

# A Grammar of Penange

Dogon language family  
Mali

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draft November 2014 based on fieldwork with one speaker  
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color coding (excluding section and chapter headings)

brown	text from the template or the Penange grammar, to be gradually replaced (disregard)
black	new material typed in for this language
blue	transcriptions for this language
green	transcriptions for other languages, reconstructions, phonetic transcriptions, and formulas
pink	data to be incorporated later into the section
red	comments to myself (e.g. data to be elicited, section to be rewritten)
orange	temporary cross-refs to examples in other sections
dk yellow	Jamsay forms in sample index, to be replaced by forms from the language in question





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# 1 Introduction

## 1.1 Dogon languages

Dogon is a well-defined genetic family of languages spoken on the Dogon plateau, the cliffs and slopes that lead down from them, the sandy plains that stretch out to their north and east, and scattered inselbergs separated from the plateau to the north. Not all varieties have been surveyed professionally, but there are at least 80 varieties with distinct local names, and we currently think that these can be grouped into about 20-25 units of the sort that linguists generally consider to be "languages."

Dogon is thought to belong to Niger-Congo, but no close relationships to specific NC families have been demonstrated.

Penange belongs to a western Dogon division in which its closest relatives appear to be Ampari, Mombo (aka Kolu), and Bunoge. This group also has affinities to Tiranige, Najamba-Kindige, Yanda Dom, Tebul Ure, and perhaps Dogulu, in opposition to eastern Dogon, but we are not yet sure of the overall genetic subgrouping.

## 1.2 Penange language

Penange (*pénà:ngè*) is the Dogon language spoken in the village of Pinia (native name *pénâ*). Like many Dogon villages, its official name is based on the Fulfulde term, which is *pîja* (the French colonial surveyors had Fulbe guides). The people call themselves *pénâ nógè* 'Pinia people'. The predominant surname is Degoga (*dêgô*). Other surnames are Kamio (*kàmîyô*), Seiba (*sèybâ*), Karambe (*kà:râmbè*), and a few Yanogue (*yànógè*).

Dogon who are born and raised in Pinia learn Fulfulde (called *púndé:ngè* in Penange) as a second language. Fulbe (*púndè*) are present in Pinia itself and in nearby hamlets, and Fulbe women make daily rounds selling milk and butter. The cattle are generally owned by Dogon and tended by Fulbe.

Many young Dogon work seasonally, or for years at a time, in southern Mali (Segou and Bamako areas), and pick up basic speaking competence in Bambara (aka Bamana), a Mande language. Another popular destination for work, but also for high school study, is Mopti-Sevare, which is also becoming Bambara-dominant.

There is a weekly market in Pinia on Fridays, supported by minibuses and vans from Mopti and other locations. The other major weekly markets frequented by Pinia people are Somadougou to the east on the north-south highway, and Goundaka near the east-west highway from Mopti to Bandiagara. A few merchants originally from Pinia now live in Somadougou. Especially on market days, Somadougou and Goundaka are rather cosmopolitan ethnically, but Fulfulde and Bambara are common *lingue franche*.

There is no single other Dogon language that is especially well-known to people of Pinia. Mombo (aka Kolu) is spoken to the east and northeast, Ampari is spoken to the southeast, and Tomo Kan is present as a minority language in Somadougou and some other villages to the south.

Bomu (aka Bobo), a Gur language, is also present in Somadougou and is an important language in San and Bla farther south on the main highway.

### 1.3 Environment

Penange is located at N. 14 23.631 x W. 04 01.943 (degrees, minutes, decimal fraction of minutes). Administratively it is in the *commune* of Goundaka, which is part of the *cercle* (district) of Bandiagara, which is (until the next reorganization) part of the *région* (province) of Mopti, in Mali. The village is located on a low rocky elevation. To the east, a flat plain including scattered millet fields extends to the main north-south highway which links Sevare to San and Segou. The southern part of the Dogon plateau spreads out to the west.

Pinia is a single, rather large village rather than a village cluster of the sort common elsewhere in Dogon country. The main reason for this is the presence of a large rock pond that retains some water through to the end of the dry season, a major attraction in a dry land (no crocodiles, though). The village has four mosques and a school (first to sixth grade as of 2012), and continues to expand with new construction.

The main economic activity is rainy-season farming. The staple cereal grown in fields near the village is millet (*Pennisetum glaucum*), with sorghum also cultivated in depressions. Pinia people are also active in rice farming, but the fields are some distance from the village (at Mousofandougou near Somadougou, at Soufouroullaye on the north-south highway, and at Fatoma north of Sevare). Fonio (*Digitaria exilis*), a traditional grain staple, is also grown. Maize is absent.

Non-cereal rainy-season crops are peanut, groundnut (*Vigna subterranea*), roselle (*Hibiscus sabdariffa*), sesame, and cow-pea (*Vigna unguiculata*). Peanut, groundnut, and roselle are cash crops cultivated exclusively by women, who use the proceeds to purchase daily condiments.



There are no vegetable gardens or other notable work opportunities during the period from the harvest (October, early November) to the next planting season (around June). As a result, most able-bodied young people from age 15 up migrate to southern Mali (especially Bamako) or to other West African countries for part or all of the dry season.

Herding (cattle, sheep, goats) is carried out in this area by Fulbe, though most of the animals are owned by Dogon.

#### **1.4 Previous study of and current fieldwork on Penange**

##### **1.4.1 Previous study**

Kirill Prokhorov, a member of the Dogon languages project who specializes in Mombo and Ampari, did an initial reconnaissance of Penange in 2011. He was the first linguist to identify Penange as a distinct language, though belonging to the genetic subgroup including Mombo, Ampari, Bunoge, and perhaps one or two other Dogon languages.

##### **1.4.2 Fieldwork**

After learning about Penange from Prokhorov, I visited Pinia for two days in 2011 in order to collect flora-fauna vocabulary and to see the village and its environment.

During a 20-month field trip from January 2011 to August 2012, I did fieldwork on several Dogon languages including Penange. The Penange work was done part-time in May-August 2012. This was a time of turmoil in Mali (Tuareg rebellion, coup and counter-coup in Bamako) and the fieldwork was done in Bobo Dioulasso, Burkina Faso, with a high-school student who was born in 1989 and grew up in Pinia.

##### **1.4.3 Acknowledgements**

Primary funding for the Dogon linguistics project during the period of fieldwork on Penange was National Science Foundation grant BCS 0853364 (2009-13), Documenting Endangered Languages (DEL) program. During school year 2011-12 I received salary support in the form of a sabbatical from the University of Michigan and a fellowship from the Guggenheim foundation.

#### 1.4.4 Additional resources

In addition to grammars, lexical data, and texts, the project has done extensive work in the following areas: a) flora-fauna (native terminology, identification), b) GPS mapping and photography of Dogon and other villages, and c) production of many videos (2 to 20 minutes) dealing with practical activities and with cultural events such as festivals. See the project website at [www.dogonlanguages.org](http://www.dogonlanguages.org) for access to this material.

## 2 Sketch

This is a brief run-down of major features, including those that distinguish Penange from other Dogon languages. First-time readers should skim some of the sample texts at the end of the grammar to get a feeling for clause structures.

### 2.1 Phonology

#### 2.1.1 Segmental phonology

Penange has a fairly conventional Dogon phoneme inventory, including the usual seven vowel qualities with [ $\pm$ ATR] opposition in mid-height vowels. Long and short vowel length are distinguished. Most of the theoretically possible nasalized vowels occur but are uncommon.

$r^n$  is absent.  $y^n$  and  $w^n$  are common word-finally (§3.2.7).

#### 2.1.2 Prosody

Tones at syllable level are H, L, <HL>, <LH>, and occasionally <LHL>. The latter is rare as a lexical tone for monosyllabic nouns: I can cite only  $s\tilde{e}:y^n$  'rib(s)', plural  $s\tilde{e}:y^n-g\grave{e}$ . This is probably contracted from an old bi- or trisyllabic 'child' compound, cf. Bunoge  $s\grave{e}ng\acute{e}-b\grave{e}$  'rib(s)'. <LHL> is more common in monosyllabic words involving a grammatically conditioned {LHL} melody that has ended up being fully expressed on a single syllable, perhaps after apocope of a final vowel. Examples are past imperfective  $\acute{y} n\tilde{o}: = y\grave{e}$  'I was going in' (§10.6.1.4), imperfective negative  $nw\check{a}-\grave{a}-l$  'you-Sg don't go in' equivalent to  $nw\check{a}:l$  (§10.2.3.3), and the possessed noun in  $\acute{y} s\tilde{o}:y^n$  'my tigerfish' (§6.2.1.1).

Stem-level tone melodies can be lexical, for example in a noun, adjective, or numeral that occurs at the end of a NP. However, these word-classes (especially nouns) are also subject to tonosyntactic overlays, such as {L} (all-low tone contour) on a noun followed by an adjective. Tones of verbs are entirely determined by the inflectional (e.g. aspect-negation) category and by pronominal subjects.

Intonational prolongation (symbol  $\rightarrow$ ) is lexicalized in some grammatical morphemes (e.g.  $w\grave{a}g\grave{a}\rightarrow$  'or') and adverbs ( $s\acute{o}\rightarrow$  'long ago'). A final intonational effect is the basic way to express polar interrogatives, as there is no segmental

morpheme (except in quoted interrogatives). There are no Jamsay-type "dying quail" intonation effects.

### 2.1.3 Key phonological rules

Syncope or apocope of short {*i u*} after an unclustered sonorant in a noninitial (especially second) syllable is common but usually optional.

Vowel-initial stems grow an initial epenthetic *y-* or *ɲ-* when preceded by a 1st/2nd person subject or possessor proclitic (*ɲ ɲ à á*).

The most important regular tonological process is spreading of a H-tone to the right, before a word with initial L-tone, thus ...HL][L... becoming ...HH][L....

## 2.2 Inflectable verbs

Suffixal verb-to-verb derivations are reversive ('un-VERB'), causative, mediopassive and transitive (often paired), and reciprocal. Many adjectives have corresponding inchoative verbs, whose causatives function as factitives.

Verbal inflection consists chiefly of perfective/imperfective aspect crossed with positive/negative polarity. For the perfective system there is an experiential perfect, but no recent perfect or resultative. For imperfective positive there are two constructions, one with auxiliary *bô* ~ *wô* and one with prolonged final vowel, in addition to a progressive with auxiliary *bô*.

There is also a capacitative form ('can VP') with suffix *-mâ:*.

Aspect-neutral statives include those derived from certain types of active verb ('sit down' becomes 'be sitting'), with final *a*, along with a few underived defective quasi-verbs ('be', 'have', 'know', 'want', 'resemble').

Statives, and already aspectually marked active verbs, can have their temporal reference point shifted to the past ('used to sti', 'was sitting', 'was sitting down', 'had sat') by adding a past clitic *=ye*.

Deontic moods are the imperative (and its negation, the prohibitive), the hortative ('let's VP'), an allative hortative ('let's go VP'), and a third-person (or indirect) hortative used in quoted imperatives.

## 2.3 Noun phrase (NP)

All possessors (except 3Sg pronoun) and determiners (definite, demonstrative) precede the noun. Adjectives and all quantifiers (numerals, 'all/each') are postnominal.

Modifying adjectives control tone-dropping on a preceding noun. Possessors and determiners also control tone overlays on following nouns.

## 2.4 Case-marking and PPs

Accusative  $-\eta \sim -\dot{w}^n$ , which is generally confined to pronouns and human NPs, is NP-final and could be considered to be a postposition. In fact, there is a homophonous locative postposition  $\eta \sim -w^n$ . The latter competes with another locative postposition *ba*. The other simple postpositions are instrumental *ni* and purposive-causative *námù*. There is no specifically dative postposition (the accusative is used for indirect objects). Other postpositions are composite, typically consisting of a possessed-noun-like stem and a final locative  $\eta \sim -w^n$  or *ba*.

## 2.5 Main clauses and constituent order

Basic constituent order is SOV when S[ubject] and O[bject] are nonpronominal NPs. Adverbs occur in various positions before the verb, including clause-initial position. 1st/2nd person pronominal subjects are always immediately preverbal proclitics. In main clauses, 3Pl is suffixal (in main clauses) and 3Sg is zero. Pronominal objects also gravitate to the verb.

## 2.6 Relative clauses

The overt head of a relative is internal to the relative clause. This overt head is maximally possessor/determiner plus noun plus adjective plus numeral, and this sequence undergoes no additional tonal modification by virtue of being relative head. The 'all' quantifier and (often) plural marking follow the verb. The verb behaves like a participle (so it can take the usual NP-level plural suffix), and it has overt participial suffixes in some inflectional categories (mainly negative and stative). Subject relatives allow no main-clause-like pronominal-subject marking on verbs. Nonsubject relatives have regular pronominal-subject marking for 1st/2nd person categories (proclitic to the verb); they also have a 3Pl subject proclitic *ɲké* (versus suffixal marking of 3Pl subject in main clauses) and a special 3Sg subject postverbal enclitic *nà* (versus zero marking in main clauses)

## 2.7 Interclausal syntax

Since there is no "bare stem" or "chaining form" of verbs, in clause-chaining either the nonfinal clause has more or less the same form (including inflectional marking) as a main clause, or it has an overt subordinating morpheme. In past-time contexts, one basic pattern is for both verbs to appear in perfective form with their own pronominal-subject marking. The two clauses may denote consecutive events, or simultaneous co-events of a single complex event. If the subject of the nonfinal clause is a 3Sg pronominal, it is expressed by the same enclitic *nà* as in relative clauses, versus zero marking in main clauses (and therefore in the final perfective clause of the chain). Another perfective construction has nonpast anterior particle *né ~ nè* after the nonfinal verb.

If the nonfinal verb is imperfective ('while VPing'), it can be followed by imperfective subordinator *w<sup>n</sup> ~ ɲ*, or the verb itself can have its final vowel lengthened.

The same particle *né ~ nè* in nonpast anterior chained clauses is also used as the regular conditional 'if' particle, though here it can be expanded as *bé-né*. Counterfactual conditions have *bé-né* and shift the temporal axis in both clauses by adding past clitic *=ye*.

Quotations are marked either by a conjugated form of *né* 'say' or by the unconjugated quotative particle *wa*. In quoted indicative clauses, original first person pronouns (i.e. coindexed with the attributed author of the quoted material) are replaced by logophoric pronouns, and original second person pronouns (i.e. addressees) are replaced by third person pronouns, so 'He said "I will kill you"' is phrased as "[LogoSg<sub>x</sub> will kill him/her] he<sub>x</sub> said." Quoted imperative and hortative clauses have special verb forms (e.g. jussive). Quoted interrogatives have a clause-final particle *lè* not used in the corresponding main clauses.

Most "control" verbs in matrix clauses take verbal-noun complements (which may include non-subject complements) when the subjects are coindexed. For 'want', a nonpast anterior complement is used when the subjects are disjoint.

### 3 Phonology

#### 3.1 Internal phonological structure of stems and words

##### 3.1.1 Syllables

Primary syllabic shapes that occur within stems are *Cv*, *Cv*;*L*, *CvL* with sonorant *L*, and occasionally *Cv*:*L*. The initial *C* position may be vacant in a word-initial syllable.

Nouns, adjectives, and numerals have at least two vocalic moras (no *Cv* stems), though there are a handful of *NCv* stems where the initial (syllabic) nasal counts like a vocalic mora. For verbs, the only regular (aspectually inflected) *Cv* stems are *né* 'say'. There are also some stative *Cv* quasi-verbs (*bô* 'be', *sâ* 'have'), and a derived stative stem *dâ* 'be sitting' from verb *dá:y* 'sit (down)'. With these exceptions, verbs like other stems have at least two vocalic moras. The inventory of monosyllabic verb stems is given in §10.1.2.1. Examples of monosyllabic stems for other stem-classes are in (xx1). Adjectives that are just perfective participles of cognate verbs (e.g. *mê* 'dry') are omitted.

(xx1) a. *Cv*: (including *v*;*L*, *Cv*:*n*, and *Cwv*:), complete list

<i>v</i> :	
<i>à</i> :	'who?'
<i>ê</i> :	'that same (one)'
<i>Cv</i> :	
<i>bô</i> :	'father's sister'
<i>dá</i> :	'evil'
<i>dô</i> :	'mortar (for pounding)'
<i>dê</i> :	'40'
<i>kó</i> :	'head'
<i>mì</i> :	'water'
<i>nà</i> :	'cow'
<i>jà</i> :	'meal'
<i>nò</i> :	'song'
<i>nê</i> : ~ <i>nwê</i> :	'hand'
<i>nì</i> :	'mother'
<i>nù</i> :	'fat(n)'
<i>pó</i> :	'share, portion'
<i>só</i> :	'vomiting'

<i>sè:</i>	'(a) grain'
<i>sí:</i>	'color'
<i>tó:</i>	'bow (for arrows)'
<i>té:</i>	'tea' (variant)
<i>tí:</i>	'errand, mission'
<i>tó:</i>	'other'
<i>wá:</i>	'day' (in <i>wá: sèlè</i> 'every day')
<i>wò:</i>	'weeping'
<i>wè:</i>	'child'
<i>wè:</i>	'moon'
<i>yò:</i>	'woman'
<i>yè:</i>	'thing'
<i>Cv:<sup>n</sup></i>	
<i>dû:<sup>n</sup></i>	'rag (as head cushion)'
<i>gà:<sup>n</sup></i>	'cat'
<i>gè:<sup>n</sup></i>	'sun' or 'fart'
<i>gí:<sup>n</sup></i>	'odor'
<i>gò:<sup>n</sup></i>	'chest (body)'
<i>já:<sup>n</sup></i>	'shed, thatch shelter'
<i>kí:<sup>n</sup></i>	'boat'
<i>sà:<sup>n</sup></i>	'waterbag'
<i>sú:<sup>n</sup></i>	'Ramadan'
<i>Cwv:</i> (see also <i>nè:</i> ~ <i>nwè:</i> 'hand' above)	
<i>dwè:</i>	'ashes'
<i>kwé:</i>	'a spice ( <i>Xylopi</i> )'
<i>kwé:</i>	'calabash vine'
<i>nwá:</i>	'this year'
<i>twè:</i>	'pile'
<i>Cwv:<sup>n</sup></i>	
<i>gwè:<sup>n</sup></i>	'whip'

b. *CvL* (including *vL*), maximum two exx. per final *C*  
*final nasal or nasalized semivowel*

<i>bây<sup>n</sup></i>	'big'
<i>jòy<sup>n</sup></i>	'fight(n)'
<i>bòw<sup>n</sup></i>	'door-shutter'
<i>ěw<sup>n</sup></i>	'there' (definite)
<i>téw</i>	'lid'
<i>dèm</i>	'house'
<i>jòm</i>	'thorn'
<i>dèn</i>	'day'
<i>dòn</i>	'mouth'
<i>gēj</i>	'place'
<i>final liquid</i>	
<i>búl</i>	'herd'



<i>dúl</i>	'root' or 'east'
<i>hâl</i>	'until'

c. *Cv:L*, all known examples

<i>dê:l</i>	'gum (resin)'
<i>kâ:m</i>	'anxiety'
<i>kâ:y<sup>n</sup></i>	'Bozo (ethnicity)'
<i>lâ:m</i>	'political authority', < Arabic
<i>mû:l</i>	'mold (for shaping bricks', Fr. <i>moule</i>
<i>nâ:m</i>	(response similar to 'amen!')
<i>pô:y</i>	'sack'
<i>sê:y<sup>n</sup></i>	'rib'

d. *NCv*, all known examples

<i>ntá</i>	'person'
<i>ŋkê</i>	'dog'

e. *NCv:* and *NCv:<sup>n</sup>*, all known examples

<i>nsì:<sup>n</sup></i>	'sweet'
<i>ntê:</i>	'hatred'

### 3.1.2 Metrical structure

In *CvCvCv*, the medial syllable is metrically weak. In this position, a short nonhigh vowel may be raised to a high vowel, variably *i* or *u* (depending on vocalic and consonantal environment). A short high vowel in this position, whether lexical or due to the raising just mentioned, is syncopated under limited conditions, especially /i/ before *y* (§3.4.2.2). Raising and syncope do not occur in all grammatical contexts; they occur in certain verbal derivations (reversive, mediopassive, transitive) of *CvCv-* stems, and in certain verbal inflections.

## 3.2 Consonants

The consonant phonemes are in (xx1). Marginal ones that occur in loanwords or as junctures (glottal stop) are parenthesized.

(xx1) Consonants

	1	2	3	4	5	6	7	8	9	10
labial	<i>p</i>	<i>b</i>	<i>m</i>	( <i>f</i> )			<i>w</i>	<i>w<sup>n</sup></i>		
alveolar	<i>t</i>	<i>d</i>	<i>n</i>	<i>s</i>	( <i>z</i> )	<i>l</i>	<i>r</i>			

alveopalatal	<i>c</i>	<i>j</i>	<i>ɲ</i>		<i>y</i>	<i>y<sup>n</sup></i>
velar	<i>k</i>	<i>g</i>	<i>ŋ</i>			
laryngeal					( <i>h</i> )	( <i>ʔ</i> )

*c* is IPA [tʃ], *j* is [dʒ], *y* is [j].

key to columns: 1. aspirated voiceless stops (*c* is affricated); 2. voiced stops; 3. nasals; 4. voiceless fricatives (including sibilants); 5. voiced fricatives (including sibilants); 6. laterals; 7-8. unnasalized then nasalized sonorants; 9-10. laryngeals

### 3.2.1 Alveopalatals (*c, j*) versus velars (*k, g*)

*j* and *g* are distinct even before front vowels {*i e ε*}. Examples with *i* are *gí:<sup>n</sup>* 'odor', *pírígí* 'hobbles (rope)', *síngì* 'rope', *ígíré* 'stir', but *kójí* 'grass', *sò:ɲì* 'spittle', *mò:ɲì* 'urine'.

*c* and *k* are likewise distinct before front vowels, though *c* is uncommon. Examples are *címjà* 'snot', *làcírì* 'couscous', *kíbá* 'kidney', and *kíndó* 'shadow'.

### 3.2.2 Back nasals (*ɲ, ɲ*)

I know of no *ɲi*, *ɲe*, or *ɲε* sequences in Penange words, so I have no evidence that *ɲ* and *ɲ* are distinct before front vowels. There are several examples of *ɲ* before front vowels, e.g. *ɲíngè* 'stimulate eardrum (with feather)', *ɲéy<sup>n</sup>* 'know'.

### 3.2.3 *g*-Spirantization (*g* → *ɣ*)

There is some spirantization of *g* in the medial position in *Cv\_v* between flanking back/low vowels {*a ɔ*}. In words like *ágálá* 'jaw' and *ògòlò* 'mud', the phoneme *g* is often pronounced as a velar fricative [ɣ].

### 3.2.4 Minor labials (*f, w*)

*p*, *m*, and *b* are basic consonants. *p* and *b* have the normal distribution of obstruents, strongly favoring syllable-initial position. *m* can occur syllable- and word-finally.

*f* occurs in loanwords like *filá:nà* 'So-and-so' (§13.2.2), *sífà* 'description', *fúfù* 'scrubber (for bathing)', and *nàfòrò* 'wealth'.

For stem-initial *Cw* clusters, see §3.xxx below.

### 3.2.5 Laryngeals (*h*, *ʔ*)

*h* and *ʔ* are not full-fledged phonemes in Penange. *h* occurs as initial consonant in a number of stems. These are mostly Fulfulde borrowings, e.g. *hâl* 'until', *hís:lá:rè* 'confidence'. Presentative *ì<sup>n</sup>hí<sup>n</sup>* 'here (it is)!' has medial *h*, but its internal morphological structure is nontransparent, cf. demonstrative *ínì* 'this/that'.

Vowel-initial words do not have a phonemic glottal stop in the fashion of e.g. Bunoge. This is clearly shown by the fact that *y*- and *j*- are added as epenthetic consonants before V-initial words following pronominal-subject proclitics (§3.4.4.1). Aside from *ʃ<sup>n</sup>ʔǝ<sup>n</sup>* 'no!', glottalization is limited to unassimilated Fulfulde loanwords, some of which retain Fulfulde preglottalized consonants, as in *sáʔdà* 'expense'.

### 3.2.6 Sibilants (*s*, *z*)

*s* is a basic consonant, occurring in prevocalic position like other obstruents. *s̥*, *z*, and *z̥* are found only in a few loanwords, e.g. *zùnú:bù* 'sin' (< Arabic).

### 3.2.7 Nasalized sonorants (*r<sup>n</sup>* absent, *w<sup>n</sup>* and *y<sup>n</sup>* word-finally)

There is no *r<sup>n</sup>* (nasalized tap).

*w<sup>n</sup>* occurs finally in handful of lexical stems: *ěw<sup>n</sup>* 'there' (discourse-definite), *bòw<sup>n</sup>* 'door-shutter', *tôw<sup>n</sup>* 'club (association)', *nűw<sup>n</sup>* 'here'. It is more common in word-final grammatical elements, notably imperfective subordinator *w<sup>n</sup>* and locative postposition *-w<sup>n</sup>*, accusative *-w<sup>n</sup>*, and locative postposition *w<sup>n</sup>*. In all cases, word-final *w<sup>n</sup>* is heard as such almost exclusively in prepausal position. Before another word, the *w<sup>n</sup>* (if this is the most basic form) is typically realized as a nasal (homorganic to a following *C*), as vowel nasalization, or as zero.

*y<sup>n</sup>* is fairly common in stem-final position. *gùy<sup>n</sup>* 'thief' (contrast verb *gúyé* 'steal'), *jòy<sup>n</sup>* 'fight(n)', *kà:y<sup>n</sup>* 'Bozo (ethnicity)', *káy<sup>n</sup>* 'work(n)', *kéy<sup>n</sup>* 'want', *kòy<sup>n</sup>* 'the bush, outback', *kùy<sup>n</sup>* 'war', *mòy<sup>n</sup>* 'sprain(n)', *mùy<sup>n</sup>* 'patience', *ḡòy<sup>n</sup>* 'pancake-like cake', *néy<sup>n</sup>* 'know', *óy<sup>n</sup>* 'waterjar'. It can also occur in "medial" position in stems ending in *y<sup>n</sup>i* whose final /i/ is usually deleted (apocope, syncope): *dá:y<sup>n</sup>i* 'sit', *gí:y<sup>n</sup>i* '(sth) smell, emit an odor', *jáy<sup>n</sup>(i)* 'fight(v)'.

