ná-ŋ well. [[3Sg-Poss Def.InanSg] mέ→ bùndò kílí-yé-y] finish-MP-Past.and.then] knocked.flat beat [ní: gày] [[zòmɔ́ η̈́ wò1 nà], [now Top] [[hare Gen Def.InanSg] Loc [[làlìyè^L ná] kárⁿá-m, ná→ – tíŋà-m nì] bò ?? -[[chase^L Purp] cross-Impf Sbinct] 3PIS do-Impf,

'Well, he finished beating his (side) down to the ground. Now they (=animals) were about to go across (to Hare's side of the field) in order to drive out (butterflies).'

[$m\acute{\epsilon} \rightarrow$ (expressive adverbial) 'knocked flat on the ground'; $n\acute{a}$ - $\mathring{\eta}$ $w\grave{o}$ 'his' and $z\grave{o}m\acute{o}$ $\mathring{\eta}$ $w\grave{o}$ 'Hare's' (with genitive $\mathring{\eta}$), both with omitted possessed noun §6.2.1.2]

(836) $k\hat{\mathfrak{I}}y^n$ bó-m] [[zòmɔ́ nà tígé-y] nà [[hare 3SgS look-Past.and.then] 3SgS be-Impf] thus [zòmź $go\acute{e}-m=\grave{o}$: zàbà-y] [hare 3ReflSg go.out-Impf=Def.InanSg run-Past.and.then]

yá á $úr^n \varepsilon - m = \delta :],$

there.Def 3ReflSg go-Impf=Def.InanSg],

'Hare was watching thus (=as this happened). Hare ran out and went there (to the field).'

[[bèndè nà] (837)hávà úrⁿú-m, [kày á-η] well, go-Impf, [horn [[shoulderbag 3ReflSg-Poss] Loc] $u r^n \varepsilon - m = \lambda:,$ kúndó jèlì-yè-y] put.in hold-MP-Past.and.then] 3ReflSgS go-Impf=Def.InanSg,

'Well, as he (=Hare) was going, he put a horn in his shoulderbag and took it along on the way there.'

[kày 'horn', hollowed out horn of a *Hippotragus* antelope, blown as a musical instrument]

(838)[bàn-iὲ-y **[kàv** †wó1 [hide-MP-Past.and.then Def.InanSg] [horn bu'' - bu'' - bu''nà gùrⁿ€-y] (sound) 3SgS say-Past.and.then] $[\grave{o}y$ -nàmà-mú = $w\grave{o}$ wànà [outback-meat-AnPl=Def.AnPl other Lmènè wò] [[[zòmɔ´ n]] nàl bèlè $\uparrow t i \eta \hat{a} - \hat{n} - \emptyset$ [[[hare Gen] Lifield Def.InanSg] Loc] get cross-PerfNeg-3PIS]

'(Hare) hid and blew the horn: bu-bu-bu! The wild animals meanwhile were unable to cross over into Hare's (field, because of fear).'

[wànà 'other', here an adverb, roughly 'meanwhile' or 'over at the other place' (obviative), likewise in (839) just below; genitive \hat{y} §6.2.1.2; mènè 'field'; bèlé 'get, obtain', here 'be able' chained to the following (not preceding) verb; see (681) in §17.4.2, other examples are bèlè 'kâ:-lí-Ø 'he/she could not shave', 3Pl bèlè 'kâ:-n-Ø]

(839)gìnè-y †ná] nò bò scatter-Past.and.then [outback Loc] go.in 3PIS RecPf-Past.and.then, háyà [wànà [tà: ή wò1 và yàmέ-∅] well, [other [hyena Gen Def.InanSg] Real be.ruined.Perf-3SgS] [zòmó n wò1 bèlè †yám-nà-ń-∅, Def.InanSg] get be.ruined-Caus-PerfNeg-3PIS, [hare Gen

'They (=animals) had scattered and had gone back into the bush. Well, meanwhile Hyena's (part of the field) was ruined. They (=animals) did not have a chance to ruin Hare's (side).'