### 3.2.8 Consonant clusters

#### 3.2.8.1 Word- and morpheme-initial *CC* clusters (*NC*, *Cw*)

Word- and stem-initial clusters are nasal plus homorganic obstruent, and consonant plus *w*.

Stems beginning in a nasal-stop cluster are in (xx1). Postpausally, the nasal is syllabic and can therefore bear its own pitch, but it is not clear that this is distinctive (i.e. phonological tone). The pitch of the nasal in postpausal position is low, except in *NCv(:)* stems like 'dog' and 'sweet' in (xx1b) when the final vowel is L-toned, in which case the pitch of the nasal is high in this position.

(xx1)	a.	<i>mbòllí</i>	[m̀bòllí]	'knobbed end of stick'
		<i>mbé</i>	[mbé]	1Pl pronoun
		<i>ndám̀dì</i>	[ndám̀dì]	'butter catfish ( <i>Schilbe</i> )'
		<i>ntá</i>	[ntá]	'person'
		<i>njó</i>	[ndzɔ́]	'today'
		<i>ngòlò-ngòlò</i>	[ng̀gòlòng̀gòlò]	'giant millipede'
		<i>ngállù</i>	[ng̀gál:ù]	'city'
		<i>nkà:lí-yè</i>	[nk̀à:líjè]	'small'
		<i>nké</i>	[nké]	'be depleted, be used up'
		<i>nké</i>	[nké]	3Pl pronoun
		<i>nkíndè</i>	[nk̀índè]	'die'
	b.	<i>nkè</i>	[nkè]	'dog'
		<i>nsì:<sup>n</sup></i>	[ns̀ì: <sup>n</sup> ]	'sweet' (as modifying adjective)
		<i>nsà bó-Ø</i>	[ns̀àbó]	'it is sweet'

When a *NCv* noun like *ntá* or *nkè* gets a {HL} tone overlay as possessed noun, I hear the result as *NCv̂* with falling tone.

(xx2)	a.	<i>mbé</i>	<i>ntá</i> <sub>HL</sub>	person
		1PIP		
				'our person (our guy)'
	b.	<i>mbé</i>	<i>nkè</i> <sub>HL</sub>	dog
		1PIP		
				'our dog'

However, I sometimes hear the possessed form as [n̂Cv̂], especially after a L-tone (and final words in nonpronominal NPs are {L}-toned as possessors). This suggests that the initial nasal is at least sometimes treated as syllabic for purposes of expressing tone overlays. An example is 'dog' in (xx3a), which can

have the pitch peak on the nasal in the unsuffixed singular, though the timing of this peak is probably variable. In the suffixed plural, I hear the pitch peak on the *ɛ*.

- (xx3) *[mbé ntà]* *ɲkè / ɲké-gè*  
 [1PIP <sup>HL</sup>person<sup>L</sup>] <sup>HL</sup>dog / <sup>HL</sup>dog-Pl  
 'our guy's dog(s)'

Initial *Cw* clusters occur primarily in monosyllabic stems. The few known unsegmentable stems of two or more syllables with initial *Cw*, are listed in (xx4). In bisyllabics, *Cw* is attested only before {*a ɛ*}. Comparable stems with +ATR vowel *e* are pronounced *Coe*, with no desyllabification of the *o*. This contrasts with structurally similar sequences in monosyllabics, like *gwé*: 'go out', arguably from /*goe*/ (see below), whose *w* is clearly nonsyllabic.

- (xx4) Bisyllabic noun/adjective stems with *Cwv* or *Coe* onset

- a. *Cwa, Cwɛ*  
*nwá:gá* [nwá:gá] 'hot', cf. verb *nú:gè* 'warm up'  
*dwé:rè* [dwé:rè] 'tied bundle'
- b. *Coe*  
*dóélé* [dóélé] 'ball, globe'  
*nòè-rè* [nòè:rè] 'sleep(n)', variant *nò:-rè*, cf. verb *nó:yè* 'sleep'

The vowel after an initial *Cw* cluster is unrounded {*i e ɛ a*} in all known examples. Attested initial *Cw* clusters are {*dw tw jw gw kw sw nw*}, i.e. *w* following a nonlabial obstruent or *n*. That *nw* is somewhat marginal is suggested by the variable pronunciation of *nwè*: ~ *nè*: 'hand' and by the contrast between perfectives *né*: 'drink' and *nwé*: 'sing' or 'go in'. The absence of *Cw* clusters with *C* a palatal {*y ɲ*} is motivated; there are *Cv*: verbs beginning in these consonants, none of which allows the *Cw* cluster. On the other hand, the absence of {*pw bw fw*} and that of {*lw*} could possibly be accidental, as there are no *Cv*: verbs with initial labial or *l*. Initial *ww* clusters can occur with *wv*: verbs in the relevant vocalism stems, but may be confined to careful pronunciations.

For nouns, see the list of monosyllabic stems (including *Cwv*:) in (xx1a) in §3.1.1 above. The absence of *Cwi* in nouns may be accidental. For modifying adjectives, only *nwá:gá* 'hot' can be cited; there are very few monosyllabic adjectives so the infrequency of *Cw* is not surprising (§4.5.1). There are no *Cw*-

initial stems among the small inventory of numerals, few of which are monosyllabic.

For verbs, initial *Cw* occurs in certain vocalism stems (§3.3.6) of some *Cv*: (bimoraic monosyllabic) verbs. The relevant vocalism stems are those with a following unrounded vowel {*a e e i*}, namely the E- and A-stems of some +ATR *Cv*: verbs, and the E-, A/O-, and A-stems of several -ATR *Cv*: stems. Vocalism stems with {*u o o*} as the nucleus lack the *w*. For example, *gwé*: 'go out' has vocalism stems *go*:, *guy*, *gwa*:, and *gwe*:. Lists of monosyllabic verbs including their vocalism stems are in (xx1) in §10.1.2.2.

The phonological status of initial *Cw* clusters is problematic. In view of the alternations between e.g. vocalism stems *gwe*: and *go*: for 'go out' in verbal morphology, we must consider the possibility that *gwe*: is derived from /*goe*/, with the *o* desyllabifying to *w* and its moraic value transferred to the nuclear *e*. Likewise, given the alternation of *dwe*: and *do*: for 'pound', we would derive *dwe*: from /*dœ*/. Since the vocalism stems for verbs primarily involve changes in the stem-final vowel, such an analysis would explain the strong association of *Cw* with monosyllabic stems; we would simply argue that in the case of *Cv*: stems the shift to *e* or *ε* affects the final mora. Moreover, the pronunciation of *Cw* before *ε*, as in *dwe*:, is [Cɔ̃], i.e. with the "w" more open than the transcription *dwe*: suggests.

I am sympathetic to this desyllabification analysis, but there is some reason to believe that the desyllabified /ɔ̃/ and /õ/ merge as phonemic /ũ/, and acquire their phonetic form by harmonizing with the ATR value of the following vowel. There is no surface opposition of [Cɔ̃a] to [Cɔ̃a], or of [Cɔ̃i] to [Cɔ̃i], though such oppositions might be expected in a desyllabification model.

Moreover, monosyllabic verbs of the relevant types have an interesting 3Pl subject perfective form. From (perfective) *gwé*: 'come out' and *dwé*: 'pound', 3Pl subject perfective forms are *gúy-yè* and *dúy-yè*. If we derive *gúy-yè* 'they went out' from /*góé-yè*/, parallel to 3Sg subject *gwé*:-Ø 'he/she/it went out' from /*góé*-Ø/, the desyllabification of *e* and its fusion into geminate *yy* should have resulted in #*góy-yè*. Likewise we should have gotten #*dóy-yè*. The attested *gúy-yè* and *dúy-yè* suggest more complex derivations, first with /*góé*-/ becoming /*gue*-/ and /*dœ*-/ becoming /*due*-/, then with a resyllabification as the *e* or *ε* fuses with the suffixal *y* and the /u/ (or /w/) becomes the syllabic nucleus, resulting in *gúy-yè* and *dúy-yè*.

### 3.2.8.2 Medial geminated *CC* clusters

Stem-internal geminate clusters are uncommon, and are probably confined to loanwords (geminate are common in Fulfulde) and to stems that have undergone syncope of a short high vowel. An example of each attested cluster is

in (xx1). If no stem-internal example is available, a stem-suffix boundary cluster is given if attested.

(xx1)	<i>bb</i>	—	
	<i>cc</i>	<i>fěccèré</i>	'half' (< Fulfulde)
	<i>dd</i>	<i>púddi</i>	'henna' (< Fulfulde)
	<i>ff</i>	—	
	<i>gg</i>	<i>jùggâl</i>	'hitching post' (< Fulfulde)
	<i>jj</i>	<i>èjjè</i>	'Dogon (person)'
	<i>kk</i>	<i>júkkì</i>	'fine (penalty)' (regional)
	<i>ll</i>	<i>sátállà</i>	'kettle' (regional)
	<i>mm</i>	<i>kàmmi</i>	'hard, solid'
	<i>nn</i>	<i>àljénnè</i>	'paradise' (regional, < Arabic)
	<i>ɲɲ</i>	<i>bàɲ-ɲà</i>	'size, dimensions' (§4.2.7)
	<i>ŋŋ</i>	—	
	<i>pp</i>	—	
	<i>rr</i>	<i>bárrá:dà</i>	'tea-kettle' (regional, < Arabic)
	<i>ss</i>	<i>àssî:l</i>	'Saturday' (< Arabic)
	<i>tt</i>	<i>sítti</i>	'sulfer' (< Fulfulde)
	<i>ww</i>	—	
	<i>w<sup>n</sup>w<sup>n</sup></i>	—	
	<i>yy</i>	<i>dòyyà:lò</i>	'lunch'
	<i>y<sup>n</sup>y<sup>n</sup></i>	<i>níy<sup>n</sup>-y<sup>n</sup>è</i>	'they drank' (§10.2.1.1, stem <i>né:</i> )

### 3.2.8.3 Medial nongeminate *CC* clusters

Obstruents (stops, affricates, fricatives) do not occur as first members of nongeminate clusters. This leaves sonorant-obstruent and sonorant-sonorant combinations.

The only common stem-internal medial clusters are {*mb nd nj ŋg*}, i.e. nasal plus homorganic voiced stop/affricate. Most *CvNCv* verb stems with such clusters are treated as prosodically light like *CvCv* verbs, while other *CvCCv* verbs are prosodically heavy like trisyllabics. This distinction is seen, for example, in the tones of the 3Sg perfective, e.g. *búndé-Ø* 'he/she hit' versus *wélgè-Ø* 'he/she dispossessed' (§10.2.1.1).

Other *CC* clusters are generally either limited to loanwords, or occur only at stem-suffix or compound boundaries, usually as the result of syncope. Boundary clusters C-y is very common in mediopassive derivatives (including frozen ones), due to syncope. In the lists below, if a stem-internal example is known it is given. If not, if an example involving a morpheme boundary is known it is

given. Failing that, — is shown. Stem- and word-initial *Cw* clusters are not included.

(xx1) Nasal plus consonant

<i>mb</i>	<i>jémbé</i>	'winnow by shaking'
<i>nd</i>	<i>ándè</i>	'go'
<i>ɲj</i>	<i>ínjè</i>	'stand, stop'
<i>ɲg</i>	<i>jóɲgé</i>	'treat (medically)'
<i>mp</i>	<i>gìrè-m-pûl</i>	'face'
<i>nt</i>	<i>ɲìntí:rè</i>	'couscous steamer'
<i>nc</i>	—	
<i>ɲk</i>	<i>kúɲkù</i>	'problem'
<i>ns</i>	<i>ànànsá:lá</i>	'white person' (< regional as e.g. <i>anasa:ra</i> , < Arabic 'Nazarene')
<i>mj</i>	<i>kámjè</i>	'squeeze'
<i>my</i>	<i>úm-yè</i>	'endure'
<i>ny</i>	<i>ányà</i>	'intention, plan' (< Arabic)
<i>ɲy</i>	—	
<i>ɲy</i>	—	
<i>mw</i>	—	
<i>nw</i>	—	
<i>ɲw</i>	—	
<i>ɲw</i>	—	
<i>ml</i>	<i>kúm-lè</i>	'open (eyes)'
<i>nl</i>	—	
<i>ɲl</i>	—	
<i>ɲl</i>	—	
<i>mr</i>	—	
<i>nr</i>	—	
<i>ɲr</i>	—	
<i>ɲr</i>	—	

(xx2) Liquid plus consonant

<i>lb</i>	<i>kálbà</i>	'act of entrusting'
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<i>ld</i>	<i>íldè</i>	'forget'
<i>lj</i>	<i>àljénnè</i>	'paradise'
<i>lg</i>	<i>wélgè</i>	'dispossess'
<i>lp</i>	—	
<i>lt</i>	—	
<i>lc</i>	—	
<i>lk</i>	—	
<i>ls</i>	—	
<i>lm</i>	<i>àlmà:m</i>	'imam' (regional, < Arabic)
<i>ln</i>	—	
<i>lp</i>	—	
<i>lŋ</i>	—	
<i>ly</i>	<i>gályé</i>	'spices'
<i>lw</i>	<i>ǎlwà</i>	'soft candy'
<i>lr</i>	—	
<i>rb</i>	—	
<i>rd</i>	<i>yòrdè</i>	'black'
<i>rj</i>	<i>kùrjù</i>	'rough'
<i>rg</i>	<i>bárgè</i>	'help'
<i>rp</i>	—	
<i>rt</i>	—	
<i>rc</i>	—	
<i>rk</i>	—	
<i>rs</i>	—	
<i>rm</i>	<i>bármà</i>	'cooking pot' (< Bambara)
<i>rn</i>	<i>àrnà</i>	'world of the living' (regional as e.g. <i>adunya</i> , < Arabic)
<i>rp</i>	—	
<i>rŋ</i>	—	
<i>ry</i>	<i>ír-yé</i>	'heal'
<i>rw</i>	—	
<i>rl</i>	<i>wér-lè</i>	'unravel (sth)'

(xx3) Semivowel plus consonant

<i>yb</i>	<i>káybè</i>	'watch over' (< Fulfulde)
<i>yd</i>	—	
<i>yj</i>	—	
<i>yg</i>	<i>káy-gè</i>	'cut an incision in' (§9.2.2)
<i>yp</i>	—	
<i>yt</i>	<i>mànà tà-y-tà-yí-yè</i>	'slingshot' (iterated, §5.1.10)
<i>yc</i>	—	
<i>yk</i>	—	
<i>ys</i>	—	
<i>ym</i>	<i>áymà</i>	'Friday' (regional as e.g. <i>aljuma</i> , < Arabic)
<i>yn</i>	—	
<i>yn</i>	—	
<i>yn</i>	—	
<i>yl</i>	<i>sáy-lè</i>	'undo (braids)'
<i>yw</i>	—	
<i>yr</i>	<i>báyrè</i>	'add, increase'
<i>wb</i>	—	
<i>wd</i>	<i>bá:wdè</i>	'means, resources' (< Fulfulde)
<i>wj</i>	—	
<i>wg</i>	—	
<i>wp</i>	—	
<i>wt</i>	—	
<i>wc</i>	—	
<i>wk</i>	—	
<i>wz</i>	—	
<i>ws</i>	—	
<i>wm</i>	—	
<i>wn</i>	<i>háwnì kán</i>	'amaze (sb)'
<i>wn</i>	—	
<i>wn</i>	—	
<i>wy</i>	<i>yáw-yáw</i>	'lightweight'
<i>wr</i>	<i>já:wrè</i>	'harvest pile'
<i>wl</i>	<i>sáwlè</i>	'(rain) stop'

### 3.2.8.4 Medial triple *CCC* clusters

The few *CCC* clusters within stems consist of a sonorant (semivowel or liquid) plus a homorganic nasal/voiced-stop cluster. The attested examples are in (xx1). A reasonable hypothesis is that many or all of these examples result from syncope of a short high vowel after the initial sonorant.

(xx1)	<i>yŋg</i>	<i>jòyŋgà</i>	'wind scorpion (solifuge)'
	<i>ynd</i>	<i>kóyndé</i>	'rock hyrax'
		<i>sòyndà</i>	'sand'
		<i>táyndè</i>	'spread (sth) out'
	<i>lmb</i>	<i>gùlmbò</i>	'korrigum (antelope)'
		<i>pélmbé</i>	'Wednesday'
		<i>sìlmbè</i>	'folding knife'
	<i>lŋg</i>	<i>bèlŋgè</i>	'fodder' (with frozen suffix, §4.1.1.2)

### 3.2.8.5 Final *CC* clusters

No stem- or word-final *CC* clusters have been observed.

## 3.3 Vowels

The vowels are given in (xx1). Nasalized vowels are uncommon.

(xx1)	oral		nasalized	
	short	long	short	long
	<i>u</i>	<i>u:</i>	—	<i>u:<sup>n</sup></i>
	<i>o</i>	<i>o:</i>	—	—
	<i>ɔ</i>	<i>ɔ:</i>	<i>ɔ<sup>n</sup></i>	<i>ɔ:<sup>n</sup></i>
	<i>a</i>	<i>a:</i>	<i>a<sup>n</sup></i>	<i>a:<sup>n</sup></i>
	<i>ɛ</i>	<i>ɛ:</i>	<i>ɛ<sup>n</sup></i>	<i>ɛ:<sup>n</sup></i>
	<i>e</i>	<i>e:</i>	—	—
	<i>i</i>	<i>i:</i>	<i>i<sup>n</sup></i>	<i>i:<sup>n</sup></i>

### 3.3.1 Oral vowels

All oral short and long vowels are common. Monosyllabic noun, verb, adjective, and numeral stems normally have two moras, so *Cv:* (along with *CvC*) are OK while *Cv* is rare (*nɛ* 'say', §10.1.2.1). There are a handful of *NCv* stems where the nasal appears to license the short vowel (*ntá* 'person', *ɲkɛ̀* 'dog', *ɲké* 'be used up').

Within nonmonosyllabic stems, long vowels are most common in stem-initial syllables, as in *tà:ɲgà* 'one', *dí:rɔ́* 'last, final', and *tá:rè* 'show'. However, stems other than verbs can have medial long vowels, e.g. *kùlè:nì* 'six' and loanwords like *álbárká:jè* 'bdellium (resin incense)'.

### 3.3.2 Nasalized vowels

Nasalized vowels are quite rare, and no +ATR nasalized vowels are known (except for reduced forms of combinations with *w<sup>n</sup>* postposition). Long nasalized vowels are attested in a few monosyllabic nouns (xx1), and in one verb, *twɛ́:n* 'step on' or (God) create' (O-stem *twɛ́:n*).

(xx1)	<i>i:<sup>n</sup></i>	<i>sí:<sup>n</sup></i>	'grub, larva'
	<i>(e:<sup>n</sup>)</i>	—	
	<i>ɛ:<sup>n</sup></i>	<i>gwɛ̀:<sup>n</sup></i>	'sedge'
	<i>a:<sup>n</sup></i>	<i>gwà:<sup>n</sup></i>	'scrub acacia'
	<i>ɔ:<sup>n</sup></i>	<i>gɔ̀:<sup>n</sup></i>	'chest (body)'
	<i>(o:<sup>n</sup>)</i>	—	
	<i>u:<sup>n</sup></i>	<i>pú:<sup>n</sup></i>	'white-faced whistling duck'

Short nasalized vowels are even less common (xx2). The absence of *u<sup>n</sup>* may be accidental.

(xx2)	<i>i<sup>n</sup></i>	<i>ì<sup>n</sup>hí<sup>n</sup></i>	'here's ___' (§4.4.3)
	<i>(e<sup>n</sup>)</i>	—	
	<i>ɛ<sup>n</sup></i>	<i>ɛ̃<sup>n</sup></i>	existential particle (§11.2.2.1)
	<i>a<sup>n</sup></i>	<i>wà<sup>n</sup> ~ wàw<sup>n</sup></i>	'Nile monitor lizard'
		<i>pùgùjá<sup>n</sup>-pùgùjá<sup>n</sup></i>	'lung'
	<i>ɔ<sup>n</sup></i>	<i>ʒ<sup>n</sup>ʔɔ̃<sup>n</sup></i>	'no!'
	<i>(o<sup>n</sup>)</i>	—	
	<i>u<sup>n</sup></i>	—	

### 3.3.3 Initial vowels

Many stems begin with a vowel. In effect, the initial *C* (i.e. onset) position of an initial syllable may be empty. Examples are *ábé* 'accept', *ónjé* 'become skinny', *ébá* 'market', *éjé* 'become clean', *ínjè* 'sift', *óy* 'waterjar', and *úgújè* 'shurn',

That these stems begin with a vowel, rather than with a glottal stop, is shown by Word-initial *y/p*-Epenthesis (§3.4.4.1), by which an epenthetic initial consonant is added when the stem follows a 1st/2nd person proclitic, either in subject function (before a predicate) or possessor function (before a noun). Thus *ábé-Ø* 'he/she accepted' but *á y-àbè* 'you-Sg accepted', and *imbé-Ø* 'he caught' but *á p-imbè* 'you-Sg caught'. Penange contrasts with Bunoge, where "vowel-initial" stems are always glottal-initial.

However, in reduplicated stative forms like *ì íngà-Ø* [ìʔíngà] 'he/she is standing' (§10.4.1.1), a phonetic glottal stop is heard.

### 3.3.4 Stem-final vowels

All oral vowel qualities occur stem- and word-finally in nouns, adjectives, and numerals.

For verbs, the situation is complicated by extensive ablaut (vocalism stems), which particularly affect the final vowel. However, all oral vowel qualities are attested stem-finally with one verb class or another.

In nonmonosyllabic noun stems (and compound finals), final long vowels are uncommon. However, note (xx1).

(xx1) *pèrègèllé:* 'namaqua dove (*Oena*)'

### 3.3.5 Vocalic harmony

Advanced tongue root (ATR) distinguishes two sets of mid-height vowels, +ATR {*e o*} and -ATR {*ɛ ɔ*}. To some extent these form harmonic sets, though there are some mixed-ATR words (see below). High vowels {*i u*} are extraharmonic; they easily combine in a stem with vowels of either ATR category. Low vowel *a* generally patterns as +ATR, but cf. comments below.

Among nouns, exceptions of ATR harmony are originally -ATR nouns that contain a frozen inanimate singular classifying suffix *-ɲge* or *-ge*, which is no longer readily segmentable (§4.1.1.2). Another mixed-ATR noun is *kó:ndè* 'cotton' (cf. Mombo *kó:ndì*). Plural *-gè* also fails to harmonize with stems.

ATR is an important feature in verb-stem morphonology. All verbs are lexically +ATR or -ATR, though all known stems in the minority final-high-

vowel class of verbs are +ATR. The majority final-nonhigh-vowel class clearly distinguishes +ATR from -ATR in some vocalism stems, including the perfective, which ends in *e* or *ɛ* (E-stem, or more generally E/I-stem) depending on the verb. One vocalism stem, the A-stem, completely erases lexical ATR, since the final vowel becomes *a* and all nonfinal vowels must be +ATR or +ATR-compatible, i.e. {*i u e o a*} and not {*ɛ ɔ*}. Another stem, the A/O-stem, also requires +ATR or +ATR-compatible vocalism, but distinguishes underlying +ATR verbs (stem-final *o*) from underlying -ATR verbs (stem-final *a*).

The association of *a* with +ATR is not only seen in the presence of stem-final *a* in these +ATR stems, but also in the fact that a verb with *a* in one or more nonfinal syllables is always +ATR. For example, *nálé* 'give birth' and all other *CaCv* verbs are +ATR (perfective always ends in *e* rather than *ɛ*).

However, my assistant does allow *a* to co-occur with -ATR {*ɛ ɔ*} within stems. For example, the imperative (A/O-stem) of *sógé* 'buy' is heard as *sógá* in careful speech of my assistant. I have sometimes transcribed it as *sógá*, but when I pronounce it this way my assistant corrects me. On the other hand, the stative (A-stem) from *génjè* 'become tilted' is consistently *génjà* 'be tilted' (§10.4.1.1) rather than #*génjà*. Another clear case of ATR alternation is adjective *dóngá* 'heavy' versus verb *dón-jè* 'become heavy', where even the E-stem points to lexical +ATR.

### 3.3.6 Vocalism stems for verbs

There are two main classes of verbs, final-nonhigh-vowel and final-high-vowel. The verbs 'come' and 'bring' have features of both classes. Final-nonhigh-vowel verbs are the majority, and distinguish lexically -ATR and +ATR subtypes. All known final-high-vowel verbs, as well as 'come' and 'bring', are +ATR. Both final-nonhigh-vowel and final-high-vowel verbs have a subtype characterized by a nonfinal *a*-vowel.

Each verb has several **vocalism stems** characterized by a stem-final vowel, complemented in some cases by a shift to +ATR in nonfinal syllables. Each indicative (aspect-negation) and modal category requires a particular vocalism stem, whether or not the category is also expressed by a suffix or auxiliary. The imperative and the perfective (positive) are both unsuffixed but occur in different vocalism stems.

Inflectional categories associated with the various vocalism stems of **final-nonhigh-vowel** verbs are given in (xx1).

(xx1) Distribution of vocalism stems (final-nonhigh-vowel verbs)

O-stem	imperfective positive (§10.2.2.1) and negative (§10.2.3.3); progressive positive (§10.2.2.3) and negative (§10.2.3.4)
A/O-stem	singular-addressee imperative (§10.7.1.1); experiential perfect positive (§10.2.1.3) and negative (§10.2.3.2); before causative <i>-mì</i> (§9.2.1)
A-stem	3Pl perfective negative portmanteau (§§10.2.3.1), plural-addressee imperative (§10.7.1.1); prohibitive (§10.7.1.2); hortative negative (§10.7.2.2); <i>-gè</i> causative (§9.2.2); derived stative (§10.4.1.1)
E-stem	perfective positive (§10.2.1.1) and negative (§10.2.3.1); hortative (§10.7.2.1); verbal noun (§4.2.3)
I-stem	before <i>-yè</i> in third-person hortative (§10.7.3.1); before <i>-yè</i> ~ <i>-yê</i> in the 3Pl subject perfective (§10.2.1.1)
U-stem	for certain stems before causative <i>-gè</i> (§9.2.2); agentive nominalizations (§5.1.4)

The labels refer to the stem-final vowel possibilities. They are summarized in more detail in (xx2).

(xx2) Stem-final vowels, final-nonhigh-vowel verbs

O-stem	{ <i>o</i> <i>ɔ</i> } depending on ATR-harmonic class of stem
A/O-stem	<i>a</i> from +ATR stems with nonfinal <i>a</i> , <i>o</i> from +ATR stems with nonfinal nonlow vowel, <i>a</i> from -ATR stems
A-stem	<i>a</i> for all stems
E-stem	{ <i>e</i> <i>ɛ</i> } depending on ATR-harmonic class for final-nonhigh-vowel stems
I-stem	<i>i</i> (occurs only before suffix-initial <i>y</i> )
U-stem	<i>u</i>

In addition, the A-stem (often) and the U-stem require that vowels in nonfinal syllables be **+ATR-compatible**. The effect is that -ATR {*ɛ ɔ*} in such syllables shift to {*e o*}. The vowels {*i u a*} are already +ATR-compatible and are not shifted in nonfinal syllables. The E-stem, the O-stem, and the I-stem do not impose +ATR compatibility on nonfinal vowels. For my assistant, the A/O-stem likewise preserves ATR values in nonfinal vowels, though in

, and not reliably the A/O-stem)

Alternations for representative final-nonhigh-vowel verbs are shown in (xx3). Tones are omitted since they are determined by separate rules.

(xx3) Sample final-nonhigh-vowel vocalism-stem paradigms

O	A/O	A	E	I	U	gloss
a. -ATR final-nonhigh-vowel stems						
<i>monosyllabic, C onset throughout</i>						
<i>ɲɔ:</i>	<i>ɲa:</i>	<i>ɲa:</i>	<i>ɲɛ:</i>	<i>ɲiy<sup>n</sup></i>	<i>ɲi:</i>	'eat (meal)'
<i>monosyllabic, Cw onset in some stems</i>						
<i>dɔ:</i>	<i>dwa:</i>	<i>dwa:</i>	<i>dwɛ:</i>	<i>duy</i>	<i>du:</i>	'pound'
<i>nonmonosyllabic, nonfinal vowels are nonlow</i>						
<i>yɛbɔ</i>	<i>yɛba</i>	<i>yɛba</i>	<i>yɛbɛ</i>	<i>yɛbi</i>	<i>yɛbu</i>	'dance'
<i>sɔgɔ</i>	<i>sɔga</i>	<i>sɔga</i>	<i>sɔgɛ</i>	<i>sɔgi</i>	<i>sɔgu</i>	'buy'
<i>nɔlɔ</i>	<i>nɔla</i>	<i>nɔla</i>	<i>nɔgɛ</i>	<i>nɔgi</i>	—	'crumple'
<i>giyɔ</i>	<i>giya</i>	<i>giya</i>	<i>giyɛ</i>	<i>giy(i)</i>	<i>giy</i>	'kill'
<i>dugɔ</i>	<i>duga</i>	<i>duga</i>	<i>dugɛ</i>	<i>dugi</i>	<i>dugu</i>	'insult'
[note: A/O-stems <i>yɛba</i> , <i>sɔga</i> , and <i>nɔla</i> have sometimes been transcribed as <i>yeba</i> , <i>soga</i> , <i>nola</i> ]						
b. +ATR final-nonhigh-vowel stems						
<i>monosyllabic, Cw onset in some stems</i>						
<i>jo:</i>	<i>jo:</i>	<i>jwa:</i>	<i>jwe:</i>	<i>juy</i>	—	'fill up'
<i>nonmonosyllabic, nonfinal nonlow vowel, final o in A/O-stem</i>						
<i>guyo</i>	<i>guyo</i>	<i>guya</i>	<i>guyɛ</i>	<i>guy(i)</i>	—	'steal'
[agentive <i>gùy<sup>n</sup></i> 'thief' is irregularly nasalized]						
<i>sigo</i>	<i>sigo</i>	<i>siga</i>	<i>sige</i>	<i>sigi</i>	<i>sigu</i>	'go down'
<i>yelo</i>	<i>yelo</i>	<i>yela</i>	<i>yele</i>	<i>yeli</i>	<i>yelu</i>	'drape (sth, over sth)'
<i>nonmonosyllabic, nonfinal a, final a in A/O-stem</i>						
<i>nalo</i>	<i>nala</i>	<i>nala</i>	<i>nale</i>	<i>nali</i>	<i>nalu</i>	'give birth'

**Final-high-vowel** verbs, a small minority (except for causative derivatives), have a rather different system. The vocalism stems and their distributions are summarized in (xx4). These verbs are notable for avoiding stem-final mid-



height vowels {*e* *ɛ* *o* *ɔ*}. The status of the O/A-stem for these verbs is dubious, since the relevant forms are *CaCa*, which could be either the A-stem or the A/O-stem, and whose first (lexical) *a* requires stem-final *a* rather than *u*.

(xx4) Distribution of vocalism stems (final-nonhigh-vowel verbs)

O/A-stem	for <i>CaCv</i> stems, final <i>a</i> as in <i>CaCa</i> - where other verbs of this class have the U-stem: singular-addressee imperative (§10.7.1.1), experiential perfect (§10.2.1.3), before causative <i>-mĩ</i> (§9.2.1) [note: <i>CaCa</i> - could also be attributed to the A-stem]
A-stem	3Pl perfective negative portmanteau (§§10.2.3.1); plural-addressee imperative (§10.7.1.1); prohibitive (§10.7.1.2); hortative negative (§10.7.2.2)
I-stem	perfective positive (§10.2.1.1) and negative (§10.2.3.1); verbal noun (§4.2.3); hortative (§10.7.2.1); third-person hortative (§10.7.3.1)
U-stem	imperfective positive (§10.2.2.1) and negative (§10.2.3.3); progressive positive (§10.2.2.3); singular-addressee imperative except for stems with nonfinal <i>a</i> (§10.7.1.1); agentives (§5.1.4); experiential perfect positive (§10.2.1.3) and negative (§10.2.3.2); progressive negative (§10.2.3.4); capacitative (§10.5)

The final vowels for final-high-vowel verbs are indicated in (xx5). All known verbs of this class are lexically +ATR.

(xx5) Stem-final vowels, final-nonhigh-vowel verbs

O/A-stem	<i>a</i>	(could be attributed to A-stem)
A-stem	<i>a</i>	
I-stem	<i>i</i>	
U-stem	<i>u</i>	

Vocalism stems for representative final-nonhigh-vowel verbs are shown in (xx6), again with tones omitted. For these verbs the A/O-stem is not shown

since it is not clearly distinct from the A-stem. Word-final short high vowels are often syncopated/apocopated, so the distinction between I-stem and U-stem is difficult to make. I assign a form to the I-stem if the *i* actually appears for at least one verb in this class, and likewise for the U-stem if the *u* appears. Failing that (i.e. when the vowel is always deleted), I assume that the I-stem corresponds to the E-stem of final-nonhigh-vowel verbs, and that the U-stem corresponds to the O-stem of final-nonhigh-vowel verbs.

(xx6) Sample final-high-vowel vocalism-stem paradigms

A	I	U	gloss
a. nonfinal syllable with <i>a</i>			
<i>kana</i>	<i>kan(i)</i>	<i>kan(u)</i>	'do'
<i>ɲaː-ma</i>	<i>ɲaː-mi</i>	<i>ɲaː-mu</i>	'feed' (causative)
b. nonfinal syllable with nonlow vowel			
<i>seːma</i>	<i>seːm(i)</i>	<i>seːmu</i>	'look'
<i>sigo-ma</i>	<i>sigo-mi</i>	<i>sigo-mu</i>	'take down' (causative)

The two verbs 'come' and 'bring' are irregular in the sense of combining some features of final-nonhigh-vowel and final-high-vowel vocalism. In most inflectional categories they follow the pattern of the majority final-nonhigh-vowel verbs. However, their singular-addressee imperatives (which of course are very common) are based on the U-stem, which is regular for the final-high-vowel verbs that do not have nonfinal *a*-vowel: *égù* 'come!', *sóngù* 'bring!'. These are also the only singular imperatives with {HL} tone melody.

I refer jointly to the E-stem of final-nonhigh-vowel verbs and the I-stem of final-high-vowel verbs as the **E/I-stem**, where the two occur in the same inflectional categories (perfective positive and negative, hortative, verbal noun). I likewise speak of a complementary **O/U-stem** combining the O-stem of final-nonhigh-vowel verbs with the U-stem of final-high-vowel verbs, with reference to categories where they cooccur (imperfective positive and negative, progressive positive and negative, capacitative). In Penange, the association of front vowels with perfectivity and of back rounded vowels with imperfectivity is more thorough-going than in most other Dogon languages.

### 3.4 Segmental phonological rules

#### 3.4.1 Trans-syllabic consonantal processes

##### 3.4.1.1 Nasalization-Spreading uncommon

There is no productive process of rightward nasalization spreading of the (mainly eastern) Dogon type where e.g. *Nvyv*, *Nvwv*, and *Nvr̥v* sequences are realized as *Nvy<sup>n</sup>v*, *Nvw<sup>n</sup>v*, and *Nvr̥<sup>n</sup>v*. Nasalized *r<sup>n</sup>* does not exist, and no nasalization of *y* is observed in e.g. *nò nóyà-Ø* 'he/she is asleep'.

However, an idiosyncratic case of nasalization spreading does occur, in combination with a vowel shift from *u* to *i*, in the 3Pl perfective of *Nv*: and *Nv* verbs with initial nasal. Compare e.g. *dúy-yè* 'they pounded' (3Sg *dwé:*) with *ɲíy<sup>n</sup>-y<sup>n</sup>è* 'they ate' (3Sg *ɲé:*), *ɲíy<sup>n</sup>-y<sup>n</sup>è* 'they drank' (3Sg *né:*) or 'they said' (3Sg *né*), and *núy<sup>n</sup>-y<sup>n</sup>nè* 'they sang' or 'they went in' (3Sg *nwé:*).

#### 3.4.2 Nonharmonic vocalic processes

##### 3.4.2.1 V-lengthening before nasal-stop clusters absent

No pattern of lengthening vowels in contexts like *C\_ndv* has been observed.

##### 3.4.2.2 Syncope

A short high vowel in the medial syllable of *CvC\_Cv* (a metrically weak position, §3.xxx) can be syncopated if the resulting *CC* cluster is, or can easily be made, allowable. In some words, alternative pronunciations have been heard (xx1). When the potentially syncopated vowel bears a tone distinct from that of the preceding and following syllables, syncope tends not to occur. In (xx1b), this leads to a difference between singular and plural, since in the plural the H-tone of *sùɲúnè* spreads to the stem-final, and there is no obstacle to syncope in the resulting *sùɲúné-gè*.

- (xx1) a. *ɲúné* ~ *ɲné* 'frog'  
*tɲúné* ~ *tɲné* 'duck'
- b. *sùɲúnè* 'small ant(s)' (Sg)  
*sùɲúné-gè* 'small ants' (Pl)

### 3.4.2.3 Apocope

Final short {*i u*} are allowable word- or stem-finally even after an unclustered sonorant, but bisyllabics show a tendency to apocope (delete) the vowel. For a discussion of apparent CvL verb stems with L a sonorant, see §10.1.2.4. For bisyllabic verb stems with final high vowel, see (xx4) in §10.1.2.7.

### 3.4.3 Local consonant sequence rules

#### 3.4.3.1 Semivowel assimilation

A segment that is heard as *w*<sup>n</sup> (especially prepausally) occurs as a locative postposition (§8.2.3.2) and as the accusative case-marker (§6.7). When followed by a C-initial word this segment generally surfaces as a nasal homorganic to the following C. It may also appear in the form of nasalization of the preceding vowel, or it may be more or less inaudible.

#### 3.4.3.2 *b* ~ *w* alternation

An irregular *b* ~ *w* alternation occurs in the imperfective paradigm, which has forms like *sémó ñ bò* 'I slaughter' and *sémò bò-Ø* 'he/she slaughters' but second person forms like *sémá-á wò* 'you-Sg slaughter' (§10.2.2.1). Here *bò* ~ *wò* is a partially lenited form related to *bò-* 'be'.

#### 3.4.3.3 *r* → *d* after alveolar

Alternations of this type are uncommon, but transitive derivational suffix *-rè-* ~ *-rê* has variants *-dê* and *-ndê* that are suggestive of a hardening process (§9.4.1)

### 3.4.4 Vowel-vowel and vowel-semivowel sequences

The stem-initial syllabic shapes transcribed as *Cwv* (*v* = some unrounded vowel) might be analysed as containing vowel clusters like *Cov* and *Cɔv*, with the {*o ɔ*} desyllabifying to glides. The phonology is most amenable to analysis for monosyllabic verbs, which have ablaut alternations, see §10.1.2.2 and §3.3.6. In bisyllabic words, initial-syllable +ATR or escapes this desyllabification and is pronounced with approximately equal duration for the two vocalic segments. The two known examples of this are *dóélé* 'ball, globe'

and *nòè-rè* 'sleep(n)' (§3.2.8.1). There is no hiatus or prosodic break between the adjacent vocalic segments.

There are no cases in Penange of *ae* or *ae* sequences.

#### 3.4.4.1 Word-initial *y/n*-Epenthesis

An epenthetic *y* or *n* is inserted before a stem-initial vowel immediately preceded by a 1st/2nd person pronominal (1Sg *ŋ*, 1Pl *ñ*, 2Sg *á*, 2Pl *à*). The pronominal may be subject of a verb, or possessor of a noun. Especially after the 2nd person pronominals, this epenthesis obviates the need for VV-Contraction. The choice between *n* and *y* correlates almost absolutely with presence/absence of a nasal consonant after the stem-initial vowel.

It is difficult to hear the distinction between *y* and *n* after *ŋ*, but the distinction is clear after *a*. Examples involving verbs are in (xx1).

#### (xx1) V-initial verbs with *y/n*-Epenthesis

gloss	perfective (or stative)	
	3Sg	2Sg
a. with <i>y</i>		
'accept'	<i>ábé-Ø</i>	<i>á y-àbè</i>
'suckle'	<i>aré-Ø</i>	<i>á y-àrè</i>
'forget'	<i>íldè-Ø</i>	<i>á y-íldè</i>
'come'	<i>égé-Ø</i>	<i>á y-ègè</i>
'go back'	<i>újúlè-Ø</i>	<i>á y-ùjúlè</i>
'ripen'	<i>úlgè-Ø</i>	<i>á y-úlgè</i>
'heave'	<i>úbé-Ø</i>	<i>á y-ùbè</i>
'suck'	<i>úré-Ø</i>	<i>á y-ùrè</i>
b. with <i>n</i>		
vowel lengthened		
'go'	<i>ándè-Ø</i>	<i>á n-ǎ:ndè</i>
other		
'stand/stop'	<i>ínjè-Ø</i>	<i>á n-ínjè</i>
'catch'	<i>ímbé-Ø</i>	<i>á n-ímbè</i>
'become skinny'	<i>ónjé-Ø</i>	<i>á n-ònjè</i>
'become smooth'	<i>ónán-gè</i>	<i>á n-ònán-gè</i>
'become wet'	<i>émbé</i>	<i>á n-èmbè</i>
'sprinkle'	<i>ámí-Ø</i>	<i>á n-àmì</i>
'sift'	<i>ínjè-Ø</i>	<i>á n-ínjè</i>
'become skinny'	<i>ónjé-Ø</i>	<i>á n-ònjè</i>

The data in (xx1) show that there is no reliable correlation between the quality of the verb-initial vowel and the choice between *y* and *j*. The choice seems to be lexical.

The idiosyncratic lengthening in *á j-ǎ:ndè* 'you-Sg went' from *ándè* 'go' does not apply to the corresponding causative *ándá-mì* 'cause to go' (also 'toss'), hence *á j-ándá-mì* 'you-Sg caused to go'.

Because of the epenthetic *j*-, 1st/2nd person subject forms of *ǎnjé* 'become skinny' are in danger of homophony with corresponding forms of *jǎnjé* 'become thin', especially because of the semantic similarity, but the two verbs are distinguished even in these forms by tones: *á jǎnjé* 'you-Sg became thin', *á j-ǎnjé* 'you-Sg became skinny'.

The *j* in *jěy<sup>n</sup>* 'know' (1st/2nd person subject form) may also be epenthetic, but synchronic segmentation is opaque.

Examples with nouns are in (xx2). Again, *j*- is associated with stems that begin in *vN*...

(xx2) V-initial nouns with *y/j*-Epenthesis

gloss	unpossessed	2Sg possessor ('your')
a. with <i>y</i>		
'pot'	<i>èjè</i>	<i>á y-èjè</i>
'brick mix'	<i>ǎgɔ́</i>	<i>á y-ǎgɔ́</i>
'road'	<i>òjù</i>	<i>á y-òjù</i>
'cloud'	<i>àlè</i>	<i>á y-àlè</i>
'market'	<i>éba</i>	<i>á y-èba</i>
'disease'	<i>ùrù</i>	<i>á y-ùrù</i>
'star'	<i>ǎjǎgɔ́lǎ</i>	<i>á y-ǎjǎgɔ́lǎ</i>
'medication'	<i>ílé:ngé</i>	<i>à y-ilé:ngé</i>
'rice'	<i>éré:ngé</i>	<i>à y-éré:ngé</i>
'doorway'	<i>ígódón</i>	<i>à y-ìgòdón</i>
'sheep'	<i>àlà̀m(ù)nǎ</i>	<i>à y-àlà̀múnǎ</i>
'breast'	<i>éjjé</i>	<i>à y-ějjé</i>
'peanut'	<i>ǎgùlè</i>	<i>á y-ǎgùlè</i>
'baobab sauce'	<i>ǎrɔ́m</i>	<i>à y-ǎrɔ́m</i>
'health'	<i>àlà̀pè</i>	<i>á y-àlà̀pè</i>
b. with <i>j</i>		
'waterjar'	<i>óy<sup>n</sup></i>	<i>á j-òy<sup>n</sup></i>
'name'	<i>ùn</i>	<i>á j-ùn</i>
'tooth'	<i>ìnì</i>	<i>á j-ìnì</i>
'well(n)'	<i>ǎndɔ́</i>	<i>á j-ǎndɔ́</i>
'milk'	<i>émé:ngé</i>	<i>á j-émé:ngé</i>
'winnowing van'	<i>òngò</i>	<i>á j-òngò</i>

Exceptionally, only *ànànsá:lá* 'white person' and *énjé:ngé* 'sediments' take *y-* in my data where *j-* is expected. Whether the fact that these nouns already have two consecutive *NC* clusters is a factor is unclear.

#### 3.4.4.2 VV-Contraction

Contraction of two vowels is most conspicuous in imperfective verbs. Here 2Sg *á* and 2Pl *à* are positioned between the verb (which appears in the O/U-stem). Compare 3Sg *sémò bò-Ø* 'he/she slaughters' and 1Sg *sémó ñ bò* 'I slaughter' with 2Sg *sémá-á wò* [*sémá:wò*] 'you-Sg slaughter' (§10.2.2.1). The O/U-stem must end in {*ɔ o u*}, and all three of these combine with 2nd person *a* morphemes as [*a:*] (omitting tone).

Similar contractions involving 2nd person *a* occur in the imperfective negative, which also involves the O/U-stem. Compare 3Sg *yèlò:-ndí-Ø* 'he/she doesn't drape' with 2Sg *yèlá-à-l* or variant *yèlá-á-lì* 'you-Sg do not drape'. The imperfective negative also has apparent contractions in 1Sg and 1Pl forms, as in *yèlò-ò-l* 'I do not drape', but here the morphological composition is obscure (§10.2.3.3).

#### 3.4.4.3 Monophthongization (/iy/ to *i:*, /uw/ to *u:*)

It is difficult to find clear examples of monophthongization. In a case like mediopassive *bí-yè* 'lie down', transitive *bí:-rè* 'put to sleep', we can either derive the latter from /*bi-yi-re*/ by syncope and monophthongization, or derive it from /*bi-re*/ by a minor vowel-lengthening process.

### 3.5 Cliticization

There are no second-position clitics of the Wackernagel type. There is no stress or accent system that would clearly distinguish affixes, clitics, and particles, so it is not easy way to recognize phonological clitics.

1st/2nd person subject markers directly precede verbs. They interact tonally with the verb, but in a complex and somewhat abstract way. I transcribe them as proclitics but an analysis as prefixes is also possible.

In the cases of VV-Contraction mentioned in §3.4.4.2 above, e.g. 2Sg *sémá-á wò* [*sémá:wò*] 'you-Sg slaughter', the second person proclitic to the verb (here the auxiliary *wò*) is phonologically rebracketed with the preceding verb, allowing the contraction to occur.

A good case for proclitic status can also be made for existential  $\epsilon^n \sim \grave{\epsilon}^n$ , see §11.2.2.1. It can co-occur with a following 1st/2nd person proclitic.

The 'it is' morpheme =yo (and variants), which occurs in identification predicates, is a good candidate for enclitic status (it is added to NPs, §11.2.1.1). Likewise for its negative counterpart =lā (§11.2.1.2).

In verbal morphology, past =ye is the best candidate for a clitic; see §10.6.1.

### 3.6 Tones

#### 3.6.1 Lexical tone patterns

Stems other than verbs, i.e. nouns, adjectives, and numerals, have lexical tone melodies that are subject to grammatical modifications. Nouns and numerals occur in morphosyntactically bare form, which reveals their lexical melodies. Adjectives normally follow nouns, and in this combination the adjective (but not the noun) shows its lexical tones.

Lexical melodies are given in slashes //, surface or grammatical melodies in curly brackets {}.

##### 3.6.1.1 Lexically /L/-melody stems allowed

For stems that do have lexical tones, /L/ is one of the allowable melodies. In fact, /L/ is quite common especially for nouns and adjectives. This situation is characteristic of western Dogon languages, whereas most eastern languages do not allow /L/ as a lexical melody in any stem-class. In the relevant western languages, grammatically conditioned tone-dropping to {L} has no audible effect on lexically /L/-toned stems.

##### 3.6.1.2 Verbs have no lexical tones

Verbs have no lexical tones, and there are no "bare" verb forms. Verbs occur exclusively in one or another of the vocalism stems (A/O-stem, etc.), either with or without following inflectional suffixes or auxiliaries. The tones of the verb depend on the inflectional category and on the pronominal-subject category. For example, *tíbé* 'fall' occurs with different tones in *ǰ tìbè* 'I fell', *ǰ tíbè* 'we fell', and *tíbé-Ø* 'he/she/it fell', to cite three forms within the perfective positive paradigm. Details on tones (and vocalism stems) are given in the sections on the various inflectional (i.e. aspect-mood-negation) categories in chapter 10.



### 3.6.1.3 Lexical tone melodies for unsegmentable noun stems

Lexical tone melodies for uncompounded nouns, prior to the operation of tonosyntactic and tonological processes, are /H/, /L/, /LH/, /HL/, and /LHL/. Of these, /L/ is the most common. A few examples of each are in (xx1).

(xx1) a. /H/-toned

<i>púː<sup>n</sup></i>	'white-faced whistling duck'
<i>úná</i>	'goat'
<i>kójí</i>	'grass'

b. /L/-toned

<i>nàː</i>	'cow'
<i>dòn</i>	'mouth'
<i>dùgù</i>	'village'
<i>mìnjìlì</i>	'mosque'
<i>kùmàːŋgà</i>	'rain(n)'
<i>àlà mùnò</i>	'sheep'

c. /LH/-toned

<i>sǎːy<sup>n</sup></i>	'tigerfish'
<i>nèjǐé</i>	'bird'
<i>gèːní</i>	'broom'
<i>còːdál</i>	'cattle egret'
<i>òróṃ</i>	'green sauce (baobab-leaf or okra)'
<i>bùyàːgí</i>	'guava'

d. /HL/-toned

<i>bâl</i>	'bush sp. ( <i>Cassia</i> )'
<i>májà</i>	'electric catfish'
<i>kóːtì</i>	'tick'
<i>káːlávâl</i>	'bamboo'
<i>pólmáláːndù</i>	'pigeon'

e. /LHL/-toned

<i>kìn-wêː</i>	'stone'
<i>sòːmbúlê</i>	'hamerkop (bird)'
<i>èjègélê</i>	'carp (fish)'
<i>kà-kàráːwò</i>	'white-bellied bustard (bird)'
<i>kùlù-ŋ-kùndíyè</i>	'laughing dove'

Nonmonosyllabic /L/-toned nouns (and other words) are pronounced in isolation with a variable degree of phonetic initial-syllable stress. I initially mistranscribed some such words as having initial-syllable H-tone. However, the distinction between /L/-toned (common) and the less common true /HL/-toned stems is clearer in phrasal context, and word-internally before plural *-gè*. The latter appears as H-toned *-gé* after a /L/-toned stem, and as L-toned *-gè* after a /HL/-toned stem, whose H-tone spreads to the stem-final syllable. For example, in isolation the melody of *kó:tì* 'tick' could be mistaken for /L/, since *#kò:tì* would in fact have some phonetic stress on its initial syllable. However, plural *kó:tí-gè*, with a clear fall in pitch from the second to the third syllable, is unmistakably the plural of a /HL/-toned noun, while the plural of nonexistent /L/-toned *#kò:tì* would have been *#kò:tí-gé* with the opposite pitch change from second to third syllable.

For trisyllabic and longer stems, true /HL/-toned nouns are heard as H.H.(H...)L with the tone break near the right edge. By contrast, nonphonemic phonetic stress in isolation pronunciations is limited to the leftmost syllable of /L/-toned stems. Therefore a trisyllabic noun like *kùmà:ngà* 'rain' whose pitch contour in isolation sounds somewhat like H.L.L is in fact lexically /L/-toned. This is confirmed by its plural *kùmà:ngà-gé*.

Tonal minimal pairs are rare. I can cite *éjjé* 'female breast' versus *èjjè* 'Dogon (person)', and *álé* 'macari (spice)' versus *àlè* ('cloud'). The tonal differences in these pairs are obliterated by grammatical tones, for example with a preceding possessor, so their functional value is low.