[recent perfect $z\hat{e}$ - §10.3.1.4; $t\hat{a}$: $\acute{\eta}$ wò 'Hyena's', another possessor and genitive marker with omitted possessed noun]

```
(840) [òy-nàmà-mú
                                        [kó
                                                          dìmbá-m]
         [outback-meat-AnPl
                                        [that.Inan
                                                          follow.Stat-Impf]
         gìnnè-y]
         scatter-Past.and.then]
         [déy<sup>n</sup>-déy<sup>n</sup>
                            [òy
                                         †ná]
                                                                           wà]
                                                    Lgo.in-Perf.3PIS
         [separately
                            outback
                                         Loc]
                                                                           Quot]
         [kó
                         zòmź
                                   bó
                                             <sup>∟</sup>jìnnì-lè-Ø
                                                                               wà]
                                             Lscatter-Caus.Perf-3SgS
         [that.Inan
                         hare
                                   3PlO
                                                                               Ouot1
              'The animals dispersed after that, they went back individually into
         the outback, it is said. So Hare made them scatter, it is said.'
              [stative dimb\acute{a}- < mediopassive dimb\acute{i}-y\acute{\epsilon} 'follow'; d\acute{e}y^n-d\acute{e}y^n
         §8.4.7.2; inanimate near-distant demonstrative k\phi 'that' (twice)
         summarizes the just described situation]
                             k\hat{\mathfrak{I}}y^n = ::
         B: hà:
(841)
                             thus=it.is
              well,
              'Well, that's how it is.'
              ['it is' clitic §11.2.1.1]
Text 5 Abandoned Twins (tale)
(tape reference: 2011.01b.05)
[the songs, indented, are partially in Tommo So, a Dogon language]
(842)
         A: s\acute{e}y^n.:
              [story-opening word]
         B: màté:n
              [audience-confirmation word]
(843) A: [yè
                          ènè nà
                                         làlé-y]
                                                                       n im \hat{\varepsilon} - m u = ::,
              [woman child 3SgS give.birth-Past.and.then] twin-AnPl=it.is,
         [nìm\hat{\varepsilon}-m\hat{u}=^{\dagger}w\acute{o}]
                                           gir^n \hat{\varepsilon}
                                                       m \grave{\varepsilon} n z - i : ^n = y \grave{\varepsilon},
         [twin-AnPl=Def.AnPl]
                                                       thin-Adj=it.is.3PlS
                                           very
         [[gìr<sup>n</sup>è
                      m \hat{\epsilon} n z - i :^n
                                     kś
                                                bè:-ná-m
                                                                             nì]
                                                get-ImpfNeg-LogoS
                                                                             Sbjnct]
         [[very
                     thin-Adj]
                                     raise
                             îbí-yé-m = \delta:,
```

fear-MP-Impf=Def.InanSg,

3LogoSgS

'A woman (once) gave birth, it was twins. The twins were very undersized. She was fearing that she would not be able to raise very undersized ones.'

[irregular noun 'child' §4.1.2 occurs in several forms in this text; 'it is' with animate plural noun §11.2.1.1; $m \hat{e} nz - i : \hat{e} = y \hat{e}$ with $g \hat{i} r^n \hat{e}$ 'very' with adjective §6.3.3.2; $m \hat{e} nz - i : \hat{e} = y \hat{e}$ with adjectival extension $-i : \hat{e} = \hat{e}$ in adjectival predicate; $ib \hat{e} - \hat{e} = \hat{e}$ 'fear' §17.3.5]

(844)†ná] $go\acute{e}$ - $m = \grave{o}$: Πòγ á [[outback Loc] 3ReflSg go.out-Impf=Def.InanSg] [[[kɔ̀lmbà dú] dùndò †*bézè-y*] nà] under] Loc] [[[Piliostigma.tree lay leave-Past.and.then] Lwè-Ø. [?áló †ná] ^Lcome-Perf.3SgS, [house Locl

'She went out into the outback. She laid them down under a *kòlmbà* (*Piliostigma reticulatum*) tree, and she went back home.'