#### 3.6.1.4 Lexical tone melodies for adjectives and numerals

Morphologically unsegmentable, underived modifying adjectives are almost exclusively /H/ or /L/ toned lexically; see §4.5.1 for lists. *tà:ngà* 'one' and *tó:* 'other' (§4.7.1.1) are syntactically adjectives and are compatible with these remarks. The only /HL/-toned basic adjective is *nsì:<sup>n</sup>* [*ńsì:<sup>n</sup>*] 'sweet, delicious', which is also the only simple adjective beginning with a *NC* sequence. It is likely that the high pitch on the nasal is predictable (§3.2.8.1). There are two adjectives with obligatory diminutive suffix *-yè* that have /LHL/ melody (§4.5.5). In all cases, the lexical tone can be heard in simple N-Adj sequences. Adjectives have rather different, verb-like forms when functioning as predicates.

Several basic numerals '2' to '10' also have /H/ and /L/ lexical melodies, but there are also some with /HL/ melody. The lexical melody appears when the numeral is preceded by a plural noun; for details see §4.7.1.2. Higher numerals (*tè:mdérè* 'hundred', *mùnjù* 'thousand', *milyô<sup>n</sup>* 'million') are noun-like and two of them have /LHL/ melody (§4.7.1.4).

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

Bitonal lexical contours are /HL/ and /LH/. Unsegmentable nouns with these melodies have their tone break near the right edge, as best seen with trisyllabic and longer stems. Examples are *bùyà:gí* 'guava' with L.L.H syllable sequence, and *pólmálá:ndù* 'pigeon' with H.H.H.L. For /HL/-toned stems, the H-tone extends onto the onset of a final *CvC* syllable, which is therefore falling-toned: *ká:láwâl* 'bamboo'.

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

The only unsegmentable tritonal noun stems are lexically /LHL/. Here too the tone breaks are bunched at the right edge. This is best seen with a quadrisyllabic noun like *èjègélè* 'carp' with its L.L.H.L syllable sequence. Analysis is complicated by the possibility that all such stems are treated prosodically by native speakers as compounds, in which case we should add a hyphen (*èjè-gélè*).

## 3.6.2 Grammatical tone patterns

### 3.6.2.1 Grammatical tones for verb stems

Verb stems have no intrinsic (lexical) tones. The tone of a verb form depends on a combination of a) the inflectional category and b) the person and number of the subject for indicatives, and the number of addressees for deontic modals. Details are given in the relevant sections of chapter 10; see especially the schematic summary in §10.3.2. There are some further changes in tones (and suffixation) of verbs in focalized and relative clauses.

### 3.6.2.2 Grammatical tones for noun stems

Nouns are subject to tonosyntactic overlays as well as to lower-level tonological processes.

In unpossessed NPs, the last modifying adjective controls a {L} overlay (i.e. tone-dropping) on the preceding noun or N-Adj combination (§6.3.1).

In possessed NPs, the possessor (which is preposed to the noun) controls {HL} or {LHL} overlay on the possessed NP (§6.2.1.1). The choice between {HL} and {LHL} depends on the final tone of the possessor; a final H-tone

requires a following {LHL}. One could therefore argue that either {HL} or {LHL} is the basic possessor-controlled overlay, and add a local phonological wrinkle to account for the other. This wrinkle would either be a tone-dissimilation at the boundary, with [...H][HL] becoming [...H][LHL], or a flattening, with [...H][LHL] becoming [...H][HL].

### 3.6.2.3 Grammatical tones for adjectives and numerals

Modifying adjectives can be lexically {L}- or {H}-toned; see §4.5.1 for lists. Two diminutive adjectives are {LHL}-toned, with the final diminutive *-yè* L-toned (§4.5.5).

In the counting sequence '1' to '10', odd-numbered numerals are {L}-toned while even-numbered numerals are {H}-toned, giving a rhythmical singsong feeling to the recited sequence. In postnominal position, most basic numerals are {H}- or {HL}-toned, e.g. *nó:m* '5' and *só:li* '7'. *nègà* '2' and *kèjò* '4' are unusual in having both {H}- and {L}-toned forms depending on the overall tone melody of the preceding noun (§4.7.1.2).

### 3.6.3 Phonological tone rules

#### 3.6.3.1 Final Tone-Raising

A final L-tone of a {L}-toned word is raised to H-tone before closely phrased words that begin with a L-tone. The raising applies to the final syllable, which may also be the only syllable of the first word. A CvL syllable with final sonorant may appear with rising tone in careful pronunciation.

An example with a following **3Sg subject verb** that begins with a L-tone, is (xx1).

- (xx1) *nìgé*            *màlgà-té:-ndí-Ø*  
 elephant    see-ExpPf-Neg-3SgS  
 'He/She has never seen an elephant.' (*nìgè*)

There is no raising before 3Sg subject forms with initial H-tone, such as positive perfectives. Raising does not occur directly before subject proclitics 1Pl *ɲ* or 2Pl *à*, even though they are L-toned, probably because these morphemes (after a prosodic restructuring) are phonologically encliticized to and syllabified with the preceding word.

Raising also occurs before **imperatives that begin with a L-tone**. *nà:* 'cow' remains L-toned in in (xx2a) before a H-initial imperative, but it is raised to *nǎ:* in (xx2b) since the following imperative is {L}-toned.

- (xx2) a. *nà:* *sóǵá*  
cow buy.Imprt  
'Buy-2Sg a cow!' (*nà:*, *sóǵé*)
- b. *nǎ:* *sòǵù-lò*  
cow buy-Rev.Imprt  
'Sell-2Sg a cow!'

Tone-raising also occurs before *nɛ* 'if'. For examples see (xx2) in §16.1.

Finally, tone-raising occurs before existential proclitic  $\text{\textcircled{e}}^n$ , which is typical of 'have', 'be (somewhere)', and to some extent other stative constructions. It does not matter whether a 1st/2nd person subject proclitic follows  $\text{\textcircled{e}}^n$ .

- (xx3) a. *àlà̀mù̀nɔ́* *è<sup>n</sup>* *sâ<sup>n</sup>-∅*  
 sheep Exist have-3SgS  
 'He/She has a cow.' (*àlà̀mù̀nɔ́*)
- b. *àlà̀mù̀nɔ́* *è<sup>n</sup>* *ɲ* *sâ<sup>n</sup> / ɲ* *sâ<sup>n</sup>*  
 sheep Exist 1SgS have / 1PlS have  
 'I have/We have a cow.' (*àlà̀mù̀nɔ́*)
- c. *nàfá* *è<sup>n</sup>* *sâ<sup>n</sup>-∅*  
 usefulness Exist have-3SgS  
 'It is useful.' (*nàfá*)
- d. *kìbál* *è<sup>n</sup>* *sá:<sup>n</sup>-yà*  
 awareness Exist have-3PlS  
 'They are aware.' (*kìbál*)

### 3.6.3.2 Contour-Tone Resyllabification

A final falling-toned syllable that is followed by a closely-phrased (perhaps encliticized) *Cv̤* particle merges its L-tone element with the L-tone of the clitic and therefore appears as H-toned. The particle may be L-toned, or may be atonal, having acquired its tone by spreading from the preceding word.

- (xx1) a. *ṇ nê* 'we said' plus quotative *wà* → *ṇ né wà*

### 3.6.3.3 Contour-Tone Mora-Addition (absent)

Though rare, falling-toned  $C\hat{V}$  syllables can occur word-finally, as in  $\hat{n} \acute{n}\acute{e}$  'we said'. The contour tone does not force lengthening of the vowel, and  $\hat{n} \acute{n}\acute{e}$  remains distinct from  $\hat{n} \acute{n}\acute{e}$  'we drank'.

A rising-toned  $C\check{V}$  syllable is very rare. However, I did hear this in perfective forms of the  $Cv$  verb  $n\acute{e}$  'say' before  $n\acute{e}$  'if' (xx2a). The full form of the melody for perfective verbs after 1Sg (or 2Sg) subject proclitic is {LHL}, and the combination with  $n\acute{e}$  'if' permits full expression of this melody. In (xx2a) there is no lengthening of the vowel of 'say' to accommodate the contour tone.

- (xx2) a.  $\hat{n} \acute{n}\acute{e} \quad n\acute{e} \quad n\acute{e}$   
           1SgS   say.Perf   if  
           'if I said'
- b.  $\hat{n} \acute{n}\acute{e} \quad n\acute{e} \quad n\acute{e}$   
           1PlS   say.Perf   if  
           'if we said'
- c.  $n\acute{e}-\emptyset \quad n\acute{e}$   
           say.Perf-3SgS   if  
           'if he/she said'

### 3.6.3.4 Rightward L-Spreading

There is no systematic rule of this type. In (xx1), the final H-tone on 'bird' is not erased by the preceding L-tone spreading to the end of the word preceding a H-toned word ('fly').

- (xx1)  $n\acute{e}j\acute{e} \quad p\acute{r}i\acute{g}\acute{e}-\emptyset$   
           bird       fly.Perf-3SgS  
           'A bird flew away.'

### 3.6.3.5 Rightward H-Spreading

Rightward H-Spreading converts a sequence H.L.L to H.H.L, whereby the H-tone begins at the left edge of a word. It is illustrated in (xx1) by the /HL/-toned noun  $k\acute{o}:\acute{t}i$ , which becomes  $k\acute{o}:\acute{t}i-$  before a L-toned suffix.

(xx1) Rightward H-Spreading

<i>kó:tì</i> + plural <i>-gè</i>	<i>kó:tí-gè</i>	'ticks'
<i>kó:tì</i> + 3Sg possessor <i>-nà</i>	<i>kó:tí-nà</i>	'his/her tick'

Phonetically, there is often a slight pitch rise on the last H-toned syllable before a L-toned syllable. Therefore H.H.L forms like *kó:tí-nà* were (mis-)transcribed as L.H.L in early fieldwork ("*kò:tí-nà*").

The spreading may extend over more than one syllable, as when a /HL/-toned noun is followed by two suffixes (xx2).

(xx2) *kó:tí-ná-gè* 'his/her ticks'

Rightward H-Spreading is not always rigorously implemented. In other words, the targeted syllable is sometimes heard with lower pitch than one would expect for a true H-tone. Further examples of spreading are in (xx3). (xx2c) shows that the process is recursive.

(xx2) a. demonstratives

<i>ínì</i> 'this' + noun	<i>íní ùnà</i> 'this goat' (§6.5.2)
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b. stative verbs and related forms

<i>túlà</i> (progressive) + 3Pl <i>-yà</i>	<i>túlá-yà</i> 'they're doing' (§10.2.2.4)
<i>túlà</i> + negative <i>-ndà</i>	<i>túlá-ndà</i> 'isn't doing' (§10.2.3.5)

c. recursion

<i>túlà</i> + Neg <i>-ndà</i> + 3Pl <i>-yà</i>	<i>túlá-ndá-yà</i> 'they aren't doing' (§10.2.3.5)
--	--

Rightward H-Spreading is not triggered by past clitic *=ye*, which can be preceded by a {HL} melody (§10.6.1).

### 3.7 Grammaticalized intonation

#### 3.7.1 Morphemes with lexically specified prolongation (→)

Some elements characterized by lexically embedded prolongation of the final syllable are *só*→ 'long ago', *nsâ*→ 'now', *tîrà*→ 'only' (§19.3.1), *jwá*→ 'a lot' and *bà:lè*→ 'a little' (§8.4.2), *wàgà*→ 'or' (§7.2.1), expressive adverbials like *yà*→ 'gliding' and *bàjé*→ 'straight', and onomatopoeias like *cì<sup>n</sup>*→ (humming of cicada).

As a grammatical feature, final prolongation occurs in one type of imperfective subordinate clause (§15.2.1.2), with no other subordinator.

Polar interrogation is expressed intonationally, with prolongation and pitch rise on the final syllable (§13.2.1).



## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

#### 4.1.1 Simple nouns

For the lexical tone contours of nouns, see §3.6.1.3.

##### 4.1.1.1 Singular (zero) and plural (-gè)

The singular of nouns is morphologically unmarked. The plural of any noun, including inanimates, is formed by suffixing *-gé* after /H/- or /L/-toned stem or *-gè* after /LH/-toned stem. /HL/- and /LHL/-toned stems also have L-toned *-gè*, but the H-tone spreads to the end of the stem proper, see Rightward H-Spreading §3.6.3.5. If the noun is treated prosodically as a compound, the initial is disregarded in the tonal processes. For example, *dù-[pá<sup>n</sup>-pá<sup>n</sup>]-gé* 'large bustard' has H-toned *-gé* after /H/-toned *pá<sup>n</sup>-pá<sup>n</sup>* (compound final), disregarding the L-toned initial. Likewise *tògù-dúmbú-gé* 'wood-hoopoes'.

Singular/plural pairs showing the basic tonology are in (xx1). For the lexical tone melodies see §3.xxx.

(xx1)	singular	plural	gloss
a. lexically /H/-toned noun			
	<i>úná</i>	<i>úná-gé</i>	'goat'
	<i>tóŋ(ú)né</i>	<i>tóŋ(ú)né-gé</i>	'duck'
	<i>kógulé</i>	<i>kógulé-gé</i>	'fish'
b. lexically /L/-toned noun			
	<i>gwè:</i>	<i>gwè:-gé</i>	'parrot'
	<i>dògù</i>	<i>dògù-gé</i>	'village'
	<i>kà:lò</i>	<i>kà:lò-gé</i>	'griot'
	<i>wèlàgù</i>	<i>wèlàgù-gé</i>	'division, subgroup'
	<i>kùmà:ŋgà</i>	<i>kùmà:ŋgà-gé</i>	'rain(n)'
	<i>àlà mùnò</i>	<i>àlà mùnò-gé</i>	'sheep'
c. lexically /LH/-toned noun			
	<i>bòmà:-wĩl</i>	<i>bòmà:-wĩl-gè</i>	'dung beetle'

<i>sǎ:y<sup>n</sup></i>	<i>sǎ:y<sup>n</sup>-gè</i>	'tigerfish'
<i>nèjjé</i>	<i>nèjjé-gè</i>	'bird'
d. lexically /HL/-toned noun		
<i>bâl</i>	<i>bâl-gè</i>	'bush sp. ( <i>Cassia</i> )'
<i>kó:tì</i>	<i>kó:tí-gè</i>	'tick'
<i>dúndù</i>	<i>dúndú-gè</i>	'owl'
<i>kó:-kò:</i>	<i>kó:-kó:-gè</i>	'plantain-eater (bird)'
<i>dábè-dábè</i>	<i>dábè-dábé-gè</i>	'nightjar'
<i>kí:ló-ŋ-kò:</i>	<i>kí:ló-ŋ-kó:-gè</i>	'hornbill (bird)'
e. lexically /LHL/-toned noun		
<i>sò:mbúlê</i>	<i>sò:mbúlê-gè</i>	'hamarkop'
<i>kà-kàrá:wò</i>	<i>kà-kàrá:wó-gè</i>	'white-bellied bustard'
<i>álá<sup>n</sup>-sǎ:bà</i>	<i>álá<sup>n</sup>-sǎ:bá-gè</i>	'cattle egret'
<i>gìŋ-gí kòbílê</i>	<i>gìŋ-gí kòbílê-gè</i>	'cuckoo wasp'
<i>gò:ŋgò tèbèlê:y</i>	<i>gò:ŋgò tèbèlê:y-gè</i>	'female agama lizard'
plural syncopated (§3.4.2.2)		
<i>sùŋúnê</i>	<i>sùŋné-gè</i>	'small ants'

#### 4.1.1.2 Frozen classifying suffixes (\*-ŋge, \*-ge)

Some nouns end in *ŋge* or *ge*, reflecting an original inanimate classifying suffix \*-ŋge or \*-ge. In most cases the ending is no longer clearly segmentable, but a few have related forms without the ending. The consistently +ATR vowels of *ŋge* and *ge* often clash with -ATR vowels in the original stem. *ŋge* but not *ge* regularly follows a long vowel. (A similar asymmetry is found with *-gà* versus *-ŋgà* allomorphs of the characteristic derivational suffix, §4.2.1.) In (xx1), a few examples are classified as segmentable since there is a related unsuffixed form, but most examples are isolated and not transparently segmentable.

(xx1)	noun	gloss	related unsuffixed form
a. *-ŋge			
	<i>unsegmentable</i>		
	<i>bèlŋgè</i>	'fodder'	
	<i>éré:ŋgé</i>	'rice'	
	<i>ílé:ŋgé</i>	'medication'	
	<i>pó:ŋgè</i>	'fonio (grain)'	
	<i>sàlè:ŋgè</i>	'cemetery'	
	<i>sè:ŋgè</i>	'millet'	
	<i>tàndà:ŋgè</i>	'twin'	

<i>té:ŋgé</i>	'wood'	
<i>segmentable</i>		
<i>émé:-ŋgé</i>	'milk'	<i>èmè kòlò</i> 'fresh milk'
<i>kèlè-ŋgé</i>	'marriage'	<i>kèlè yò:</i> 'bride' ('marriage woman')
<i>nènò:-ŋgé</i>	'fatigue'	<i>néné</i> 'become tired'
<i>nù:gò:-ŋgé</i>	'heat'	<i>nú:gè</i> 'become hot'
<i>sínjá:-ŋgé</i>	'sorghum'	<i>sìnjà-n-dúmbé</i> 'sugar cane'
<i>púná:-ŋgé</i>	'flour, powder'	<i>púná</i> 'flour, powder'

- b. \*-ge after nasal other than *ŋ* (could reflect \*-ge or \*-ŋge)

<i>unsegmentable</i>	
<i>númgé</i>	'cow-pea'
<i>sòm-gè</i>	'tamarind'

- c. \*-ge after vowel or nonnasal sonorant

<i>unsegmentable</i>	
<i>pábálgè</i>	'sesame'
<i>sòlògè</i>	'roselle (bissap)'
<i>òrògè</i>	'baobab leaves'

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

Some of the most basic nouns are those in (xx1). The plurals are regular.

(xx1)	'person'	<i>ntá</i>	<i>ntá-gé</i>
	'woman'	<i>yò:</i>	<i>yò:-gé</i>
	'man'	<i>wálá</i>	<i>wálá-gé</i>
	'child'	<i>wè:</i>	<i>wè:-gé</i>
	'thing'	<i>yé:</i>	<i>yé:-gé</i>

#### 4.1.3 Initial *Cv*-reduplication in nouns

Initial *Cv*-reduplication is not common. 'Grasshopper' is *káyá*, 'hyena' is *tà:<sup>n</sup>*, both unreduplicated unlike their reduplicated cognates in eastern Dogon (e.g. Jamsay). The few Penange examples that appear to contain an initial reduplication are in (xx1). In (xx1a) the reduplicant has the same vowel quality as the first vowel of the base. In (xx1b) the reduplicant has *i*. Neither is sufficiently common to constitute a recognizable pattern.

(xx1)	a.	<i>kà-kàrá:wò</i>	'white-bellied bustard' (onomatopoeic)
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- ná-náyè* 'mint' (regional word < Arabic)
- b. *tí-túgù* 'spice (seeds of *Ammodaucus*) for porridge'

#### 4.1.4 Miscellaneous nominal reduplications

Minor patterns involving some kind of partial reduplication are listed in (xx1).

- (xx1) a. *[bè-bèrè]-bèy* 'sandgrouse'  
*[kà-kàràŋ]-ká:yè* 'long-tailed starling'
- b. *bìrì-[kémé:-mè:]* 'house bunting'
- c. *dábá-dábá:jì* 'sardine-like fish sp.'
- d. *tè:gú-<sup>n</sup>-tě:lè* 'Abyssinian roller (bird)'
- e. *kè-kě:rè ~ ké:-kě:rè* 'buffalo-weaver (bird)'

For *bàl-bàl-yè* 'catfish (*Clarias*)' see §5.1.5.

#### 4.1.5 Nouns with frozen full-stem iteration

Some nouns and compound finals, especially flora-fauna terms, are full iterations. In a few cases there is an apparent nasal linker (§5.xxx). In general the uniterated base does not occur separately.

(xx1) Without vocalic shift

- a. monosyllabic base
- {H}-{H}*  
*dù-[pá<sup>n</sup>-pá<sup>n</sup>]* 'Denham's bustard (bird)'  
*kón-kón* 'mistletoe'
- {LH}-{LH}*  
*kǎ:<sup>n</sup>-kǎ:<sup>n</sup>* 'pied crow'
- {HL}-{HL}*  
*tûm-tûm* 'bush sp. (*Scoparia*)'
- {H}-{L}*  
*kó:-kò:* 'plantain-eater'  
*kòjì-[pó:-pò:]* 'herb sp. (*Endostemon*)'  
*tóy-tòy* 'bush sp. (*Physalis*)'

b. bisyllabic base

$\{H\}-\{H\}$	
<i>kúb(ú)-kúb(ú)</i>	'machete blade' (Fr. <i>coupe-coupe</i> )
<i>yúgú-yúgú</i>	'used clothing heap'
$\{L\}-\{L\}$	
<i>bòrò-bòrò</i>	'trash, refuse'
<i>dègè-dègè</i>	'statuette'
<i>kàrà-kàrà</i>	'armpit'
<i>kìjì-kìjì</i>	'winged termite'
<i>kòlò-kòlò</i>	'donkey'
<i>[kòrò-kòrò]-jùwà</i>	'tree sp. ( <i>Gardenia</i> )'
<i>tògù-tògù</i>	'gecko'
$\{L\}-\{L\}$ with nasal linker	
<i>kàlà-ŋ-kàlà</i>	'herb sp. ( <i>Cassia</i> )'
<i>pòlò-m-pòlò</i>	'tree sp. ( <i>Gyrocarpus</i> )'
<i>sàgà-<sup>n</sup>-sàgà</i>	'tree sp. ( <i>Piliostigma</i> )'
$\{LH\}-\{LH\}$	
<i>kíló<sup>n</sup>-kíló<sup>n</sup></i>	'black-headed lapwing (bird)'
<i>pògú-pògú</i>	'shrub sp. ( <i>Calotropis</i> )'
$\{L\}-\{HL\}$	
<i>èjò-éjò</i>	'grass sp. ( <i>Eragrostis</i> )'
<i>kìrì-kìrì</i>	'epilepsy'
<i>kìndò-kìndò</i>	'skink sp. ( <i>Chalcides</i> )'
$\{HL\}-\{HL\}$	
<i>údà-údà</i>	'hoopoe (bird)'
$\{H\}-\{HL\}$	
<i>búlá-búlá</i>	'blue'
$\{H\}-\{L\}$	
<i>kíyó<sup>n</sup>-kìyò<sup>n</sup></i>	'herb sp. ( <i>Spermacoce</i> )'
<i>kóló-kóló</i>	'shoulder'

c. trisyllabic base

$\{LH\}-\{LH\}$ with nasal linker	
<i>kòlòbè-ŋ-kòlòbè</i>	'tree sp. ( <i>Mitragyna</i> )'

Ordinary common nouns with iterative form combined with a vowel change are uncommon. I can cite (xx2), which corresponds to a more productive pattern in some other Dogon languages.

(xx2) With vocalic shift

{H}-{HL} with nasal linker  
*kó:ló-ŋ-kà:là* 'tree locust'

The cases in (xx3) are stylized onomatopoeias and can be made into predicates with *kání* 'do, make', but they can also be used as nouns, as in 'I heard a ...'. Shift of a nonlow vowel to *a* in the second part is common. Forms like *hò:-hà:* are usually bipartite in Penange (compare tripartite counterparts like *hó:-hà:-hó:* in other Dogon languages), but the whole form may be repeated to denote extended noises: *hò:-hà: hò:-hà:*.

(xx3) Onomatopoeic stems

a. without vowel shift

*kùgùrúŋ-kùgùrúŋ* 'crunching sound' (e.g. dog crunching bone)

b. with vowel shift

*kóló-kàlà* 'sudden loud noise'

*dim-dàm* 'sound of sb running'

*hò:-hà:* 'loud talking noise, hubbub'

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

Penange does not have nouns with an apparently segmentable initial *a-* or variant.

## 4.2 Derived nominals

4.2.1 Characteristic derivative (*-gà* or *-ŋgà*)

This suffix derives a noun (or adjective) in which a distinctive feature such as a body part is used to characterize an entity. The suffix is *-gà* or *-ŋgà*, in the latter case with lengthened preceding vowel (cf. comments on frozen *ge* versus *ŋge* inanimate suffixes, §4.1.1.2). The input stem is tone-dropped so the entire derivative is {L}-toned.

(xx1)	characteristic gloss	input	gloss
a. with <i>-gà</i>			
	<i>kèlè-gà</i> 'having a horn'	<i>kélé</i>	'horn'
	<i>kùlù-gà</i> 'humped'	<i>kùlù</i>	'hump'
	<i>kùlè-gà</i> 'hairy'	<i>kúlé</i>	'hair'

<i>kòlòm-gà</i>	'sorcerer'	<i>kòlòm</i>	'(evil) spell'
<i>nàfòrò-gà</i>	'rich person'	<i>nàfòrò</i>	'wealth'
<i>jàngà-gà</i>	'pot-belly (person)'	<i>jàngà</i>	'belly'
<i>ùrù-gà</i>	'sick person'	<i>ùrù</i>	'disease'

b. with *:-ngà*

<i>bà:wdè:-ngà</i>	'rich person'	<i>bá:wdè</i>	'means, capability'
<i>nòèrè:-ngà</i>	'sleepy one'	<i>nòèrè</i>	'sleeping(n)'
<i>nì:gò:-ngà</i>	'coward'	<i>ní:gó</i>	'fear(n)'
<i>nàmàgù:-ngà</i>	'destroyer (person)'	<i>nàmàgù</i>	'ruining(n)'
<i>tùyà<sup>n</sup></i>	'making trouble'	<i>tùyà:-ngà</i>	'trouble-maker'
<i>wàlà:-ngà</i>	'hero, real man'	<i>wálá</i>	'man'
<i>yò:-ngà</i>	'real woman'	<i>yò:</i>	'woman'
<i>yùbùgò:-ngà</i>	'liar'	<i>yùbùgò</i>	'(a) lie'

'Lazy person' is *kòjò* or *kòjò-gà*, so in this case the *-gà* derivative has the same sense as the input. 'Laziness' is *kòjò-lmà* (see the following section).

#### 4.2.2 *-lmà* and *-ng-kálmá* abstractives

Suffix *-lmà* or *-ng-kálmá* takes as input a noun denoting a type of person, often but not always pejorative, and derives an abstractive. The *-ng-* is tentatively segmented as a nasal linker (§xxx).

(xx1)	abstractive	gloss	input	gloss
a.	<i>-lmà</i>			
	<i>kòjò-lmà</i>	'laziness'	<i>kòjò</i>	'lazy one'
	<i>yàbà-lmà</i>	'idiocy'	<i>yàbà</i>	'idiot'
	<i>mòrò-lmà</i>	'being spastic'	<i>mòrò</i>	'spastic, uncoordinated one' (Fr <i>amaldème</i> )
b.	<i>-ng-kálmá</i>			
	<i>tà:nà-ng-kálmá</i>	'craziness'	<i>tá:ná</i>	'crazy'
	<i>sàgàllà-ng-kálmá</i>	'youth' (coll.)	<i>ságállá</i>	'(a) youth'
	<i>gìrgà-ng-kálmá</i>	'blindness'	<i>gìrgà</i>	'blind person'

#### 4.2.3 Deverbal and denominal *-ngè* ~ *-ngé* nominals

Suffix *-ngè* ~ *-ngé* may have developed out of an inanimate singular class suffix (preserved as such in Najamba). Deverbal and denominal nominals with *-ngé* that have been observed are in (xx1).

(xx1)	nominal	gloss	input	gloss
	a. deverbal			
	<i>nènò:-ngè</i>	'fatigue'	<i>néné</i>	'become tired'
	b. denominal			
	<i>tá:-ngé</i>	'craziness'	<i>tá:ná</i>	'crazy person'

#### 4.2.4 Verbal nouns (-I)

An abstractive verbal noun is freely formed by suffixing *-I* (with L-tone) to the otherwise {H}-toned **E/I-stem** of the verb, i.e. the E-stem for final-nonhigh-vowel verbs and the I-stem for final-high-vowel verbs. I transcribe with falling tone marked on the stem-final vowel.

(xx1)	Perf 3Sg	verbal noun	gloss
	a. final nonhigh vowel, +ATR		
	<i>gwé:</i>	<i>gwê:-I</i>	'leaving'
	<i>nó:yè</i>	<i>nó:yé-I</i>	'sleeping'
	<i>gó:ndè</i>	<i>gó:ndê-I</i>	'going out'
	<i>túmbú-gè</i>	<i>túmbú-gê-I</i>	'pushing'
	b. final nonhigh vowel, -ATR		
	<i>né:</i>	<i>nê:-I</i>	'drinking'
	<i>tólé</i>	<i>tólê-I</i>	'butchering'
	<i>sémé</i>	<i>sémê-I</i>	'slaughtering'
	<i>tímbí-rè</i>	<i>tímbí-rê-I</i>	'superimposing'
	c. final high vowel		
	<i>dám</i>	<i>dámî-I</i>	'speaking'
	<i>kán</i>	<i>kánî-I</i>	'do'
	d. 'come' and 'bring'		
	<i>égé</i>	<i>égê-I</i>	'coming'
	<i>sóngé</i>	<i>sóngê-I</i>	'bringing'

For compounds, see §5.1.3.



#### 4.2.5 Derived nominals with suffix *-yè* or *-yè ~ -yè*

For instrumental compounds whose final is an instrument nominal with suffix *-yè*, see §5.1.10. For product-of-action compounds with suffix *-yè ~ -yè*, see §5.1.11. These suffixed derivatives are not recorded in uncompounded nouns.

See also the diminutive nouns in *-yè* in §5.1.5.

#### 4.2.6 Uncompounded agentives

The attested agentives are nearly all compounds; see §5.1.4.

*dà:nà* 'hunter' is obscurely related to *dà:nàmà* '(the) hunt, (act of) hunting'. It is made predicative by *kán* 'do' (*dà:nàmà kán* 'hunt, do hunting') or by *ándè* 'go' (*dà:nàmà ándè* 'go hunting').

*gùy<sup>n</sup>* 'thief' (note the nasalization) is obscurely related to verb *gúyè* 'steal, rob', cognate nominal *gùyò* as in *gùyò gúyè* 'commit theft'.

#### 4.2.7 Deadjectival extent nominals (suffix *-yà*)

Nouns denoting measurable dimensions related to adjectives are in (xx1). The suffix is *-yà*. If the adjective is nonmonosyllabic, its final vowel is (raised and) syncopated before *-yà*.

##### (xx1) Extent nominals

noun	gloss	related adjective
a. suffixal derivatives		
<i>gòl-yà</i>	'length'	<i>gòlò</i> 'long'
<i>bàñ-nà</i>	'size, dimensions'	<i>bây<sup>n</sup></i> 'big'
<i>sùmb-yà</i>	'depth'	<i>sùmbè</i> 'deep'
<i>bàmb-yà</i>	'width'	<i>bámbá</i> 'wide'
<i>dònj-à</i>	'weight'	<i>dóngá</i> 'heavy'
b. suppletive		
<i>dígò:ngè</i>	'height (of object)'	(cf. <i>gòlò</i> 'long, tall')
<i>ínjí</i>	'height (of person)'	

Since 'long' and 'tall' as adjectives are both expressed by *gòlò*, to distinguish the nominals 'height' and 'length' suppletion is necessary in the case of 'height'

(xx1b). *dìgò:ngè* 'height' (e.g. of a wall or a tree) is related to verb *dígé* 'go up', while *íngír* 'height (of a person)' is related to *ínjè* 'get up'.

#### 4.2.8 Other derived nominals

Minor nominal derivational types are grouped in (xx1).

(xx1)	derivative	gloss	related forms
a.	final <i>u</i> (apocopated after some sonorants)		
	<i>bámbú</i>	'wrap for carrying baby on back'	verb <i>bámb-yè</i>
	<i>nàgàlù</i>	'load(n)'	verb <i>nágálè</i> 'load (cart, truck)'
	<i>téw</i>	'lid'	<i>té:-rè</i> 'cover (with lid)'
b.	final <i>i</i>		
	<i>gè:ní</i>	'broom'	<i>gé:n-yè</i> 'sweep'
	<i>kìndò-sè:mí</i>	'mirror'	<i>kíndó</i> 'shadow, image', <i>sé:mì</i> 'look'
c.	suffix (?) <i>-rv</i> , <i>-lv</i>		
	<i>nòè-rè</i>	'sleep(n)'	verb <i>nó:yè</i> 'sleep', perhaps mediopassive
	<i>dóé(-)ré</i>	'gear'	<i>dú-yé</i> 'carry on head' (?)
	<i>dóélé</i>	'ball, globe'	—
d.	suffix <i>-gu</i>		
	<i>jàmà-gù</i>	'damage(n)'	<i>jámí</i> 'malfunction(v)'
e.	suffix <i>-nga</i>		
	<i>nwà:gà:-nga</i>	'lefty(n)'	adj <i>nwà:gà</i> 'left (hand/foot)'
f.	suffix <i>-mâl</i>		
	<i>dógá-mâl</i>	'afterworld'	<i>dógé</i> 'die'

### 4.3 Pronouns

#### 4.3.1 Basic personal pronouns

The forms of personal pronouns are in (xx1). The accusative forms are based on the independent series. Nonsingular categories also base the possessor forms on the independent series. A distinct series (e.g. 1Sg *ŋ*) of proclitics are used as pronominal-subject markers for 1st/2nd persons preceding verbs in main and relative clauses, and for 1Sg and 2Sg as possessors preceding possessed NPs.

3Sg is unmarked for main-clause subject, and has a unique suffix *-nà* for possessor and an eclitic *ná* for subject of nonsubject relative (or nonsubject focalized clause). 3Pl has various suffixal forms (depending on aspect-negation category) for main-clause subjects, and is parallel to 1Sg and 2Sg in possessor and relative-clause subject series.

(xx1) Personal Pronouns

	indep.	accus.	poss.	subject	
				main cl.	relative cl.
1Sg	<i>mí</i>	<i>mì-ŋ</i>	<i>ŋ</i> X	<i>ŋ</i> VERB	<i>ŋ</i> VERB
1Pl	<i>mbé</i>	<i>mbé-ŋ</i>	<i>mbé</i> X	<i>ŋ</i> VERB	<i>ŋ</i> VERB
2Sg	<i>ó</i>	<i>ò-ŋ</i>	<i>á</i> X	<i>á</i> VERB	<i>á</i> VERB
2Pl	<i>ábé</i>	<i>ábé-ŋ</i>	<i>ábé</i> X	<i>à</i> VERB	<i>à</i> VERB
3Sg	<i>ànò</i>	<i>ànò-ŋ</i>	X- <i>nà</i>	VERB-Ø	VERB <i>ná</i>
3Pl	<i>ŋké</i>	<i>ŋké-ŋ</i>	<i>ŋké</i> X	[variable]	<i>ŋké</i> VERB

There are no special inanimate pronouns or anaphoric pronouns, except that possessed 'my head', 'your head', etc. is used for reflexive objects.

sg pronominal possessors with certain kin terms

'mother' à ní:, ñ ní:, ní:-ná

'elder sib' à dé:, ñ dé:, dè:-nà

'elder sib' á bòbó, ŋ bòbó, bòbò-nà

#### 4.4 Definite and deictic words

##### 4.4.1 Determiners

##### 4.4.1.1 Definite (è ~ é)

Definite *è* cannot be used absolutely (i.e. without a noun or some other following word). It is invariant for all animacy and number categories. Like demonstratives, it precedes the noun. If not already H-initial, the noun gets an initial H-tone that can then spread to a second lexically L-toned mora that is not immediately followed by a H-tone, see 'man' and 'sheep' in (xx1). However, if the noun contains a lexical /LH/ sequence, the L-tone cannot be totally deleted,

so /LH/-toned 'broom' ends up as {HLH} (xx1c), and /LHL/-toned 'carp' surfaces as {HLHL} (xx1e).

(xx1)	noun	gloss	definite
a. /H/-toned			
	<i>úná</i>	'goat'	<i>è úná</i>
	<i>wá lá</i>	'man'	<i>è wá lá</i>
b. /L/-toned			
	<i>nà:</i>	'cow'	<i>è ná:</i>
	<i>dùgù</i>	'village'	<i>è dúgù</i>
	<i>sé:ngè</i>	'millet'	<i>è sé:ngè</i>
	<i>àlámùnò</i>	'sheep'	<i>è álámùnò</i>
c. /LH/-toned			
	<i>gè:ní</i>	'broom'	<i>è gè:ní</i>
d. /HL/-toned			
	<i>kó:tì</i>	'tick'	<i>è kó:tì</i>
e. /LHL/-toned			
	<i>èjègélè</i>	'carp'	<i>è éjègélè</i>

Definite *è* cannot co-occur with demonstratives. It is uncommon in combination with possessors, since possessed NPs are usually interpreted to be definite anyway. However, *è* can combine with a possessor, most readily with 3Sg possessor suffix *-nà*.

(xx2)	<i>è</i>	<i>sé:ngè-nà</i>
	Def	millet-3SgP
	'his/her millet (definite)'	

Plural *-gè* is added to the noun: *è éjègélé-gè* 'the carps'. However, when an otherwise absolute numeral is directly marked as definite, *è* takes a plural form *è-ngè* (§4.7.1.2).

When the noun is absent but an adjective is present, *è* is arguably treated like an adjectivally modified noun. Before a {L}-toned adjective, *è* becomes H-toned *é*, as in *é tòmbò* 'the white one', plural *é tòmbò-gè*. Before a {H}-toned adjective, it remains L-toned, as in *è kándá* 'the new one', plural *è kándá-gé*.

#### 4.4.1.2 'This/that' (deictic and discourse-definite demonstratives)

Demonstratives are preposed to nouns. Deictic categories are proximate and distant. There is no distinction between human, animate, and inanimate. The regular nominal plural suffix *-gè* is added directly to the demonstrative if the latter is used absolutely (i.e. without a noun), otherwise it is added to the noun (xx1).

##### (xx1) Absolute forms of demonstratives

###### a. Proximate

*ínì* 'this'  
*íní-gè* 'these'

###### b. Distant

*èm-bà* 'that' (really 'over there', §4.4.2.1)

###### c. Discourse-definite

*ê:* 'that'  
*é:-(ŋ)gè* 'those'

Proximate *ínì* requires a L-toned onset on the following noun. a lexically /H/- or /HL/-toned noun is dropped to {L} melody (xx2bc). The medial H-tone in /LH/- or /LHL/-toned nouns is not affected (xx2de). In other words, only an initial H-toned syllable or syllable-sequence is tone-dropped after *ínì*. Since a noun following *ínì* always begins with L-tone, *ínì* itself is pronounced *íní* in this combination, see Rightward H-Spreading §3.6.3.5. /L/-toned nouns are unaffected (xx2a).

Distant *èm-bà* and discourse-definite *ê:*, on the other hand, control {HL} overlay on the following noun. This suggests that they are really demonstrative adverbs ('there'), so 'that house (over there)' is phrased as '(the) house of over there'. lexical /HL/ nouns show no audible change after these forms (xx2c).

(xx2)	noun	gloss	proximate	distant	disc-def
a. /L/-toned					
	<i>dùgù</i>	'village'	<i>íní dùgù</i>	<i>èm-bà dúgù</i>	<i>è: dúgù</i>
b. /H/-toned					
	<i>úná</i>	'goat'	<i>íní únà</i>	<i>èm-bà únà</i>	<i>è: únà</i>
c. /HL/-toned					
	<i>kó:tì</i>	'tick'	<i>íní kò:tì</i>	<i>èm-bà kó:tì</i>	<i>è: kó:tì</i>

d. /LH/-toned

*gè:ní* 'broom' *íní gè:ní* *èm-bà gè:ní* *è: gè:ní*

e. /LHL/-toned

*èjègélè* 'carp' *íní èjègélè* *èm-bà èjègélè* *è: èjègélè*

If the NP is plural, plural suffix *-gè* is added only to the noun: *íní ùnà-gè* 'these goats', *èm-bà gè:ní-gè* 'those brooms'. Note the Rightward H-Spreading in the latter example.

#### 4.4.2 Demonstrative adverbs

##### 4.4.2.1 Locative adverbs

The basic locational demonstrative adverbs are in (xx1).

(xx1)	form	gloss
	<i>nùw<sup>n</sup></i>	'here'
	<i>èm-bà</i>	'over there (nearby or distant, deictic)', cf. locative <i>bà</i>
	<i>è<sup>n</sup>-w<sup>n</sup></i>	'there (definite)', cf. locative <i>w<sup>n</sup></i>

##### 4.4.2.2 Emphatic and approximative modifiers of adverbs

Modifiers of spatial adverbs are in (xx1).

(xx1)	form	gloss
a.	<i>nùw<sup>n</sup> já:tì</i>	'right here'
	<i>èmbà já:tì</i>	'right there (deictic)'
	<i>è<sup>n</sup> já:tì</i>	'right there (discourse-definite)'
b.	<i>nùw<sup>n</sup> pélós</i>	'around here, in this area'
	<i>èmbà pélós</i>	'around there (deictic)'
	<i>è<sup>n</sup> pélós</i>	'around there (discourse-definite)'
c.	<i>nùw<sup>n</sup> ní</i>	'this way'
	<i>èmbà ní</i>	'that way (deictic)'
	<i>è<sup>n</sup> ní</i>	'that way (discourse-definite)'

#### 4.4.2.3 'Like this/that' (*ènè*, *néni*)

*néni* → 'like this, like that' is deictic; it is used when the speaker demonstrates the indicated action or speech, or when another agent is observed doing so. *ènè* 'like that, thus' (French *ainsi*) is (discourse-)definite.

- (xx1) a. *ènè*      *káy<sup>n</sup>*      *kán*      *bò-Ø*  
 thus      work      do      Impf-3SgS  
 'He/She works like that (as described previously).'
- b. *néni*      *káná*  
 like.this      do.Imprt  
 'Do (it) like this!' (demonstrating)

*éné* is also common in narrative in the sense 'then, following that' or more abstractly 'in that situation'. It effectively resumes the situation described by the preceding discourse.

#### 4.4.3 Presentative ('here's ...!') (*ì<sup>n</sup>hí<sup>n</sup>*)

There is a single presentative form, translatable as 'here's X' or 'there's X' in combination with a NP, namely *ì<sup>n</sup>hí<sup>n</sup>*. It is invariant in form (no plural or other agreement). It usually precedes the NP, and it must precede a pronoun. I hear it as {L}-toned before a pronoun beginning with a H-tone.

- (xx1) a. *ì<sup>n</sup>hí<sup>n</sup>*      *sěydù*  
 here's      Seydou  
 'Here's Seydou!' [less often *sěydù* *ì<sup>n</sup>hí<sup>n</sup>*]
- b. *ì<sup>n</sup>hí<sup>n</sup>*      *mí*  
 here's      1Sg  
 'Here I am!'
- c. *ì<sup>n</sup>hí<sup>n</sup>*      *ànò*  
 here's      3Sg  
 'Here he/she is!'

## 4.5 Adjectives

Adjectives can be postnominal modifiers, or they can be predicates. This section describes their forms as modifiers. For adjectival predicates see §11.4.1.

Within the NP, adjectives follow nouns (including nouns with 3Sg possessor *-nà*) and precede numerals. Sequences of two or more adjectives are possible. An adjective controls tone-dropping on the preceding noun or adjective, hence [N<sup>L</sup> Adj] and [N<sup>L</sup> Adj<sup>L</sup> Adj<sup>L</sup>2], see §6.3.1 and §6.3.3.1.

### 4.5.1 Morphologically simple adjectives

Morphologically simple adjectives are illustrated in (xx1), grouped roughly by domain.

(xx1) simple adjectives

dimensions (for 'short' and 'small' see §4.5.xxx below)

<i>bàyn</i> <sup>n</sup>	'big (house, tree)'
<i>bámbá</i>	'wide (passageway), spacious (courtyard)'
<i>bàgàlà</i>	'big, fat, massive, stout (animal, person, rock)'
<i>gòlò</i>	'long, tall'
<i>wàgè</i>	'distant'
<i>sùmbè</i>	'deep (well, hole)'
<i>dóndó</i>	'empty' = 'deserted',
<i>dóŋgá</i>	'heavy'
<i>ɲòŋgò</i>	'thin, slender (person, pole)'
<i>èlò</i>	'thin, delicate (e.g. fabric)'

fullness

<i>kùrè</i>	'undiluted, full-strength (e.g. milk)'
<i>sèlè</i>	'diluted (e.g. milk)'
<i>jwè:</i>	'full (container)'

age and state

<i>ká:mnó</i>	'old (man, woman)'
<i>kándá</i>	'new'
<i>ɲàm</i>	'malfunctioning'
<i>kòlò</i>	'fresh (vegetation); 'fresh (milk); raw (meat)'
<i>dèmè</i>	'ripe (grain, fruit); cooked, done (meat)'
<i>ùlgè</i>	'ripe (fruit)'
<i>bòrè</i>	'cooked, done (meal, meat)'



<i>ònjè</i>	'lean (animal, meat)'
<i>kùnè</i>	'plump, fatty'
<i>dògè</i>	'dead'
<i>málá</i>	'alive' (lit. "who can see")
temperature and speed	
<i>nwá:gá</i>	'hot (water, food); 'fast'
<i>tàyè</i>	'cold, cool (water)'
<i>tà:mì</i>	'slow'
texture and hardness	
<i>ònànà</i>	'smooth, sleek (surface)'
<i>kùrjù</i>	'coarse (surface)'
<i>kàmmì</i>	'hard (e.g. rock, wood)'
taste and smell	
<i>gòmè</i>	'rotten (meat, fruit)'
<i>nsì:<sup>n</sup> [ńsì:<sup>n</sup>]</i>	'sweet, delicious' (also 'sharp')
<i>gà:là</i>	'bitter'
sharpness	
<i>nsì:<sup>n</sup> [ńsì:<sup>n</sup>]</i>	'sharp' (also 'delicious, sweet')
evaluation	
<i>pó:ló</i>	'good'
<i>nàm</i>	'bad' (see also §4.5.xxx)
<i>yágá</i>	'pretty'
<i>dá:</i>	'nasty, evil'
difficulty, expensiveness	
<i>má:gá</i>	'difficult (work); expensive'
<i>mómó</i>	'inexpensive'
<i>jámá</i>	'easy (work)', 'nearby (village)'
color	
<i>bòmbè</i>	'red, brown'
<i>yórdé</i>	'black, dark'
<i>tòmbò</i>	'white, light-colored'
moisture	
<i>mè:</i>	'dry'
<i>èmbè</i>	'wet'

The regionally widespread syncretisms 'sweet' = 'sharp' and 'hot' = 'fast' are present. However, 'cold' is distinct from 'slow', and the 'hot' = 'fast' syncretism

in modifying adjectives is subtly undone in inchoative verbs (*nú:gè* 'become hot', *nwá:jè* 'become fast, accelerate') and adjectival predicates (*nwà:gè bó-Ø* 'it is hot' versus *nwà:jè bó-Ø* 'it is fast').

#### 4.5.2 Iterated adjective stems

The stems in (xx1) are always (i.e. lexically) iterated, but function syntactically like other adjectives (e.g. tone-dropping a preceding noun). 'Blue' is a regionally widespread loanword.

(xx1)	<i>búlá-búlà</i>	'blue'
	<i>kará-kará</i>	'bitter'
	<i>èb-èb</i>	'supple (e.g. goatskin)'
	<i>sém-sém</i>	'pointed'
	<i>yáw-yáw</i>	'lightweight'
	<i>tóm-tóm</i>	'sour, acrid (like lemon)'

#### 4.5.3 Phrasal adjectives (exemplars)

As in other Dogon languages, 'yellow' and 'green' are expressed by compounds or noun-adjective sequences denoting exemplars.

(xx1)	adjective	gloss	literal sense
a.	<i>pòrò púnà</i>	'yellow'	'néré-tree flour' (bright yellow)
b.	<i>kòjì kòlò</i>	'green'	'fresh grass'

#### 4.5.4 Negative adjectives

Certain adjectival senses rendered by a simple lexical item in English are expressed by negating the adjective at the marked pole. In modifying function within NPs, the form used is that of a relative clause, with participial *-gà* suffix (xx1).

(xx1)	a.	<i>nsì:<sup>n</sup>-dì-gà</i>	'blunt, not sharp (blade)'
	b.	<i>yágá-ndá-gà</i>	'ugly, not pretty'
	c.	<i>póló wòl-gà</i>	'bad, no good' ( <i>pó:ló</i> 'good')

<i>sùmb-yà wǒl-gà</i>	'shallow, not deep'
<i>mà:gè wǒl-gà</i>	'easy, not difficult' ( <i>má:gá</i> 'difficult')

For predicative counterparts see §11.4.xxx

#### 4.5.5 Diminutive adjectives (-yè)

Two adjectives denoting small dimensional values end in *-yè*, which can be recognized as a frozen diminutive, cf. §5.1.5.

(xx1)	form	gloss
	<i>dùngùrí-yè</i>	'short'
	<i>ṛkà:lí-yè</i>	'small'

There are no nondiminutive counterparts for these adjectives.

For *-yè* on nouns, see §4.2.5 and the compounds in §5.1.10-11.

#### 4.5.6 Derived adjective with *-mà*

*sànjàl-mà* 'slippery (ground)' is the combination of the verb *sánjálè* 'slide, slip' with a derivational suffix apparently related to capacitative *-mâ*: (§10.5). It is used only as a predicate, so its status as an adjective is shaky: *sànjàl-mà bó-Ø* 'it (ground) is slippery'.

#### 4.5.7 Intensifying adjectives

Some regular adjectives have corresponding intensifiers.

(xx2)	adjective	gloss	intensifier
a. uniterated intensifier			
	<i>adjective {L}-toned</i>		
	<i>tòmbò</i>	'white'	<i>tòmbò pájá</i>
	<i>bòmbè</i>	'red'	<i>bòmbè cóy</i>
	<i>ùlgè</i>	'ripe'	<i>ùlgè jéy<sup>n</sup></i>
	<i>nwá:gá</i>	'hot'	<i>nwà:gà táw</i>
	<i>tàyè</i>	'cold'	<i>tàyè kílólló</i>
	<i>adjective {H}-toned</i>		
	<i>kándá</i>	'new'	<i>kàndà céy<sup>n</sup></i>

b. iterated		
<i>yòrdè</i>	'black'	<i>yòrdè kárí-kárí</i>
<i>kàmmì</i>	'hard'	<i>kàmmì káṅ-káṅ</i>
<i>gòmè</i>	'rotten'	<i>gòmè dúgá-dúgá</i>

Syntactically, these intensifiers are adjectives, though rather specialized. In the forms shown, they follow the primary adjective, and as shown by 'new' in (xx1a) they control tone-dropping on the preceding adjective. Furthermore, if plural *-gè* is added, it appears after the intensifier, as in *tòmbò pájá-gé* 'very white ones'. In other words, N-Adj plus intensifier is treated as N-Adj1-Adj2 for tonosyntactic and morphological purposes. This sequence is syntactically a NP, and is made predicative by adding the 'it is' clitic at the end (xx3). For H-toned definite *é* before L-toned adjective, see §4.4.1.1.

- (xx3) *é tòmbò pájá=yó*  
 Def white very.white=it.is  
 'It is very white (snow white etc.).'

The corresponding negative predicate has *=lá* replacing *=yó*.

With 'die' as the core stem, the intensifier *gádá* requires subject inflection on the verb. For 3Sg subject, the form used is the postverbal *nà* as in e.g. relative clauses.

- (xx4) *dògè* *nà* (a) *gádá*  
 " " (b) *ṣómé-Ø*  
 die.Perf 3SgS (a) very.dead  
 (b) be.a.long.time.Perf-3SgS  
 (a) 'He/She is very dead (stone dead).'  
 (b) 'It's been a long time since he/she died'
- (xx5) *dòg-yè* (a) *gádá*  
 " (b) *ṣómé-Ø*  
 (a) 'They are very dead (stone dead).'  
 (b) 'It's been a long time since he/she died'

#### 4.6 Participles functioning like adjectives

Participles (i.e. forms of verbs used in relative clauses) are described in §14.4. Some "adjectival" senses are expressed by participles of *kání* 'do' following an expressive adverbial (xx2).