(845) àmbà [ènè^L $bálé-m = \hat{\beta}:$, *bô:1* God [children^L those.NearDist] 3ReflSg gather-Impf=Def.InanSg, hà: $úr^n \varepsilon - V$ $zir^n \hat{\varepsilon} - y$, well. go-Past.and.then convey-Past.and.then, èné = wò nà kó-y, children=Def.AnPl 3SgS raise-Past.and.then, sátárá và g-ó, manhood Real go.out-Perf.3PlS,

'God gathered (=adopted) those children. Well, He went and conveyed them (to a place) and He raised the children. They attained manhood.'

 $[zir^n \hat{\epsilon} - y < \text{irregular verb } zin \text{ 'convey, take (away)' } \$10.2.1.12; \text{ the last segment is literally "they emerged (into) young-man-hood"}]$

(846)[sátárá nà kárⁿέ-y, gò] [manhood go.out] 3SgS do-Past.and.then, èné = wò [sòm^L án] [horse^L children=Def.AnPl male] cégéré á $págé-m = \delta$:, tie-Impf=Def.InanSg, saddle(n) 3ReflSgS [èné = wò $ni:, \quad \acute{a}-y^n\grave{\varepsilon}-m\grave{u}$ hà: á-nù] ní:, [children=Def.AnPl 3Pl-two] now, 3Refl-AnPl-AnPl now, well, dùnò^L ná] Hní:] [[á $ur^n u-m-\emptyset$ wà. Hmother] search Purp] go-Impf-LogoS [[3Refl Quot,

'When they had attained manhood, the children each saddled up his stallion. The two children now, (as for) them now, they said (=decided) that they would go to look for their mother.'

[$\grave{e}n\acute{e}=w\grave{o}$ $\acute{a}-n\grave{u}$ 'the two children' with cliticized definite $=w\grave{o}$ and pronominal $\acute{a}-n\grave{u}$ (226c) in §7.1.2, can alternatively be phrased as $\grave{e}n\acute{e}$ $n\grave{o}-n\acute{o}:-m\grave{u}=w\grave{o}$ with the regular numeral '2' preceded by $n\grave{o}$ - 'person' (not reduplicative) as classifier and followed by the definite clitic; two occurrences of $n\acute{t}$: 'now' then one of $^Hn\acute{t}$: 'mother' in H-toned possessed form, glosses based on narrator's comments]

```
(847)
         [[jǎ:
                                                                úr<sup>n</sup>ú-m]
                       nì]
                                   dàmè-y]
         [[thus
                                   speak-Past.and.then]
                                                                go-Impf]
                       Adv]
         [[sòm<sup>L</sup>
                      án]
                                  mí:]
                                                úr<sup>n</sup>ú-m]
         [[horse L
                                                go-Impf]
                      male]
                                 Inst]
         [[dàmà<sup>L</sup>
                       tùmá→1
                                    nà]
                                               dọè-y]
         [[village<sup>L</sup>
                                              arrive-Past.and.then]
                       one]
                                    Loc
                            [bònà
         [yè-mù
                                                   †ná]
                                                             bò
                                                                      ?ápá-m],
                                                            3PIS
         [woman-AnPl [pounding.area
                                                   Loc]
                                                                      stand.Stat-Impf]
```

'Saying (=intending) thus, they went, they went with (=on) (their) stallions. They arrived at a village. Women were standing in the grain-spike pounding area (at the edge of the village).'

[jä: nì 'thus' §8.4.1; instrumental §8.1.2; dɔe-y 'arrived', the verb properly denotes reaching the boundary of a place (e.g. the gate of a house); there is a pounding area at the edge of every village where women go to do heavy pounding, especially of millet grain spikes, in large mortars]

```
(848)
         [song]
                                pŏ:-yè
                                            pŏ:-yè
                                                                        sèndè-[dén-dèn]
                                hello!
                                            hello!
                                                           <sup>L</sup>pàdù-w sèndè-[déŋ-dèŋ]
                                [[yàgú
                                           dú:] nà]
                                                          Lleave.Perf-2SgS
                                [[what? under] Loc]
                                                           <sup>L</sup>pàdù-m sèndè-[déŋ-dèŋ]
                                [[yùló dú:]
                                                 nà]
                                                           Lleave.Perf-1SgS
                                [[néré under] Loc]
                                        Hná:
                                                                 \dot{u} = l\dot{\varepsilon} \ s\dot{e}nd\dot{e}-[d\acute{e}\eta-d\grave{e}\eta]
                                 [mí
                                                    gè]
                                [1SgP Hmother Def.AnSg]2Sg=it.is.not
```

A: 'Greetings!'

B: 'Greetings!'

A: 'Under what (tree) did you leave (them)?'

B: 'I left (them) under néré tree (Parkia biglobosa).'

A: 'You are not my mother.'

[Many women claim to be the mother of such elegant young men, but only the true mother knows which tree she left the babies under.]

```
n \hat{a}  ^{L} d \hat{\sigma} g \hat{\epsilon} - m 
                              ſá→
                                                   [[1ò1
                                                               dú]
(849) \int \partial \eta g \hat{\epsilon}
            [this.AnSg [3LogoSgS
                                                   [[néré under] Loc] <sup>L</sup>leave.Perf-LogoS]
                              g u r^n \varepsilon - y
                              say.Perf-Past.and.then]
            3SgS
                                                          ^{\mathrm{L}}d\partial g\hat{\varepsilon}-\mathcal{O}
                                                                                         †dé
            [[[lòl
                             dú]
                                          nà]
                                                                                                       gày]
                                                           Lleave.Perf-3SgS
                                                                                         if
            [[néré
                            under]
                                          Loc]
                                                                                                       Top]
                               H<sub>ní:</sub>
                                               gè]
                                                                    n\grave{a} = l\grave{a}
                                                                                             †wá.
            Γá
            [3LogoSgP Hmother Def.AnSg]
                                                                    3Sg=it.is.not
                                                                                             Ouot,
```

'This (woman) said: "I left (the babies) under a néré tree." (One twin) said: "If she left (them) under a néré tree, she is not my mother."

['she is not my mother' here and in (852) could alternatively be translated 'you are not my mother', given the usual substitution of 3Sg for original 2Sg in quoted speech; $n\hat{a} = l\hat{a} - \emptyset$ 'is not her'. 'It is not' clitic drops tone to $= l\hat{a}$ - before quotative $w\hat{a}$]

```
(850)
                                                             go\acute{e}-m=\grave{o}:1
         [[íyέ
                    là] kóy
                                              á
         [[again too] just.over.here 3LogoSgS go.out-Impf=Def.InanSg]
                         úr<sup>n</sup>ú-m]
         [bò
         [3PIS
                         go-Impf]
         [[[dàmà <sup>L</sup>
                        tùmá→]
                                         nà]
                                                             †d\mathfrak{z} \varepsilon - y]
                                                  bò
         [[village<sup>L</sup>
                                         Loc
                                                 3PIS
                                                             arrive-Past.and.then]
                        one
                                 [bònà
                                                        †ná]
         [yè-mù
                                                                  yá
                                                                           ?ápà-yè],
         [woman-AnPl
                                 [pounding.area
                                                        Loc]
                                                                  Real
                                                                          stand.Stat-3PIS],
         yá
                         á
                                        d\mathfrak{d}\varepsilon-m=\mathfrak{d}:
         there.Def
                         3LogoS
                                        arrive-Impf=Def.InanSg
```