- (xx2) *mǎn-mǎn kân* 'soft (skin)'  
*tògúl-tògúl kân* 'spotted'

## 4.7 Numerals

### 4.7.1 Cardinal numerals

In the chanted recitation of numerals '1' to '10', a rhythmical alternation of {L}-toned (odd numerals) and {H}-toned (even numerals) is observed. Arguably this is intonational rather than (lexically) tonal.

#### (xx1) counting sequence

'1'	<i>tè:dà</i>
'2'	<i>né:ngá</i>
'3'	<i>tà:ndì</i>
'4'	<i>ké:jó</i>
'5'	<i>nò:m</i>
'6'	<i>kúlé:ní</i>
'7'	<i>sò:lì</i>
'8'	<i>sé:lé</i>
'9'	<i>tò:wà</i>
'10'	<i>pé:lú</i>

Focusing on segmental form rather than tones, '1' through '4' have a common *Cv:Cv* (or *Cv:NCv*) shape in the counting sequence, which contributes to the incantational rhythm of the recitation. In the case of '3', the regular form (see below) is already *Cv:NCv*. '4' achieves the *Cv:Cv* shape by lengthening its first vowel. '1' and '2' have significantly distinct segmental forms in counting sequences and in NPs.

#### 4.7.1.1 'One' (*tà:ngà*), 'same (one)' (*tà:ngà*), and 'other' (*tó:*)

Other than in the counting sequence (i.e. absolutely or following a noun), '1' is *tà:ngà*. It is treated tonosyntactically as an adjective. In the numeral's absolute function, definite *è* is allowed (xx1a,d), the sense being 'one (of them)'. Unlike nouns, *è* can be tone-raised before *tà:ngà*.

- (xx1) a. *[(é) tà:ngà]* *mì-ŋ / ñnò-ŋ* *tábá*  
 [(Def) one] 1Sg-Acc / 3Sg-Acc give.Imprt

'Give-2Sg me/him-or-her one!'

- b. *ùná<sup>L</sup> / yɔ́:<sup>L</sup> / nèjjè<sup>L</sup> / kò:tì<sup>L</sup> / kìn-wè:<sup>L</sup>*      *tà:ngà*  
 goat / woman / bird / tick / stone      one  
 'one goat/woman/bird/tick/stone' (< *úná, yɔ́:, nèjjé, kó:tì, kìn-wê:*)
- c. *tà:ngá*      *tùmbùgò*  
 one      push.Imprt  
 'Push-2Sg one!'
- d. *é*      *tà:ngà*  
 Def      one  
 'the one' (*è*)

In (xx1c), *tà:ngá* undergoes Final Tone-Raising before the imperative.

Identity or equivalence of two referents, for example belonging to the same species, is expressed by an 'it is' predicative form of *tà:ngà* (xx2).

- (xx2) *[[ínì nì] [ínì nì] sèlé] tà:ngà = yó*  
 [[this and] [this and] all]      one=it.is  
 'This and this are the same.'

*tó:* 'other' is an adjective, and controls tone-dropping on a preceding noun: *ùná<sup>L</sup>*  
*tó:* 'another goat' (*úná*). Adverbial 'apart, separate, distinct' is iterated *tó:-tó:* or *tó:-ná* (§8.4.5.2).

#### 4.7.1.2 '2' to '10'

For forms in the counting sequence, see §4.7.1 above.

Numerals '2' to '9' are added to a noun (or noun-adjective sequence) with plural *-gè*. The plural suffix is allowed, but usually omitted, with '10'. The plural noun has its regular tones, except that a lexically /L/-toned noun has L-toned plural *-gè*. '2' and '4' get their tones (on both syllables) by spreading the final tone of the preceding plural morpheme, except they are {H}-toned after a /L/-toned noun. The effect is that '2' and '4' are {H}-toned after flat /H/- and /L/-toned nouns, but {L}-toned after a noun with a contour tone (/HL/, /LH/, /LHL/). '3' and '7' through '9' have {HL} melody. '5', '6', and '10' have {H} melody. When used absolutely ('give me two!'), all of the numerals are {L}-toned.

- (xx1)      gloss      after N or N-Adj ("X")      absolute

'2'	X- <i>gè nègà</i> (contour-toned noun) X- <i>gè négá</i> (/L/-toned noun) X- <i>gé négá</i> (/H/-toned noun)	<i>nègà</i>
'3'	X- <i>gè/-gé tá:ndì</i>	<i>tà:ndì</i>
'4'	X- <i>gè kèjò</i> (contour-toned noun) X- <i>gè kéjós</i> (/L/-toned noun) X- <i>gé kéjós</i> (/H/-toned noun)	<i>kèjò</i>
'5'	X- <i>gè/-gé nò:m</i>	<i>nò:m</i>
'6'	X- <i>gè/-gé kúlé:ní</i>	<i>kúlè:nì</i>
'7'	X- <i>gè/-gé sò:lì</i>	<i>sò:lì</i>
'8'	X- <i>gè/-gé sè:lè</i>	<i>sè:lè</i>
'9'	X- <i>gè/-gé tò:wà</i>	<i>tò:wà</i>
'10'	X(- <i>gè/-gé</i> ) <i>pé:l(ù)</i>	<i>pè:l(ù)</i>

Examples showing the tonal behavior of '2' and '4' are in (xx2). They are {H}-toned only after /L/ and /H/ melodies, and are {L}-toned after all contour melodies.

(xx2)	lexical melody	noun	gloss	Pl noun plus '2/4'
a. flat tonal melody				
	/L/	<i>yò:</i>	'woman'	<i>yò:-gè négá / kéjós</i>
	/H/	<i>úná</i>	'goat'	<i>úná-gé négá / kéjós</i>
b. contoured tonal melody				
	/LH/	<i>nèjjé</i>	'bird'	<i>nèjjé-gè nègà / kèjò</i>
	/HL/	<i>kó:tì</i>	'tick'	<i>kó:tí-gè nègà / kèjò</i>
	/LHL/	<i>kìn-wê:</i>	'stone'	<i>kìn-wé:-gè nègà / kèjò</i>

Numerals may follow nonsingular pronouns. In this case, the numeral is {H}-toned and is followed by a plural suffix *-gè*, always L-toned.

(xx3)	<i>mbé / ábé / ñké</i>	<i>négá-gè / tá:ndí-gè / pé:l-gè</i>
	1Pl / 2Pl / 3Pl	two-Pl / three-Pl / ten-Pl
	'we/you/they two/three/ten' (= 'the three of us' etc.)	

When a numeral follows a demonstrative, the demonstrative has the plural suffix, and the numeral is {L}-toned. In other words, both the demonstrative and the numeral have the same form they would have in isolation (absolutely).

(xx3)	<i>íní-gè</i>	<i>nègà / tà:ndì / pé:l(ù)</i>
-------	---------------	--------------------------------

Prox-Pl                      two / three / ten  
'these two/three/ten'

In (xx3), plural *-gè* may be doubled: *ín-gé-gè nègà* 'these two'.

When a numeral follows the definite morpheme, the latter takes the plural form *è-ηgè*. The numeral has {L}-toned form.

(xx4)    *è-ηgè*                      *nègà / tà:ndì / pè:l(ù)*  
Def-Pl                      two / three / ten  
'the two/three/ten'

Numerals cannot be directly possessed. Instead of 'your three', for example, one says 'your three things (possessions)': *à jé:-gè tá:ndì*.

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

The multiples of '10' are given in (xx1). There are distinctive lexical items for '20' and '40', and an apparent composite form for '80'. '60' is based on '20' but the morpheme *sígò* is not otherwise known. Odd-numbered multiples '30', '50', '70', and '90' are conjunctions of the next lower decimal multiple and '10', e.g. '50' is literally "40 and 10." In '30', the left conjunct ('20 and') is usually contracted to *tà:<sup>n</sup>*. In '50' and higher odd-numbered decimal multiples, *nì* 'and' in the left conjunct is often reduced to *n* or to vowel nasalization.

(xx1)	gloss	form
	'10'	<i>pè:l(ù)</i>
	'20'	<i>tà:lmò</i>
	'30'	<i>[tà:lmò nì] [pè:l nì] ~ tà:<sup>n</sup> [pè:l nì]</i>
	'40'	<i>dè:</i>
	'50'	<i>[dé: nì] [pè:l nì] ~ dè:<sup>n</sup> [pè:l nì]</i>
	'60'	<i>tà:lmò sígò</i>
	'70'	<i>[tà:lmò sígò nì] [pè:l nì]</i>
	'80'	<i>tò:<sup>n</sup>-jígì</i>
	'90'	<i>[tò:<sup>n</sup>-jígì nì] [pè:l nì]</i>

As noted previously, a preceding noun occasionally takes plural *-gè* before '10', though the unsuffixed noun is preferred. With higher numerals, *-gè* is absent. Nouns like *nà:* 'cow' and *mìnjìlì* 'mosque' that are lexically /L/-toned acquire a final H-tone (on the final syllable, or on the final mora of a monosyllabic) before decimal numerals from '20' up. Nouns of other tone classes, like 'goat',



'bird', and 'tick', undergo no changes before these numerals, so we cannot speak of a tonosyntactic {LH} overlay erasing all lexical tone melodies.

- (xx2) a. *nà:(-gè) / mìnjìlì(-gè) / úná(-gé) / nèjjé(-gè)* *pé:lú*  
 cow(-Pl) / mosque(-Pl) / goat(-Pl) / bird(-Pl) 10  
 '10 cows/mosques/goats/birds'
- b. *nǎ: / mìnjìlǐ / úná / nèjjé / kó:tì* *tà:lmò / dè:/ tǎ:<sup>n</sup>-jígì*  
 cow / mosque / goat / bird / tick 20 / 40 / 80  
 '20/40/80 cows/mosques/goats/birds'

**Decimal plus single-digit** numerals like '47' are expressed as conjunctions of the decimal numeral (with the appropriate form of a preceding noun) and the single-digit numeral. Unusually, the conjunction *nì* 'and' takes H-toned form *nǐ* in the left conjunct in such composite numerals. In isolation (i.e. prepausally), my assistant sometimes pronounced H-toned *nǐ* in the right conjunct too, but this was not consistent even in isolation, and it was not observed in medial position in clauses.

- (xx2) a. [*dè:* *nǐ*] [*sò:l* *nì*]  
 [40 and] [seven and]  
 '47'
- b. [*tà:lmò* *nǐ*] [*nò:m* *nì*]  
 [20 and] [five and]  
 '25'
- c. [*tǎ:<sup>n</sup>-jígí* *nǐ*] [*tà:ndí* *nì*]  
 [80 and] [3 and]  
 '83'

In such combinations, the decimal numerals have their regular form, subject to minor contractions in allegro speech style.

In these combinations, '1 and' (as in '11' and '51') is *tèdà n*, cf. *tè:dà* '1' in the counting sequence. The other single-digit numerals have their usual {L}-toned absolute form before the conjunction *nì*.

#### 4.7.1.4 Large numerals ('100', '1000', ...) and their composites

The stems in (xx1) are added to the regular form of a noun, or are used absolutely.

(xx1)	gloss	independent form	modifying a noun X
a.	'hundred'	<i>tè:mdérè</i> (<Fulfulde)	<i>X tè:mdérè</i>
b.	'thousand'	<i>mùnjù</i>	<i>X mùnjù</i>
c.	'million'	<i>milyô<sup>n</sup></i> (<French)	<i>X milyô<sup>n</sup></i>

'Hundred' and 'million' (both loanwords) are treated like common nouns, and therefore require plural *-gè* before numerals '2' to '9' (and optionally '10'). 'Thousand' does not have the plural suffix in such combinations, though in isolation *mùnjù-gè* 'thousands' is grammatical.

(xx2)	gloss	simple	with '2'	gloss
a.	'hundred'	<i>tè:mdéré</i>	<i>tè:mdéré-gè nègà</i>	'200'
b.	'thousand'	<i>mùnjù</i>	<i>mùnjù nègà</i>	'2,000'
c.	'million'	<i>milyɔ̃<sup>n</sup></i>	<i>milyɔ̃<sup>n</sup>-gè nègà</i>	'2,000,000'

'Million' is used chiefly for currency.

#### 4.7.1.5 Currency

The currency unit in Mali and several other Francophone West African states that belong to the ECOWAS regional association (French acronym CEDEAO) is the CFA franc (FCFA). As of 2012, one US dollar was worth about 500 FCFA. In the native languages, currency is counted based on a unit equal to five FCFA, except for amounts of one million FCFA or greater which use the French loanword *milyɔ̃*" to denote one million FCFA. In Penange this unit is called *m̀bú:dù*, plural *m̀bú:dú-gè* before numerals '2' through '9'.

(xx1)	a. <i>m̀bú:dù</i> currency.unit '5 FCFA'	
	b. <i>m̀bú:dú-gè</i> currency.unit-Pl '10 FCFA'	<i>nègà</i> two

#### 4.7.1.6 Distributive numerals

Numerals are iterated with no further morphology to make distributives ('two by two', 'two currency units each', etc.). The forms are based on the absolute and postnominal (rather than counting-sequence) forms where we can distinguish them (especially '1' and '2'). The regular tone melody is {L} for the left iteration and {HL} for the right iteration, represented as L-HL in the right column in (xx1). However, for '100' the right iteration has its lexical tone, and the left iteration is {H}-toned.

(xx1)	gloss	absolute	distributive	tones
	'1'	<i>tà:ngà</i>	<i>tà:ngà-tá:ngà</i>	L-HL
	'2'	<i>nègà</i>	<i>nègà-négà</i>	L-HL
	'3'	<i>tà:ndì</i>	<i>tà:ndì-tá:ndì</i>	L-HL
	'4'	<i>kējò</i>	<i>kējò-kējò</i>	L-HL
	'5'	<i>nò:m</i>	<i>nò:m-nò:m</i>	L-HL
	'6'	<i>kùlè:nì</i>	<i>kùlè:nì-kúlé:nì</i>	L-HL
	'7'	<i>sò:lì</i>	<i>sò:lì-só:lì</i>	L-HL
	'8'	<i>sè:lè</i>	<i>sè:lè-sé:lè</i>	L-HL
	'9'	<i>tò:wà</i>	<i>tò:wà-tó:wà</i>	L-HL
	'10'	<i>pè:l(ù)</i>	<i>pè:l(ù)-pé:lù</i>	L-HL
	'20'	<i>tà:lmò</i>	<i>tà:lmò-tá:lmò</i>	L-HL
	'40'	<i>dè:</i>	<i>dè:-dè:</i>	L-HL
	'100'	<i>tè:mdéré</i>	<i>tè:mdéré-tè:mdéré</i>	H-LHL
	'100'	<i>mùnjù</i>	<i>mùnjù-múnjù</i>	L-HL

The negative predicative form is with *=là* 'it is not', as in *nègà-négà=là* 'it isn't two by two'.

For *àngà-àngà* 'how many (each)?' see §13.2.7.

#### 4.7.2 Ordinal adjectives

For interrogative *à:ngù-lò* 'how many-eth?' see §13.2.7.

##### 4.7.2.1 'First' (*páná*) and 'last' (*dí:ró*)

Adjective 'first' is *páná*, as in *yè: páná* '(the) first thing' (*yé:* 'thing'). The noun is tone-dropped as before other adjectives.

Adjective 'last' is *dí:rɔ́*, as in *yè: dí:rɔ́* '(the) last thing'.  
For adverbial 'first(ly), at first', see §8.4.6.2

#### 4.7.2.2 Other ordinals (suffix *-lò*)

Ordinals from 'second' to 'tenth' are in (xx1). The suffix is *-lò*, and the stem is {L}-toned. There are some segmental irregularities, especially in 'second' through 'fourth'. In 'fourth' but not 'tenth', there is a switch from -ATR *ɛ* to +ATR *e*. Except for 'third', all stems end in a short high vowel before *-lò*, see especially 'fifth', but this vowel is frequently syncopated when also preceded by *l* ('seventh', 'eighth', 'tenth').

(xx1)	form	gloss
a. single-digit numeral		
	<i>nè:gù-lò</i>	'second'
	<i>tà:ndè-lò</i>	'third'
	<i>kè:jù-lò</i>	'fourth'
	<i>nò:mù-lò</i>	'fifth'
	<i>kùlè:nì-lò</i>	'sixth'
	<i>sò:l(i)-lò</i>	'seventh'
	<i>sè:l(i)-lò</i>	'eighth'
	<i>tò:wà-lò</i>	'ninth'
	<i>pè:l(i)-lò</i>	'tenth'
b. decimal		
	<i>tà:lmò-lò</i>	'twentieth'
	<i>dè:-lò</i>	'fortieth'
c. decimal plus single-digit numeral		
	<i>pè:l-ní tètà-n-lò</i>	'eleventh'
d. hundred		
	<i>tè:mdèrè-lò</i>	'hundredth'

#### 4.7.3 Fractions and portions

*fěccéré* 'portion, division' (< Fulfulde) can mean 'half', 'third', or other substantial fraction.

## 5 Nominal and adjectival compounds

The notation I use for tonal types of noun-noun and relative compounds is as follows. Using **n** for noun, **a** for adjective, **num** for numeral, **v** for verb, and **x** for a variable word class (noun, adjective, perhaps adverb), the stem-class combinations are represented as e.g. [**x n**], [**n n**], [**n v**], [**n num**], [**n a**] and (with a suffix) [**n v-VblN**]. Tone diacritics are added ( $\acute{x}$  = all high tone,  $\hat{x}$  = falling melody,  $\check{x}$  = rising melody,  $\grave{x}$  = all low tone,  $\bar{x}$  = regular lexical tone). Example: [ $\grave{n} \bar{n}$ ] is a noun-noun compound whose initial is dropped to {L} tone contour and whose final has its lexical tones.

### 5.1 Nominal compounds

#### 5.1.1 Pseudo-possessive compounds, light [ $\bar{n} \hat{n}$ ] or heavy [ $\bar{n} \tilde{n}$ ]

This is the productive noun-noun compound type. The initial preserves its own lexical tone, but like a possessor it controls {HL} on light finals and {LHL} on heavy finals.

Examples with prosodically light finals, which therefore appear with {HL} melody, are in (xx1). The clearest examples are those in (xx1a), where the initial has a lexical melody other than /L/ and where the final has an audible tone change. The cases in (xx1b) are assigned to this compound type by analogy, although the initial is lexically /L/-toned. *kó*: 'head' idiosyncratically drops to {L} as compound initial (xx1c).

#### (xx1) Prosodically light final with {HL}

	compound	gloss	initial	final
a.	<i>dómjò-kúlè</i>	'beard'	<i>dómjò</i> 'chin'	<i>kúlè</i> 'hair'
	<i>sígé-gò:gè</i>	'shinbone'	<i>sígé</i> 'foot'	<i>gò:gè</i> 'bone'
	<i>úná-gújù</i>	'goatskin'	<i>úná</i> 'goat'	<i>gújù</i> 'skin'
	<i>túlú-kòbè</i>	'Guiera tree leaf'	<i>túlú</i> 'Guiera'	<i>kòbè</i> 'leaf'
	<i>kámbe-mî:</i>	'zaban juice'	<i>kámbe</i> 'zaban'	<i>mî:</i> 'water'
b.	<i>gò:<sup>n</sup>-kúlè</i>	'chest hair'	<i>gò:<sup>n</sup></i> 'chest'	<i>kúlè</i> 'hair'
	<i>nè:-gò:gè</i>	'arm bone'	<i>nè:</i> 'hand, arm'	<i>gò:gè</i> 'bone'
	<i>àlàmunò-gújù</i>	'sheepskin'	<i>àlàmunò</i> 'sheep'	<i>gújù</i> 'skin'

<i>sà:l-gújù</i>	'snake sp. skin'	<i>sà:l</i> 'snake sp.'	<i>gùjù</i> 'skin'
<i>màlfâ-púnà</i>	'gunpowder'	<i>màlfâ</i> 'rifle'	<i>púnà</i> 'powder'
<i>sè:ngè-nî:</i>	'Maerua tree'	<i>sè:ngè</i> 'millet'	<i>nî:</i> 'mother'
<i>kòy<sup>n</sup>-swâ:</i>	'wild mouse'	<i>kòy<sup>n</sup></i> 'outback'	<i>swâ:</i> 'mouse'
<i>kòy<sup>n</sup>-nâ:</i>	'buffalo'	<i>kòy<sup>n</sup></i> 'outback'	<i>nâ:</i> 'cow'
<i>kòy-gâ:<sup>n</sup></i>	'wild cat'	<i>kòy<sup>n</sup></i> 'outback'	<i>gâ:<sup>n</sup></i> 'cat'
<i>sànà-mî:</i>	'wild-grape juice'	<i>sànà</i> 'wild grape'	<i>mî:</i> 'water'
<i>sòmngè mî:</i>	'tamarind juice'	<i>sòmngè</i> 'tamarind'	<i>mî:</i> 'water'
c.			
<i>kò:-ng-gúlê</i>	'head hair'	<i>kó:</i> 'head'	<i>kúlê</i> 'hair'
<i>kò:-bògólýè</i>	'skull'	<i>kó:</i> 'head'	(unattested)

Examples with prosodically heavy finals, which appear with {LHL} melody, are in (xx2). *púnà:-ngé* is a variant of *púnà* 'flour, powder' with a frozen nominal suffix (§4.1.1.2).

(xx2) Prosodically heavy final with {LHL}

compound	gloss	initial	final
a. <i>éré:ngé-[púnà:-ngè]</i>	'rice flour'	<i>éré:ngé</i> 'rice'	<i>púnà:-ngé</i> 'flour'
b. <i>sè:ngè-[púnà:-ngé]</i>	'millet flour'	<i>sè:ngè</i> 'millet'	<i>púnà:-ngé</i> 'flour'
<i>dà:nà-bà:mbúlà</i>	'hunter's hat'	<i>dà:nà</i> 'hunter'	<i>bà:mbúlà</i> 'hat'
<i>[mòl-wàlà]-bà:mbúlà</i>	'marabout's hat'	<i>mòl-wàlà</i> 'marabout'	"

Although the compound has a form similar to that of a possessive construction, it functions syntactically as a common noun in cases like those illustrated. The compound noun can therefore take a true possessor.

Examples with preposed possessor (i.e. any possessor other than a 3Sg pronominal) are in (xx3). The final is **treated as an unsegmented unit** for purposes of applying the possessor-controlled tone overlay. Since the compound as a whole is prosodically heavy, this means a {LHL} overlay for 1Sg possessor *ń* and a {HL} overlay for 1Pl possessor *ń* (§6.2.1.1).

(xx3) Possessed forms of compounds

- a. *màlfâ-púnà* 'gunpowder'  
*ń màlfâ-púnà* 'my gunpowder'  
*ń màlfâ-púnà* 'our gunpowder'
- b. *éré:ngé-[púnà:-ngè]* 'rice flour'

ɛ́ y-èrè:ngè-púná:-ngè 'my rice flour'  
 ɛ́ y-ééré:ngé-púná:-ngè 'our rice flour'

- c. [mòl-wàlà]-bà:mbúlà 'marabout's hat'  
     ɛ́ [mòl-wàlà]-bà:mbúlà 'my [marabout's hat]'  
     ɛ́ [mól-wálá]-bá:mbúlà 'our [marabout's hat]'

In (xx3b-c), where the compound initial is trisyllabic, the tone contours of the possessed forms are distinct from what they would be under recursive possession, as in [my rice]'s flour' or '[my marabout]'s hat'. For example, the latter would appear as [ɛ́ mòl-wàlà] bà:mbúlà with {LHL} melody overlaid on mòl-wàlà 'marabout'. The situation is similar to that of English [*my girls*]' school versus *my* [*girls' school*].

However, 3Sg possessor suffix -nà is variably positioned when added to such compounds. In (xx4a) -nà is added to the end of the compound, but in (xx4b) it is added directly to the initial. For example, 'his gunpowder' in (xx4b) is phrased as [[his rifle]'s powder].

- (xx4) a. pòrò-púná-nà 'his nere flour'  
       b. éré:ngé-ná púná:-ngè 'his rice flour'  
           màlfà-nà púnà 'his gunpowder'

### 5.1.2 Other noun-noun compound types

I have no clear examples of [n̄ n̄] (no tone changes) or of [n̄ n̄] (initial drops tones). A [n̄ n̄] type (both initial and final tone-dropped) occurs in agentive compounds (§5.1.4). The situation should be reviewed following additional lexicography.

### 5.1.3 Compounds with final verbal noun, type [n̄ ɛ̂-l]

The verbal noun with final -l (§4.2.4) can take nominal compound initials, usually denoting a prototypical object (xx1a). As usual, kó: 'head' drops to kò:- as initial (xx1b). Cognate nominals other than verbal nouns can also serve as initials in such compounds. An example is kùbò 'agriculture, farm work' in (xx1c).

- (xx1) a. bí:ngò-[tíyê-l] 'weaving cloth/mats' (bí:ngò)  
           kònjè-[nê:-l] 'beer drinking'

*wótóró-[<sup>4</sup>túmbú-gê-l]* 'pushing carts' (*wótórò*)  
*bòw<sup>u</sup>-[<sup>4</sup>túmbú-gê-l]* 'pushing doors'

- b. *kò:-[múndê-l]* 'tressing hair'
- c. *sè:ngè-kúbò* 'millet farming'  
*númgé-kúbò* 'cowpea farming'  
*èrè:ngè-kúbò* 'rice farming'  
*pábálgé-[<sup>4</sup>kúbò]* 'sesame farming' (*pábálgè*)

In *wótóró-[<sup>4</sup>túmbú-gê-l]* (xx1a) and *pábálgé-[<sup>4</sup>kúbò]* (xx1c), the sequence /...HL-H.../ is realized as /...HH-<sup>4</sup>H.../ as the first H-tone spreads to the right, and as the L-tone is manifested as downstep on the last H-tone. Pronunciations with /...HL-H.../ preserved are also possible.

#### 5.1.4 Agentive compounds of type [n̩ ǂ] and [n̩ ǂ̃]

Most agentives denoting human occupations are compounds. The initial is {L}-toned. A prosodically light final is also {L}-toned. A prosodically heavy final is {H}-toned, but if it is trisyllabic (before syncope) it takes L-toned plural *-gè*. The initial is a noun denoting the typical object of the activity. In a few cases the initial is a cognate nominal variant (not in use elsewhere) ending in *a*. The final is a verb, in the I/U-stem, though the /u/ is apocopated after an unclustered sonorant.