'They (=twins) proceeded to go away from there. They went and arrived at a village, (to find) women standing in the grain-spike pounding area. They arrived (=approached).'

```
(851)
         [song]
                                   pŏ:-yè
                                               pŏ:-yè
                                                                             sèndè-[dén-dèn]
                                  hello!
                                               hello!
                                                               <sup>L</sup>pàdù-w sèndè-[déŋ-dèŋ]
                                   [[yàgú
                                              dú:]
                                                      nà]
                                  [[what? under] Loc] Leave.Perf-2SgS [[sá: dú:] nà] Lpàdù-m sèndè-[déŋ-dèŋ]
                                  [[grape under] Loc] Lleave.Perf-1SgS
                                           Hná:
                                   [mí
                                                                      \dot{u} = l\dot{\varepsilon} \ s\dot{e}nd\dot{e}-[d\acute{e}\eta-d\grave{e}\eta]
                                                       gè]
                                  [1SgP Hmother Def.AnSg]2Sg=it.is.not
```

A: 'Greetings!'

B: 'Greetings!'

A: 'Under what (tree) did you leave (them)?'

B: 'I left (them) under wild-grape tree (Lannea microcarpa).'

A: 'You are not my mother.'

```
(852)
                    là] [kóy
                                          d\partial g \hat{\varepsilon} - y
                                                                     nàηé-Ø
         [íyé
          [again too] [over.there leave-Past.and.then] pass.Perf-3SgS Quot,
          [[[kùdà
                                       nà]
                                                ^{L}d\partial g\hat{\varepsilon}-\emptyset
                             dú]
                                                                         dé
                                                                                  gày]
          [[[wild.grape under] Loc]
                                               Lleave.Perf-3SgS
                                                                                  Top]
                         H<sub>ní:</sub>
                                                       n\grave{a} = l\grave{a} - \emptyset
                                                                             †wá,
                                      gè]
          [3LogoSgP Hmother Def.AnSg] 3Sg=it.is.not
                                                                            Quot
```

'Again he (=a twin) left that place and continued onward, it is said. "If she left (them) under a wild-grape tree, she is not my mother," he said (or thought).'

(853)íyé-ń [bò úrⁿú-m] [bò úrⁿú-m] go-Impf] that.day [3P1S [3plS go-Impf] [íyế lá] [[[dàmà L tùmá→] nà] bò † $d\mathfrak{z} \varepsilon - y$] [again too] [[[village^L one] Loc 3PIS arrive-Past.and.then [yè-mù [bònà †ná] yà ?ápà-yè], Real stand.Stat-3PIS], [woman-AnPl [pounding.area Loc bò-ý pódé-m á gὲ, 3LogoSgS greet-Impf Def.AnSg,

'That (same) day they went. Again they arrived in a village. Women were standing in the grain-spike pounding area. When they had greeted them...'

[*íyé-ý* 'that day', cf. *íyé* 'today', distinct from *íyé* 'again'; *dàmá* 'village'; *pódé-m gè* with animate plural definite *gè* since *á* here denotes both young men, would be $-m = \hat{o}$: for animate singular]

```
(854) [song]
                               pŏ:-yè
                                           pŏ:-yè
                                                                      sèndè-[déŋ-dèŋ]
                               hello!
                                           hello!
                                                        Lpàdù-w sèndè-[dén-dèn]
                                         dú:] nà]
                               [[yàgú
                               [[what? under] Loc] Lleave.Perf-2SgS
                                                        <sup>L</sup>pàdù-m sèndè-[déŋ-dèŋ]
                               [[kòybé dú:] nà]
                               [[Pilio under]
                                                  Loc] Lleave.Perf-1SgS
                               [mí <sup>H</sup>ná:
                                                               \dot{u} = \dot{y}^n s \dot{e} n d \dot{e} - [d \acute{e} \eta - d \grave{e} \eta]
                                                  gè]
                               [1SgP Hmother Def.AnSg]2Sg=it.is
```

A: 'Greetings!'

B: 'Greetings!'

A: 'Under what (tree) did you leave (them)?'

B: 'I left (them) under Piliostigma tree.'

A: 'You are my mother.'

(855) [tígé nà kár n é-y]

```
[look
                                       do-Past.and.then]
                    3SgS
ſyέ
                gè]
                                       \grave{e}n\acute{e} = w\grave{o},
[woman
               Def.AnSg]
                                       children=Def.AnPl,
                              \partial m \partial^{\mathrm{L}}
Γὸmὸ<sup>L</sup>
             cicatrice
                                           nà
                                                     zùwó-zó]
                                                                           yà
                                                                                   bó-Ø.
[place<sup>L</sup>
                              place<sup>L</sup>
                                           3SgS know-Perf2]
             scar
                                                                           Real be-3SgS,
                    \acute{a}-m\grave{u} = w\grave{o} ]
                                                          \partial miy^n \hat{\varepsilon}
                                                                           bó
[[èné
                                                                                         wà1
[[children
                    3Logo-AnPl=Def.AnPl] these.An
                                                                           3Pl=it.is Quot]
```

'She looked (at them), the woman (looked at) the children. There was a spot (on their bodies) (with) a scar (or mark) that she knew. "These are my children," she said.'

[redundant double occurrence of relative head $\partial m \partial^L < \text{noun } \partial m \delta$ 'place', either of the two can be omitted; $\partial m i y^n \dot{e} b \delta$ 'it is these' (predicative)]

^Lk∂-vy-à, $^{\rm H}$ wá $\rightarrow nì$ (856)[ànjă: $kár^n \varepsilon - y$] [3Pl QuotS QTop] [how? do-Past.and.then] Lraise-MP.Perf-3PlS, [[àmà^L à: njí, bò bé] mì] [[place^L ah 3PIS here, be.Past.Ppl] Inst [[cì^L cêm kámá] тì fú→] [[thing^L each] all all] Inst sádú-sàdù $k\acute{a}r^n\acute{\varepsilon}-m=\grave{\delta}:,$ Iter-ask 3ReflSgS do-Impf=Def.AnSg,

"Doing what (=how) were you-Pl raised?" Ah here, she was asking about where they had been and everything (else).

[kó-yyé 'be raised' from kó 'raise (e.g. a child)' §9.3.1; bé relativeclause verb form of bè- 'was' §14.1.7.7; iterated sádú-sàdù §15.1.6]

```
(857)
         ſνè
                                                ^{\dagger}g\dot{\varepsilon}
         [woman
                         NearDist.AnSg
                                                Def.AnSg]
         \int \partial c - i \cdot n
                             [[bònà
                                                      †ná]
         [fast-Adj
                             [[pounding.area
                                                      Loc]
                                          bὲ
         gòn
                                                      kó]
                     3ReflSg
                                          Past
                                                      Dem.NearDist]
         gear
         á
                            bálé-m = 3:1
         3ReflSg
                           gather-Impf=Def.InanSg]
```

'That (same) woman quickly gathered up the gear (e.g. grain and pestle) that she was (holding) in the grain-spike pounding area.'

[$n\grave{a}$ † $g\acute{e}$ (111) in §4.4.2.1; ... $g\grave{o}n$ \acute{a} $b\grave{e}$ $k\acute{o}$ reduced from ... $g\grave{o}n$ \acute{a} $j\grave{e}l\grave{a}=b\grave{e}$ $k\acute{o}$ 'that gear that she was holding']