(xx1)	compoud	plural	gloss (componentns)
a. initial is regular noun, u apocopated after sonorant			
	<i>initial is audibly tone-dropped</i>		
	<i>ùnà-gìr</i>	<i>ùnà-gìr-gé</i>	'goatherd' ( <i>úná, gírê</i> )
	<i>tàjì-tìy</i>	<i>tàjì-tìy-gé</i>	'basket-weaver' ( <i>tájí</i> )
			'basket', <i>tíyê</i> )
	<i>initial is already {L}-toned</i>		
	<i>sòy-kùw</i>	<i>sòy-kùw-gé</i>	'tailor' ( <i>sòy</i> 'fabric' <i>kwé:</i> )
	<i>nò:-nùw</i>	<i>nò:-nùw-gé</i>	'singer' ( <i>nò:</i> , <i>nwé:</i> )
	<i>gèjì-tìy</i>	<i>gèjì-tìy-gé</i>	'weaver' ( <i>gèjì</i> 'cotton string
			with gear', <i>tíyê</i> )
	<i>dèm-sìm</i>	<i>dèm-sìm-gé</i>	'builder' ( <i>dèm</i> 'house',
			<i>símé</i> )
	<i>sàbàl-kàn</i>	<i>sàbàl-kàn-gé</i>	'merchant' ( <i>sàbàl kán(í)</i> 'do
			business')

- b. initial is regular noun, *u* is overt after cluster or obstruent



*tè:ngè-jòmbù*      *tè:ngè-jòmbù-gé*      'wood-gatherer' (*tè:ngè*, *jómbé*)

c. initial is a special cognate nominal with final *a*:

*gìrà:-gìr*      *gìrà:-gìr-gé*      'herder' (verb *gíré* 'tend', no noun)

*yèbà:-yèbù*      *yèbà:-yèbù-gé*      'dancer' (verb *yébé*, usual noun *yèbù*)

*mùndà:-mùndù*      *mùndà:-mùndù-gé*      'braiding lady' (*múndé*)

*pènjà:-pènjù*      *pènjà:-pènjù-gé*      'milker (of cows)' (*pénjé*)

*jòngà:-jòngù*      *jòngà:-jòngù-gé*      'healer' (*jóngé*)

d. trisyllabic verb

*nàmà-ná:ndù*      *nàmà-ná:ndù-gé*      'meat-taster' (*ná:ndè*)

*[sògù-là]-[sógú-l]*      *[sògù-là]-[sógú-l]-gé*      'merchant' (*sògù-là*

'selling', *sógú-lè* 'sell')

*wòtòrò-túmbú-gú*      *wòtòrò-túmbú-gú-gé*      'pusher of carts'

In flora-fauna terminology, 'dung beetle' (scarabaeid beetle that pushes a small ball of animal droppings) is *bòmà:-wíl*. The initial is otherwise unfamiliar to my assistant (cf. *sùgò* 'excrement'), but *wíl* is suggestively similar to *wí:lè* 'roll (sth) along'. Though synchronically isolated, this could be a vestige of an archaic agentive compound type with {LH} rather than {L} melody on the final.

#### 5.1.5 Compounds with *wè:* 'child', diminutive *-yé* ~ *-yè*, and *sè:* 'grain'

Possessive-type compounds with *wè:* 'child' as the final are illustrated in (xx1). 'Child' takes the {HL}-toned form *wé:*, plural *wé:-gé*.

(xx1)	compound	gloss	initial	gloss
	<i>bòw<sup>n</sup> wê:</i>	'key'	<i>bòw<sup>n</sup></i>	'door (shutter)'
	<i>dò: wê:</i>	'pestle'	<i>dò:</i>	'mortar'
	<i>dógó wê:</i>	'herb ( <i>Caralluma</i> )'	<i>dógó</i>	'night'
	<i>kìn wê:</i>	'small stone'	<i>kìnì</i>	'stone, rock, hill'
	<i>kòndì wê:</i>	'circumcised boy'	<i>kòndì</i>	'circumcision'
	<i>kúm wê:</i>	'balanzan fruit'	<i>kúm</i>	'balanzan tree'
	<i>nàm-yà wê:</i>	'small grindstone'	<i>nàm-yà</i>	'large grindstone'
	<i>tí: wê:</i>	'envoy'	<i>tí:</i>	'mission'

A pestle is a blunt club for pounding grain inside a wooden mortar. A small grindstone is held in the hand and used to crush grain that is placed on the large flat grindstone.

For adjectives with diminutive *-yè*, see §4.5.5. Nouns with transparent diminutive *-yè* are in (xx2).

(xx2)	compound	gloss	initial	gloss
	<i>tù má-yè</i>	'twig'	<i>tù mà</i>	'stick'

A number of nouns and compound finals always end in *-ye*, either H- or L-toned. In these cases *-ye* is no longer transparently segmentable but probably originated as a diminutive ending. Hyphens are included in (xx3) to bring this out but elsewhere the hyphen is usually omitted. In some cases, L-toned *-yè* follows a stem with {LH} melody, as with 'twig' in (xx2) above.

(xx3)	compound	gloss
a.	final <i>-yé ~ -yè</i>	
	{H}-toned <i>-yé</i>	
	<i>ból-yé</i>	'tomb'
	<i>gùjà sá:nd-yé</i>	'tree sp. ( <i>Combretum</i> )'
	<i>té:b-yé</i>	'kite (hawk)'
	{L}-toned <i>-yè</i>	
	<i>bòl-bòl-yè</i>	'catfish ( <i>Clarias</i> )'
	<i>dábál-yè</i>	'story, tale'
	<i>kòmbòl-yè</i>	'shell; scale'
	<i>kùlù-ŋ-kùndí-yè</i>	'laughing dove'
	<i>núgúr-yè</i>	'seedstock'
	<i>sìlò:nd-yè</i>	'gutter spout (on roof)'
	<i>súgúl-yè</i>	'ear'
	<i>tò:ndí-yè</i>	'cowry shell(s)'
	<i>tùgùn-[tá:l-yè]</i>	'tree sp. ( <i>Boscia</i> )'
b.	likely <i>*jy → ji</i>	
	<i>nèjjé</i>	'bird'

A compound final *-sê* derived from *sê* '(single) grain, seed' is attested in more abstract sense denoting a small unit in (xx4). 'Heart' is usually treated in Dogon languages a small part of the liver-heart(-lung) complex, but *dòngò-* in this compound is obscure.

(xx4)	<i>tó:-sê</i>	'arrow'	<i>tó:</i>	'bow'
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<i>móré-sê:</i>	'bullet'	<i>móré</i>	'bullet'
<i>dòngò-sê:</i>	'heart'	( <i>dòngò</i> )	'wooden spear'

#### 5.1.6 Compounds with 'man' (*wálá*) and 'woman' (*yò:*)

No irregular or otherwise unusual compounds including 'man' or 'woman' have been observed. Both *wálá* 'man' and *yò:* 'woman' are used as nouns, and as modifying adjectives: *ɲkè wálá* 'male dog', *ɲkè yò:* 'female dog'. 'Boy' and 'girl' are just 'male child' (*wè: wálá*) and 'female child' (*wè: yò:*).

#### 5.1.7 *X bá:ɲgà* 'owner of X'

A possessive-type compound of the type *X bá:ɲgà* means 'owner of X', with {HL} overlay on *bá:ɲgá* 'owner'. An example is *dèm bá:ɲgà* 'home-owner'.

#### 5.1.8 Nasal linker between compound initial and final

A number of compounds, including frozen combinations that behave prosodically as compounds, have an apparent nasal linker. It is heard as a homorganic nasal before stops, and as vocalic nasalization before *s*.

##### (xx1) a. iterative (§4.xxx)

<i>kàlà-ɲ-kàlà</i>	'herb sp. ( <i>Cassia</i> )'
<i>kó:ló-ɲ-kà:là</i>	'tree locust'
<i>sàgà-<sup>n</sup>-sàgà</i>	'tree sp. ( <i>Piliostigma</i> )'
<i>pòlò-m-pòlò</i>	'tree sp. ( <i>Gyrocarpus</i> )'

##### b. other

<i>álá-<sup>n</sup>-sǎ:bà</i>	'cattle egret'
<i>ɲìgìlì-<sup>n</sup>-[sǎ:l-yè]</i>	'swift; bat (mammal)'
<i>tè:gú-<sup>n</sup>-tè:lè</i>	'roller (bird)'
<i>sìnjà-<sup>n</sup>-dúmbé</i>	'sugar cane'
<i>nùmà-ɲ-gíló</i>	'tree sp. ( <i>Cassia</i> )'
<i>gítè-ɲ-gá:rì</i>	'bush sp. ( <i>Solanum</i> )'
<i>ùnjà-ɲ-kámbé</i>	'bush sp. ( <i>Waltheria</i> )'
<i>kùlù-ɲ-kùndíyè</i>	'laughing dove'

### 5.1.9 Iterative natural-species compounds (*X-màn-X*)

I can cite the examples in (xx1).

- (xx1) *tòŋgù-màn-tòŋgù* 'woodpecker'  
*dànŋgù-màn-dànŋgù* 'herb sp. (*Zornia*)'

### 5.1.10 Instrumental compounds (*bí-yà, -yè*)

A form based on a verb with (tonally modified) **impersonal 3Pl** subject can be used to specify a functional type of a commodity. Those in (xx1) are based on **imperfective** verbs, and end in *bí-yà*, differing in tone from the regular 3Pl imperfective *b(ì)-yà*. The verb form as a whole has {LHL} melody, versus {HL} for the 3Pl imperfective as main-clause verb (*nó: b-yà* 'they drink').

- (xx1) a. *mì:* *nò:-bí-yà*  
 water drink-Impf-Instr  
 'drinking water, water for drinking'
- b. *mì:* *dù-yò-bí-yà*  
 water bathe-MP-Impf-Instr  
 'water for bathing'
- c. *nù:* *nù:mb-yò-bí-yà*  
 oil rub.on-MP-Impf-Instr  
 'oil for rubbing (not cooking)'

The combinations in (xx2) are based on the perfective stem. A modified noun ('stick') is present in (xx2a-b), but this slot is empty in (xx2c-e). The verb including the 3Pl subject suffix again has {LHL} melody, which distinguishes this instrumental compound type from the product-of-action compounds covered in the following section. The verb also requires +ATR suffix *-yè* even for -ATR verbs whose 3Pl perfective ends in *-yè* (*búmb-yè* 'they filed'). Stem iterations ending in a high vowel, arguably pro-forma cognate nominals, are added in these examples.

- (xx2) a. *tùmà* *bùndù-[bùndí-yè]*  
 stick hitting(n)-[hit.Perf-Instr]  
 'a stick for hitting' (*búndé* 'hit')
- b. *mànà* *tày-[tàyí-yè]*  
 plastic shooting(n)-[shoot.Perf-Instr]

'slingshot' (i.e. rubber used for shooting) (*mánà*, *táyé* 'shoot')

- c. *kòjì-[kòjí-yè]*  
scraping(n)-[scrape.Perf-Instr]  
'scraper (for excavating the interior of a calabash or mortar)'
- d. *dàgù-[dàgí-yè]*  
locking(n)-[lock.Perf-Instr]  
'padlock' or 'blacksmith's hammer'
- e. *bùmbù-[bùmbí-yè]*  
filing(n)-[file.Perf-Instr]  
'file (tool)' (verb *búmbé* 'brush, file')

The examples in (xx3) below have forms similar to those in (xx2), including the {LHL} melody of the verb, but now the initial noun does not denote the general entity type, rather the characteristic object of the action. For example, a toothbrush is not a tooth that one brushes with, rather an implement that one brushes teeth with. These are best transcribed as compounds (with hyphens) rather than as noun-adjective sequences (with spaces).

- (xx3)
- a. *ìní-[bùmbí-yè]*  
tooth-[brush.Perf-Instr]  
'toothbrush' (*ìní*, verb *búmbé* 'brush, file')
  - b. *àràngè-[ìgírí-yè]*  
baobab.leaf-[stir.by.rotation.Perf-Instr]  
'stirring-stick' (*àràngè*, verb *ìgírè*)
  - c. *kò:-[pùlí-yè]*  
head-[cover.Perf-Instr]  
'veil, abaya' (*kó:*, verb *púlé*)

#### 5.1.11 Product-of-action compounds (-yè ~ -yè)

A **product-of-action** expression like 'roast(ed) meat' can be generated with a noun denoting the substance followed by a form seemingly segmentally identical to the 3Pl subject perfective, but here functioning as an adjective with no specific subject in mind. In this construction, the verb stem is {L}-toned, and the lexical ATR value of the stem is reflected in the suffixal vowel. Both of these features distinguish this product-of-action construction from the

instrument nominals covered in the preceding section. Compare the examples in (xx2) with 3Pl perfective *yá:r-yè*, *dú-yyè*, and *nám-mì*.

- (xx2) a. *ɔ̀gùlè / nàmà*      *yà:r-yè*  
 peanut<sup>L</sup> / meat<sup>L</sup>      roast.Perf-Product  
 'roasted peanuts / meat' (*ɔ̀gùlé, nàmà*)
- b. *ɔ̀gùlè / sè:ngè*      *dù-yyè*  
 peanut<sup>L</sup> / millet<sup>L</sup>      pound-Product  
 'pounded peanuts / millet' (*ɔ̀gùlé, sè:ngè*)
- c. *sè:ngè*      *nám-mì*  
 millet<sup>L</sup>      stone.grind-Product  
 '(stone-)ground millet' (*sè:ngè*)

## 5.2 Adjectival compounds

### 5.2.1 Bahuvrihi ("Blackbeard") compounds

#### 5.2.1.1 With adjectival compound final [*n-nà-à*]

In (xx1), the bahuvrihi adjective consists of a noun (e.g. body part), a 3Sg possessor suffix, and an adjective. The compound itself functions as an adjective modifying a common noun such as a flora-fauna term, but it can also be used without the noun. The compound-initial noun (with 3Sg possessor *-nà*) drops its tones, while the final adjective has its lexical tones. The resulting form is identical to the corresponding true possessive 'his/her ADJ N' combination (e.g. 'his/her black hair'). Note the {H}-toned *dóngá* 'heavy' in (xx1c) and the {H}-toned *kúlé* 'hair' dropping to *kùlè* in (xx1d). The noun denoting the general class of the entity is tone-dropped as usual before a modifying adjective, see 'dove' in (xx1a) and 'goat' in (xx1d).

Orthographically, I write the bahuvrihi as a single word.

- (xx1) a. *kùlù-ŋ-kùndiyè*      *pàrò-nà-yòrdè*  
 dove<sup>L</sup>      nape<sup>L</sup>-3SgP-black  
 'doves with black nape rings' (e.g. vinaceous dove) (*kùlù-ŋ-kùndiyè, pàrò, yòrdè*)
- b. *yò:*      *jàṇà-nà-bàgàlà(-gé)*  
 woman<sup>L</sup>      belly<sup>L</sup>-3SgP-big(-Pl)  
 'big-bellied woman/women' (*yò:, jàṇà, bàgàlà*)

- c. *yò:* *kò:-nà-dóngá(-gé)*  
 woman<sup>L</sup> head<sup>L</sup>-3SgP-heavy(-Pl)  
 'heavy-headed woman/women' (*yò:*, *kó:*, *dóngá*)
- d. *ùnà* *kùlê-nà-yòrdê(-gé)*  
 goat<sup>L</sup> hair<sup>L</sup>-3SgP-black(-Pl)  
 'black-haired cat(s)' (*úná*, *kúlê*, *yòrdê*)

The *-nà-* is invariant and pro forma. If the compound is pluralized, plural suffix *-gè* (or H-toned variant *-gé*) is added to the "singular" form with *-nà-*, rather than to a form with 3Pl possessor, as shown in the examples in (xx1).

#### 5.2.1.2 With numeral compound final

Bahuvrihis with a nonsingular numeral instead of an adjective have the same form as the corresponding noun-numeral combination, e.g. 'two heads', including tone melodies and the medial plural suffix *-gè*. An example is (xx1a). If the numeral is *tà:ngà* '1', which is syntactically an adjective (§4.7.1.1), the compound has the form of an adjectival bahuvrihi, with 3Sg possessor *-nà-* as in the examples presented in the preceding section.

- (xx1) a. *ùnà* *kó:-gé-négá*  
 goat<sup>L</sup> head-Pl-two  
 'a two-headed goat' (*úná*, *kò:*, *nègà*)
- b. *ntà* *gìrè-nà-tà:ngà(-gé)*  
 person eye-3SgP-one(-Pl)  
 'one-eyed person/people' (*ntá*, *gìrè*, *tà:ngà*)





## 6 Noun Phrase structure

### 6.1 Organization of NP constituents

#### 6.1.1 Linear order

The basic left-to-right linear order of elements is (xx1).

- (xx1) -2 determiner (demonstrative or definite)  
 -1 possessor  
 0 noun  
 +1 modifying adjective  
 +2 cardinal numeral  
 +3 universal quantifier (*sèlè* 'all')

Examples illustrating the relative ordering of adjacent elements are in (xx2). The linear ordering in (xx1) is cobbled together from such examples. In the "type" formulae, n = noun and a = adjective.

(xx2)	NP constituents	type
a.	<i>dèm</i> <sup>L</sup> <i>ɲkà:líyè</i> house <sup>L</sup> small '(a) small house'	[n-a]
b.	<i>dèm</i> <sup>L</sup> <i>ɲkà:liyè-gè</i> <i>tà:ndì</i> house <sup>L</sup> small-Pl <sup>L</sup> three 'three small houses' ( <i>tà:ndì</i> )	[n-a-num]
c.	<i>ín</i> <sup>L+</sup> <i>dèm-gè</i> <i>tà:ndì</i> Prox <sup>L+</sup> house-Pl <sup>L</sup> three 'these/those three houses'	[dem-n-num]
d.	<i>ín</i> <sup>L+</sup> <i>dèm-gè</i> <i>sèlè</i> Prox <sup>L+</sup> house-Pl      all 'all of these/those houses'	[dem-n-'all']
e.	<i>è</i> <sup>HL</sup> <i>[dèm-gè      tà:ndì]</i> <i>sèlè</i>	[def-n-num-'all']

- Def <sup>HL</sup>[house-Pl three] all  
'all three (of the) houses'
- f. *íní* *sèydù*<sup>L</sup> <sup>HL</sup>[*dém-gè* *tà:ndì*] [dem-poss-n-num]  
Prox Seydou<sup>L</sup> <sup>HL</sup>[house-Pl three]  
'these three houses of Seydou'
- g. *à:màdù*<sup>L</sup> *únà*<sup>HL</sup> [poss-n]  
Amadou<sup>L</sup> goat  
'Amadou's goat' (*únà*)
- h. *à:màdù*<sup>L</sup> [*ùnà*<sup>L</sup> *ɲkà:liyé-gè*] [poss-n-a]  
Amadou<sup>L</sup> [goat<sup>L</sup> small-Pl]  
'Amadou's small goats'
- i. *à:màdù*<sup>L</sup> [*ùnà*<sup>L</sup> *ɲkà:liyé-gé* *tà:ndì*] [poss-n-a-num]  
Amadou<sup>L</sup> [goat<sup>L</sup> small-Pl three-Pl]  
'Amadou's three small goats'
- h. *ɲ*<sup>LHL</sup> [*ɲ-ùnà-gè* *tá:ndì*] [poss-n-num]  
1SgP <sup>LHL</sup>[Epen-goat-Pl three]  
'my three houses'

#### 6.1.2 Headless NPs (absolute function of non-noun NP constituents)

A NP component other than a noun may (appear to) head the NP if the noun slot is empty. The examples in (xx1) are shown (with definite *è* where appropriate) and can function as NPs in clauses, as in 'give me \_\_\_ !'.

- (xx1) a. *è bómbe* 'the red one'  
*bómbe* '(some) red'
- b. *è-ɲgé tà:ndì* 'the three'  
*tá:ndì* 'three'
- c. *íni* 'this (one)'
- d. *sèlè* 'all, everything'

### 6.1.3 Bifurcation of relative-clause head NP

The apparent bifurcation of the head NP in a relative has limited effect in Penange, since possessors and determiners are prenominal. The 'all' quantifier *sèlè* is postverbal (§14.6.2).

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

A noun is tone-dropped to {L} before a modifying adjective, see §6.3.1 below. This is the one systematic right-to-left tonosyntactic control process. Numerals '2' and up have only limited tonal interactions with preceding nouns or N-Adj sequences; certain numerals ('2', '4') themselves have variable tonal form depending on tones of a preceding noun, but there is no systematic tonosyntax for these combinations. *sèlè* 'all' does not affect tones of preceding words.

Prenominal possessors control a tone overlay on the following possessed noun. This overlay is realized as {HL}, {H}, or {LHL} depending on the prosodic shape of the possessed noun, for nonpronominal and most pronominal possessors. H-toned pronominal possessors (1Sg *ŋ*, 2Sg *á*) are followed by {L}-toned possessed nouns under limited conditions. Identifying the basic possessed overlay is tricky since it depends on how we formulate lower-level tonological processes and on whether we include (the final word of) the possessor in the domain of the overlay. The logical candidates for basic overlay are {HL} and {LHL}, with the simpler surface patterns taken as reductions thereof I regard the overlay controlled by preposed possessors as purely tonosyntactic.

3Sg possessor suffix *-nà*, the only possessor that follows the possessed noun, does not erase lexical tones on the noun but it does have some quirky tonal interactions with them at the stem-suffix boundary. Specifically, it requires a shift from lexical /L/ to {LH} for heavy stems, merging with lexical {LH}. The suffix *-nà* is also quirky in that it immediately follows the possessed noun stem, preceding a plural suffix and any adjectives or numerals associated with the possessed noun. There is some quirky tonology of such combinations (e.g. noun-*nà*-Plural Adj Num), but it is not purely tonosyntactic in nature.

Determiners are prenominal, like most possessors. Definite *è* requires an initial H-tone on the following noun, but the lexical tone melody of the noun is not completely erased, so this is not pure tonosyntax. *ini* 'this' requires initial L-tone on the following noun, but again the lexical melody of the noun is not entirely erased. By contrast, *èm-bà* 'that' and *ê*: 'that (discourse-definite)', which are best analysed as locative adverbs ('there') that here function syntactically as possessor NPs, control {HL} on the following noun, so this control is tonosyntactic.

NPs undergo no additional tone-dropping when functioning as relative-clause internal heads.

## 6.2 Possessives

Except for 3Sg pronominal possessor (suffix *-nà*), all possessors precede the possessed NP. There is no genitive morpheme. Instead, possessor-possessioned relationships are expressed by linear juxtaposition and by tone melodies. In §6.2.1 the tonal changes on nonpronominal possessor NPs are considered. Tone overlays on the possessed noun or NP are considered in §6.2.2-3.

Pronominal possessors are shown in (xx1). The independent pronouns and pronominal-subject proclitic pronouns for the same categories are also shown to bring out the morphological relationships. Tone melodies on the possessed noun X are disregarded for the moment.

(xx1)	category	possessor of X	independent	proclitic to V[erb]
	1Pl	<i>mbé</i> X ~ <i>ɲ</i> X	<i>mbé</i>	<i>ɲ</i> V
	2Pl	<i>ábé</i> X ~ <i>à</i> X	<i>ábé</i>	<i>à</i> V
	3Pl	<i>ɲké</i> X	<i>ɲké</i>	V- <i>yà</i> (etc.) suffix
	3Sg	X- <i>nà</i>	<i>ɲnà</i>	V- <i>∅</i> (V <i>ná</i> in relatives)
	1Sg	<i>ɲ</i> X	<i>mí</i>	<i>ɲ</i> V
	2Sg	<i>á</i> X	<i>ó</i>	<i>à</i> V

The generalizations are summarized in (xx2).

### (xx2) Pronominal possessors

- plural pronouns have either independent or proclitic form
- 3Sg possessor has a unique suffix *-nà*
- 1Sg and 2Sg possessors have proclitic form

There are no differences in segmental form or linear order of alienable and inalienable possessors. There are slight differences in tones of nouns in the two cases.

A **default inanimate possessed noun** is *ɲé*; as in *wè:-gè ɲé* 'the children's \_\_\_' and *á ɲé* 'yours'. It can be pluralized (*X ɲé:-gè*). It is probably an old word

for 'thing', with possessor-controlled {HL} with originally epenthetic *p-* now fused and unsegmentable. Cf. *è* 'that which' (default relative head), §14.2.4.

### 6.2.1 Tones of alienable possessor NP

If the preposed possessor is a nonpronominal NP, its **final word is often tone-dropped** to {L} before the possessed noun, which itself begins with a H-tone. Some of my current transcriptions do not indicate this possessor tone-dropping, so **more study of this is needed**.

A simple example with a personal name is (xx1a). In (xx1b), 'Seydou' is tone-dropped as possessor of 'father', then 'father', which should be {LH}-toned as an inalienably possessed noun, is tone-dropped to {L} as the final word in the possessor of 'cow'. Except for such recursive possession, a nonfinal word in the possessor NP is not tone-dropped. Therefore the pronominal possessor of 'father' in (xx1c) remains H-toned, and 'man' in (xx1d) surfaces with its definite-controlled {HL} overlay. In (xx1a-d), the form of the possessor NP when used separately is given in parentheses after the free translation.