(858) [[èné á-mù] tédí-yé-y]
[[children 3ReflSgP-AnPl] take.along-MP-Past.and.then]

```
[[?əlo †ná] úr^né-y,

[house Loc] go-Past.and.then,

'She took her children along (with her), (they) went to (her) house.'
```

```
(859)
       háyà
                [àmbà ↑wá→
                                          gòr<sup>n</sup>5
                                                          zó-Ø
                                                                       wà.
                                 gày],
                                                  yà
                                          power Exist
                                                          have-3SgS
       well,
               [God
                      Quot
                                 Top],
                                                                      Quot,
       ſá→
                    èné
                                ὴηᢒ҅ӯ
                                        kś
                                               bè:-ná-m
                                                                     nì]
       [3LogoSgS
                                        raise get-ImpfNeg-LogoS Sbjnct]
                   children
                                thus
       [íyé
                   [ènè
                                            jiz\acute{e}-m=\grave{o}:],
                                á
                                3LogoSgS throw-Impf=Def.InanSg],
       [today
                   [children
       kó-vyé-v
                                    [ŋ̀gó
                                             sòm
                                                        págé-y]
       raise-MP-Past.and.then]
                                    [then
                                             horse
                                                        tie-Past.and.then]
       [á-ý
                           dùnó-dùnò-dùnò]
                           search-search]
       [3LogoSg-Acc
       [ὴgό
                 [bònà
                                  †ná]
                                           wò-y],
       [then
                 [pounding.area Loc]
                                           come-Past.and.then],
```

'She said: "well, God has the power. The children that I threw (=abandoned) believing that I could not raise children in that way, (they) were raised (by God), then they tied (=saddled up) horses, kept searching for me, and then came to the grain-spike pounding area.""

[iterated verb duno-duno-duno §15.1.6, as also in (770); two occurrences of ηgo 'this' (inanimate) resuming a just-described situation, could be glossed 'then' or 'with that', or just disregarded in free translation]

```
(860)
          nàηá-m
                                             bò
                                                       sádé-y],
                                                                                   hà:.
                            Γá
                                             3PIS
          pass-Impf
                            [3LogoSg
                                                       ask-Past.and.then],
                                                                                  well,
          [[àmà<sup>L</sup>
                      á-ý
                                        bò
                                                 jìzé
                                                                         mì→]
          [[place<sup>L</sup> 3LogoSg-Acc3PlS throw.Ppl.Perf
                                                                        and]
          [cì<sup>L</sup>
                           kámá
                                          mi \rightarrow 1
          [thing<sup>L</sup>
                           each
                                          and]
                        bò
          dàm
                                    k\acute{a}r^n\acute{\varepsilon}-y],
                        3PIS
          speak
                                    do-Past.and.then],
          hà:
                     [èné
                                    \acute{a}-m\grave{u} = w\grave{o}
                                                                          bó
                                                                                        wà,
                    [children
                                    3LogoSg-AnSg=Def.AnSg] 3Pl.it.is
          well,
                                                                                        Quot,
```

'(She) said: "While passing (=on your way here), you-Pl asked me, well, where they threw you (=where you were thrown) and everything (else). Well, you-Pl are my children."

[3Logophoric coindexed with the author of a quotation within another quotation, here the children]

(861) hà: kó [bò-ý tédí-yé-y]

```
well, so [3Pl-Acc take.along-MP-Past.and.then]
[?śló †ná] wò-zò-m wà,
[house Loc] come-Perf2-LogoS Quot,
    'Well, then she took them along (with her), they came to (her) house, it is said.'
```

```
(862)
          [[?áló
                            †ná]
                                         \grave{e}n\acute{e} = w\grave{o}
          [[house
                            Loc]
                                         children=Def.AnPl
          tédí-yé
                                         kúndé-y]
                                         kúnae-y<sub>J</sub>
put.in-Past.and.then]
Hdé:]
          take.along-MP
                                                                                   L?əlò]
          [[\dot{e}n\acute{e} = w\grave{o}
                                                                    Hfather]
                                                                                   Lhouse]
          [[children=Def.AnPl
                                             [[3ReflSg
                                             \int k \hat{j} y^n \, d^{\perp} w - \hat{a}
                                                                                  wà]
          dùnè-y]
                                                        Lsee-Perf.3PIS
          look.for-Past.and.then]
                                             [thus
                                                                                  Quot]
```

'When she had taken them along (with her) and brought them into the house, the children (then) looked for their father. In that way they saw (=found) (him).'

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