- (xx1) a.  $\begin{array}{ccc} \textcolor{blue}{s\grave{e}ydu}^L & \text{HL} & \textcolor{blue}{n\hat{a}}: \\ \text{S}^L & & \text{HL}_{\text{cow}} \end{array}$   
 'Seydou's cow' ( $\textcolor{blue}{s\grave{e}ydu}$ )
- b.  $\begin{array}{ccc} \textcolor{blue}{[s\grave{e}ydu]}^L & \text{HL} & \textcolor{blue}{b\grave{o}b\grave{o}}^L \\ \text{[S]} & \text{HL}_{\text{father}} & \text{HL}_{\text{cow}} \end{array}$   
 'Seydou's father's cow' ( $\textcolor{blue}{s\grave{e}ydu}^L \text{HL} \textcolor{blue}{b\grave{o}b\grave{o}}$ )
- c.  $\begin{array}{ccc} \textcolor{blue}{[ij]} & \text{HL} & \textcolor{blue}{n\hat{a}}: \\ \text{[1SgP]} & \text{HL}_{\text{father}} & \text{HL}_{\text{cow}} \end{array}$   
 'my father's cow' ( $\textcolor{blue}{ij}^{\text{HL}} \textcolor{blue}{b\grave{o}b\grave{o}}$ )
- e.  $\begin{array}{cccc} \textcolor{blue}{[è]} & \text{HL} & \textcolor{blue}{w\acute{a}l\grave{a}} & \text{L} & \textcolor{blue}{k\grave{a}:mn\grave{o}}] & \text{HL} & \textcolor{blue}{n\hat{a}}: \\ \text{[Def]} & \text{HL}_{\text{man}} & & \text{L} & \text{old} & \text{HL}_{\text{cow}} \end{array}$   
 'the old man's cow' ( $\textcolor{blue}{è}^{\text{HL}} \textcolor{blue}{w\acute{a}l\grave{a}} \textcolor{blue}{k\grave{a}:mn\grave{o}}$ )

#### 6.2.1.1 Tones of alienably possessed noun

(xx1) presents pronominal-possessor paradigms for three alienably possessed nouns. The nouns here are lexically /L/-toned.

(xx1) Alienable possession paradigm (/L/-toned nouns)

	poss	'sheep' ( <i>&lt; àlāmúnò</i> )	'mosque' ( <i>&lt; mìnjìlì</i> )	'village' ( <i>&lt; dùgù</i> )	'cow' ( <i>&lt; nà:</i> )
a.	1Sg	<i>ń y-àlāmúnò</i> <i>ń y-àlāmúnò-gè</i>	<i>ń mìnjìlì</i> <i>ń mìnjìlì-gè</i>	<i>ń dùgù</i> <i>ń dùgù-gè</i>	<i>ń nà:</i> <i>ń nǎ:-ngè</i>
	1Pl	<i>mbé álámúnò</i> <i>mbé álámúnò-gè</i>	<i>mbé mìnjìlì</i> <i>mbé mìnjìlì-gè</i>	<i>mbé dúgú</i> <i>mbé dúgú-gè</i>	<i>mbé ná:</i> <i>mbé ná:-ngè</i>
	or:	<i>ń y-álámúnò</i> <i>ń y-álámúnò-gè</i>	<i>ń mìnjìlì</i> <i>ń mìnjìlì-gè</i>	<i>ń dúgú</i> <i>ń dúgú-gè</i>	<i>ń ná:</i> <i>ń ná:-ngè</i>
b.	2Sg	<i>á yàlāmúnò</i> <i>á yàlāmúnò-gè</i>	<i>á mìnjìlì</i> <i>á mìnjìlì-gè</i>	<i>á dùgù</i> <i>á dùgù-gè</i>	<i>á nà:</i> <i>á nǎ:-ngè</i>
	2Pl	<i>ábé álámúnò</i> <i>ábé álámúnò-gè</i>	<i>ábé mìnjìlì</i> <i>ábé mìnjìlì-gè</i>	<i>ábé dúgú</i> <i>ábé dúgú-gè</i>	<i>ábé ná:</i> <i>ábé ná:-ngè</i>
	or:	<i>à y-álámúnò</i> <i>à y-álámúnò-gè</i>	<i>à mìnjìlì</i> <i>à mìnjìlì-gè</i>	<i>à dúgú</i> <i>à dúgú-gè</i>	<i>à ná:</i> <i>à ná:-ngè</i>
c.	3Sg	<i>àlāmúnò-nà</i> <i>àlāmúnò-ná-gè</i>	<i>mìnjìlì-nà</i> <i>mìnjìlì-ná-gè</i>	<i>dùgù-nà</i> <i>dùgù-ná-gè</i>	<i>nà:-nà</i> <i>nà:-ná-gè</i>
	3Pl	<i>ńké álámúnò</i> <i>ńké álámúnò-gè</i>	<i>ńké mìnjìlì</i> <i>ńké mìnjìlì-gè</i>	<i>ńké dúgú</i> <i>ńké dúgú-gè</i>	<i>ńké ná:</i> <i>ńké ná:-ngè</i>
d.	NP	NP <sup>L</sup> <i>álámúnò</i> NP <sup>L</sup> <i>álámúnò-gè</i>	NP <sup>L</sup> <i>mìnjìlì</i> NP <sup>L</sup> <i>mìnjìlì-gè</i>	NP <sup>L</sup> <i>dùgù</i> NP <sup>L</sup> <i>dùgù-gè</i>	NP <sup>L</sup> <i>nà:</i> NP <sup>L</sup> <i>ná:-ngè</i>

In the singular forms for 3Sg possessor we observe a break between prosodically heavy stems, which "grow" a final H-tone before *-nà*, and prosodically light stems, which remain {L}-toned before *-nà*. For this purpose, light stems are *Cv:*, *CvCv*, and *CvNCv* (with homorganic nasal/voiced-stop cluster) while heavy stems are other *CvCCv* stems along with *Cv:Cv* and all trisyllabic and longer stems. Further examples are (light) *gùmbà-nà* 'his/her bowl' and (heavy) *àlgá-nà* 'his/her pig' (*àlgà*), *tù:mbá-nà* 'his/her gourd' (*tù:mbà*).

1Sg and 2Sg possessors are expressed by single-segment pronominal proclitics identical to those used to make subjects with verbs (1Sg *ń*, 2Sg *á*). 1Pl and 2Pl possessors can be expressed either by independent pronouns (1Pl *mbé*, 2Pl *ábé*) or by subject-like proclitics (1Pl *ń*, 2Pl *à*). 3Pl possessor is always independent *ńké*. 3Sg possessor is a suffix *-nà* (H-toned *-ná* after /H/-toned noun) resembling the 3Sg subject enclitic *ná* found in nonsubject relative and

nonsubject focalized clauses. 3Pl and 3Sg possessor pronominals are not used when the corresponding nonpronominal NP possessor is present (xx1d).

Examples with representative nouns of lexical melodies other than /L/ are in (xx2).

(xx2)	noun	gloss	1Sg	1Pl	3Sg
a. lexically /H/-toned					
	<i>pú:<sup>n</sup></i>	'duck sp.'	<i>ń pù:<sup>n</sup></i>	<i>mbé pú:<sup>n</sup></i> ~ <i>ń pú:<sup>n</sup></i>	<i>pú:<sup>n</sup>-ná</i>
	<i>úná</i>	'goat'	<i>ń n-úná</i>	<i>mbé úná</i> ~ <i>ń n-úná</i>	<i>úná-ná</i>
b. lexically /LH/-toned					
	<i>1Sg {LH}</i> <i>nèjjé</i>	'bird'	<i>ń nèjjé</i>	<i>mbé nèjjé</i> ~ <i>ń nèjjé</i>	<i>nèjjé-nà</i>
	<i>1Sg {LHL}</i> <i>sǎ:y<sup>n</sup></i>	'tigerfish'	<i>ń sǎ:y<sup>n</sup></i>	<i>mbé sǎ:y<sup>n</sup></i> ~ <i>ń sǎ:y<sup>n</sup></i>	<i>sǎ:y<sup>n</sup>-nà</i>
	<i>gè:ní</i>	'broom'	<i>ń gě:nì</i>	<i>mbé gě:nì</i> ~ <i>ń gě:nì</i>	<i>gè:ní-nà</i>
	<i>bùyà:gí</i>	'guava'	<i>ń bùyá:gì</i>	<i>mbé bùyá:gì</i> ~ <i>ń bùyá:gì</i>	<i>bùyà:gí-nà</i>
c. lexically /HL/-toned					
	<i>bāl</i>	'bush sp.'	<i>ń bāl</i>	<i>mbé bāl</i> ~ <i>ń bāl</i>	<i>bāl-nà</i>
	<i>kó:tì</i>	'tick'	<i>ń kǒ:tì</i>	<i>mbé kó:tí</i> ~ <i>ń kó:tì</i>	<i>kó:tí-nà</i>
	<i>ká:láwâl</i>	'bamboo'	<i>ń kà:làwâl</i>	<i>mbé ká:láwâl</i> ~ <i>ń ká:láwâl</i>	<i>ká:láwâl-nà</i>
	<i>pólmálá:ndù</i>	'pigeon'	<i>ń pòlmàlá:ndù</i>	<i>mbé pólmálá:ndù</i> ~ <i>ń pólmálá:ndù</i>	<i>pólmálá:ndú-nà</i>
d. lexically /LHL/-toned					
	<i>kìn-wê:</i>	'stone'	<i>ń kìn-wê:</i>	<i>mbé kín-wê:</i> ~ <i>ń kín-wê:</i>	<i>kìn-wê:-nà</i>
	<i>sò:mbúlè</i>	'hamarkop'	<i>ń sò:mbúlè</i>	<i>mbé sò:mbúlè</i> ~ <i>ń sò:mbúlè</i>	<i>sò:mbúlè-nà</i>
	<i>èjègélè</i>	'carp'	<i>ń y-èjègélè</i>	<i>mbé éjégélè</i> ~ <i>ń y-éjégélè</i>	<i>èjègélè-nà</i>

*y/j*-Epenthesis applies to vowel-initial nouns if preceded by 1st/2nd person proclitics, but not by 1Pl or 2Pl independent pronouns; see 'goat' in (xx2a), 'carp' in (xx2d), and 'sheep' in (xx1).

The tone melodies can be summarized for the different possessors as in (xx3).

- (xx3) a. after nonpronominal NP possessor  
           {HL} overlay on noun
- b. after 1Pl (*ɲ*, *mbé*), 2Pl (*à*, *ábé*), or 3Pl (*ɲké*)  
           {HL} overlay on noun  
           —reduced to {H} in prosodically light stems
- c. after 1Sg (*ɲ*) or 2Sg (*á*)  
           {LHL} overlay on noun  
           —reduced to {L} in prosodically light stems  
           —reduced to {LH} in plural *CṿCṿ-gè* and *Cṿ:-gè*
- d. before 3Sg *-nâ* ~ *-ná*  
           lexical /H/ and /LH/ melodies are preserved  
           lexical /HL/ is preserved; the H-tone spreads to the presuffixal syllable  
           lexical /LHL/ is preserved; the H-tone shifts to the presuffixal syllable  
           lexical /L/ becomes /LH/ if heavy (*Cṿ:Cṿ* or trisyllabic or longer, or any light stem plus plural *-gè*)  
           —/L/ is preserved for light stems (*Cṿ:*, *CṿCṿ*, or *CṿNCṿ* with homorganic cluster)

The **tone-melody reductions** mentioned in (xx3b-c) make reference to the distinction between prosodically light and heavy stems. **Light** stems are *Cṿ:*, *CṿCṿ*, and *CṿNCṿ* with homorganic nasal/voiced-stop cluster. Data are sparse on *CṿL* nouns; for *bâl* 'bush sp.', my assistant produced the full {LHL} overlay in *ɲ bâl* (1Sg) but reduced {HL} to {H} in *ɲ bâl* (1Pl). Even the consistent reductions for *CṿCṿ* and *Cṿ:* stems are not phonologically automatic, as can be seen by the fact that the {HL} melody does not reduce after a nonpronominal NP possessor (xx3a), see (xx1d) for data.

Contour melodies {HL}, {LHL}, and {LH} have their **tone breaks** near the right edge of the relevant tonal domain, as is also the case when such stems appear without modifiers in their lexical shape. For example, 'carp' in (xx2d) realizes {HL} as *élgélgè* (H.H.H.L), {LHL} as *èlègélè* (L.L.H.L), and {LH} as *èlègélé* (L.L.L.H).



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

We have seen that a simple possessed noun has {HL} tones after a nonpronominal NP possessor. When an adjective is added to the possessed noun, formulaically [Poss [N Adj]], we get the same {HL} contour, but it is realized over the entire N-Adj sequence, with only the final syllable L-toned, tonosyntactic formula [Poss<sup>L HL</sup>[N Adj]]. Compare unpossessed (xx1a) with possessed counterparts (xx1b). The same is true of the {HL} contour for possessed NPs after a plural pronominal possessor (xx1c).

- (xx1) a.  $\dot{u}n\grave{a}^L$   $y\acute{o}rd\acute{e} / y\acute{o}rd\acute{e}-g\acute{e}$   
 goat<sup>L</sup> black / black-PI  
 'black goat(s)' ( $\acute{u}n\acute{a}$ )
- b.  $\grave{a}:m\grave{a}d\grave{u}^L$   $^{HL}[\acute{u}n\acute{a} \quad y\acute{o}rd\grave{e} / y\acute{o}rd\acute{e}-g\grave{e}]$   
 Amadou<sup>L</sup>  $^{HL}$ [goat black / black-PI]  
 'Amadou's black goat(s)' ( $\acute{a}:m\acute{a}d\grave{u}$ )
- c.  $mb\acute{e} / \acute{a}b\acute{e} / \eta k\acute{e}$   $^{HL}[\acute{u}n\acute{a} \quad y\acute{o}rd\grave{e} / y\acute{o}rd\acute{e}-g\grave{e}]$   
 1PIP / 2PIP / 3PIP  $^{HL}$ [goat black / black-PI]  
 'our/your-PI/their black goat(s)'

Similarly, the maximal {LHL} overlay controlled by a 1Sg or 2Sg possessor is expressed over the entire possessed N-Adj sequence (xx2).

- (xx2)  $\eta / \acute{a}$   $^{LHL}[\grave{n}\grave{u}n\grave{a} \quad y\acute{o}rd\grave{e} / y\acute{o}rd\acute{e}-g\grave{e}]$   
 1SgP / 2SgP  $^{LHL}$ [goat black / black-PI]  
 'my/your-Sg black goat(s)' (epenthetic  $\eta$ )

Consider now [Poss [N-PI Num]]. Without the possessor, the noun 'goat' has its usual lexical tones (xx3a). When (xx3a) is possessed, a {LHL} overlay, distinct from the {HL} overlay seen in (xx1b) above, is applied to the entire possessed NP (xx3b). The tonosyntactic formula is [Poss<sup>L LHL</sup>[N-PI Num]]. This {LHL} overlay converges with the {LHL} that is controlled, here and elsewhere with prosodically heavy possessed NPs, by 1Sg/2Sg possessors (xx3c).

- (xx3) a.  $\acute{u}n\acute{a}-g\acute{e}$   $t\acute{a}:nd\grave{i}$   
 goat-PI three  
 'three goats' ( $\acute{u}n\acute{a}$ , plural  $\acute{u}n\acute{a}-g\acute{e}$ )
- b.  $\grave{a}:m\grave{a}d\grave{u}^L$   $^{LHL}[[\grave{n}\grave{u}n\grave{a}-g\grave{e} \quad t\acute{a}:nd\grave{i}]]$   
 Amadou<sup>L</sup>  $^{LHL}$ [[goat-PI three]

'Amadou's three goats' (*á:mádù*)

- c. *ɲ / á* <sup>LHL</sup>[[*ùnà-gè* *tá:ndì*]  
 1 SgP / 2 SgP <sup>LHL</sup>[[goat-Pl three]  
 'my/your-Sg three goats'

A N-Adj-Num combinations is expressed without a possessor as [N<sup>L</sup> Adj-Pl<sup>L</sup> Num], as in (xx4a), see §6.xxx below. When a possessor is added, as in the formula [Poss [N Adj-Pl Num]], there is no overt change in the tones of the possessed NP. This is probably accidental, since the unpossessed string already happens to be compatible with the maximal {LHL} possessor-controlled overlay.

- (xx4) a. *ùnà*<sup>L</sup> *yòrdè-gè*<sup>L</sup> *tá:ndì / kúlé:ní*  
 goat<sup>L</sup> black-Pl<sup>L</sup> three / six  
 'three / six black goats.'
- b. *ùnà*<sup>L</sup> *yòrdè-gé*<sup>L</sup> *kèjò*  
 goat<sup>L</sup> black-Pl<sup>L</sup> four  
 'four black goats.'
- c. *à:mádù*<sup>L</sup> <sup>LHL</sup>[[*ùnà* *yòrdè-gè* *tá:ndì / kúlé:nì*]  
 Amadou<sup>L</sup> <sup>LHL</sup>[[goat black-Pl three / six]  
 'Amadou's three /six black goats.'
- d. *à:mádù*<sup>L</sup> <sup>LHL</sup>[[*ùnà* *yòrdè-gé* *kèjò*]  
 Amadou<sup>L</sup> <sup>LHL</sup>[[goat black-Pl four]  
 'Amadou's four black goats.'

3Sg pronominal possessor *-nà* ~ *-ná* (e.g. *úná-ná* 'his/her goat', *úná-ná-gè* 'his/her goats') is added to the noun stem even when it has logical scope over the entire unpossessed NP including modifiers and numerals. When the possessed noun with *-nà* ~ *-ná* is followed by a numeral (xx5a) or by an adjective (xx5b-c), the initial lexical tone of the noun stem spreads to the end of the word. The effect is that the five lexical tone melodies for nouns reduce to two, {H} and {L}. The numeral or adjective has {HL} overlay regardless of whether the noun is {H}- or {L}-toned after this tone-spreading rule. The shift to {HL} is inaudible for *tá:ndì* '3' but is audible for *nègà* ~ *négá* '2'. When the noun with *-nà* ~ *-ná* is followed by both an adjective and a numeral, the adjective is treated as an extension of the noun for tonosyntactic purposes, so the N-Adj sequence is entirely {H}-toned (xx5d) or entirely {L}-toned (xx5e). The numeral has the same {HL} overlay as before. The adjectives in these examples are *yórdé* 'black' (regular plural *yórdé-gé*) and *bòmbè* 'red'.



'my/our/your-Sg/your-Pl/their father

- b.  $\dot{a}:\text{m}\dot{a}\text{d}\dot{u}$ <sup>L</sup>  $\text{b}\dot{o}\text{b}\dot{o}$ <sup>HL</sup>  
 Amadou<sup>L</sup> father<sup>HL</sup>  
 'Amadou's father'
- c.  $\text{b}\dot{o}\text{b}\dot{o}-\text{n}\dot{a}$   
 father-3SgP  
 'his/her father'

We now consider the tonal form of **inalienably possessed** nouns after such a possessor. Paradigms in the same format given earlier for alienables are in (xx2). The crucially different forms are those for 1Sg and 2Sg possessors that are flagged with "(!)."

(xx2) Inalienable possession paradigm

category	'father' (< $\text{b}\dot{o}\text{b}\dot{o}$ )	'uncle' (< $\text{n}\dot{e}\dot{j}\dot{i}$ )	'mother' (< $\text{n}\dot{i}:$ )
a. 1Sg	$\dot{\eta}$ <sup>LH</sup> $\text{b}\dot{o}\text{b}\dot{o}$ (!) $\dot{\eta}$ <sup>LHL</sup> $\text{b}\dot{o}\text{b}\dot{o}-\text{g}\dot{e}$	$\dot{\eta}$ <sup>LH</sup> $\text{n}\dot{e}\dot{j}\dot{i}$ (!) $\dot{\eta}$ <sup>LHL</sup> $\text{n}\dot{e}\dot{j}\dot{i}-\text{g}\dot{e}$	$\dot{\eta}$ <sup>HL</sup> $\text{n}\dot{i}:$ (!) $\dot{\eta}$ <sup>HL</sup> $\text{n}\dot{i}:-\text{g}\dot{e}$ (!)
1Pl	$\text{m}\text{b}\dot{e}$ <sup>H</sup> $\text{b}\dot{o}\text{b}\dot{o}$ $\text{m}\text{b}\dot{e}$ <sup>HL</sup> $\text{b}\dot{o}\text{b}\dot{o}-\text{g}\dot{e}$	$\text{m}\text{b}\dot{e}$ <sup>H</sup> $\text{n}\dot{e}\dot{j}\dot{i}$ $\text{m}\text{b}\dot{e}$ <sup>HL</sup> $\text{n}\dot{e}\dot{j}\dot{i}-\text{g}\dot{e}$	$\text{m}\text{b}\dot{e}$ <sup>H</sup> $\text{n}\dot{i}:$ $\text{m}\text{b}\dot{e}$ <sup>HL</sup> $\text{n}\dot{i}:-\text{g}\dot{e}$
b. 2Sg	$\acute{a}$ <sup>LH</sup> $\text{b}\dot{o}\text{b}\dot{o}$ (!) $\acute{a}$ <sup>LHL</sup> $\text{b}\dot{o}\text{b}\dot{o}-\text{g}\dot{e}$	$\acute{a}$ <sup>LH</sup> $\text{n}\dot{e}\dot{j}\dot{i}$ (!) $\acute{a}$ <sup>LHL</sup> $\text{n}\dot{e}\dot{j}\dot{i}-\text{g}\dot{e}$	$\acute{a}$ <sup>HL</sup> $\text{n}\dot{i}:$ (!) $\acute{a}$ <sup>HL</sup> $\text{n}\dot{i}:-\text{g}\dot{e}$ (!)
2Pl	$\acute{a}\text{b}\dot{e}$ <sup>H</sup> $\text{b}\dot{o}\text{b}\dot{o}$ $\acute{a}\text{b}\dot{e}$ <sup>HL</sup> $\text{b}\dot{o}\text{b}\dot{o}-\text{g}\dot{e}$	$\acute{a}\text{b}\dot{e}$ <sup>H</sup> $\text{n}\dot{e}\dot{j}\dot{i}$ $\acute{a}\text{b}\dot{e}$ <sup>HL</sup> $\text{n}\dot{e}\dot{j}\dot{i}-\text{g}\dot{e}$	$\acute{a}\text{b}\dot{e}$ <sup>H</sup> $\text{n}\dot{i}:$ $\acute{a}\text{b}\dot{e}$ <sup>HL</sup> $\text{n}\dot{i}:-\text{g}\dot{e}$
c. 3Sg	$\text{b}\dot{o}\text{b}\dot{o}-\text{n}\dot{a}$ $\text{b}\dot{o}\text{b}\dot{o}-\text{n}\dot{a}-(\eta)\text{g}\dot{e}$	$\text{n}\dot{e}\dot{j}\dot{i}-\text{n}\dot{a}$ $\text{n}\dot{e}\dot{j}\dot{i}-\text{n}\dot{a}-(\eta)\text{g}\dot{e}$	$\text{n}\dot{i}:-\text{n}\dot{a}$ $\text{n}\dot{i}:-\text{n}\dot{a}-(\eta)\text{g}\dot{e}$
3Pl	$\eta\text{k}\dot{e}$ <sup>H</sup> $\text{b}\dot{o}\text{b}\dot{o}$ $\eta\text{k}\dot{e}$ <sup>HL</sup> $\text{b}\dot{o}\text{b}\dot{o}-\text{g}\dot{e}$	$\eta\text{k}\dot{e}$ <sup>H</sup> $\text{n}\dot{e}\dot{j}\dot{i}$ $\eta\text{k}\dot{e}$ <sup>HL</sup> $\text{n}\dot{e}\dot{j}\dot{i}-\text{g}\dot{e}$	$\eta\text{k}\dot{e}$ <sup>H</sup> $\text{n}\dot{i}:$ $\eta\text{k}\dot{e}$ <sup>HL</sup> $\text{n}\dot{i}:-\text{g}\dot{e}$
d. NP	NP <sup>L</sup> $\text{b}\dot{o}\text{b}\dot{o}$ <sup>HL</sup> NP <sup>L</sup> $\text{b}\dot{o}\text{b}\dot{o}-\text{g}\dot{e}$ <sup>HL</sup>	NP <sup>L</sup> $\text{n}\dot{e}\dot{j}\dot{i}$ <sup>HL</sup> NP <sup>L</sup> $\text{n}\dot{e}\dot{j}\dot{i}-\text{g}\dot{e}$ <sup>HL</sup>	NP <sup>L</sup> $\text{n}\dot{i}:$ <sup>HL</sup> NP <sup>L</sup> $\text{n}\dot{i}:-\text{g}\dot{e}$ <sup>HL</sup>

["NP<sup>L</sup>" means final word in NP is {L}-toned]

The alienable and inalienable paradigms are very similar. There is no difference in the plural-pronoun, 3Sg, or nonpronominal NP possessor combinations.

However, there are notable differences in the **1Sg/2Sg possessed forms** for prosodically light stems (which include most kin terms). If the possessed noun is *CvCv*, the {LH} overlay is fully expressed in the plural in both constructions ('father', 'uncle', 'village'): *ń b̀̀b̀b̀-ge* 'my fathers' and *ń ǹ̀j̀-ge* 'my uncles' like *ń d̀̀g̀-ge* 'my villages'. However, in the unsuffixed singular, the {LH} overlay remains fully articulated with inalienables, but flattens to {L} for inalienables: *ń b̀̀b̀* 'my father' and *ń ǹ̀j̀* 'my uncle', but *ń d̀̀g̀* 'my village'. Likewise, with 1Sg/2Sg possessor, if the possessed noun is *Cv*, it appears with H-tone if inalienable (*ń ǹ̀*: 'my mother', similarly *ń d̀̀*: 'my elder sibling'), but with L-tone in the singular becoming <LH>-tone in the plural if alienable (*ń ǹ̀*: 'my cow', *ń ǹ̀-ge* 'my cows'). For prosodically heavy nouns there is no tonal difference between alienable and inalienable.

The prosodically light kin and relationship terms in (xx1a) have the telltale {LH} or monosyllabic H-tone of inalienable nouns in the 1Sg form. The heavy nouns in (xx1b) have {LHL} overlay in the 1Sg form which is compatible with alienable or inalienable possession.

(xx1)      unposs.      X's \_\_\_\_      'my \_\_\_\_'      gloss

a. prosodically light, definitely inalienable

*monosyllabic with {H}*

<i>d̀̀</i> :	<i>d̀̀</i> :	<i>ń d̀̀</i> :	'elder sibling'
<i>ǹ̀</i> :	<i>ǹ̀</i> :	<i>ń ǹ̀</i> :	'mother'
<i>b̀̀</i> :	<i>b̀̀</i> :	<i>ń b̀̀</i> :	'aunt'

*bisyllabic with {LH}*

<i>ǹ̀j̀</i>	<i>ǹ̀j̀</i>	<i>ń ǹ̀j̀</i>	'uncle'
<i>ǹ̀b̀</i>	<i>ǹ̀b̀</i>	<i>ń ǹ̀b̀</i>	'younger sibling'
<i>t̀̀r̀</i>	<i>t̀̀r̀</i>	<i>ń t̀̀r̀</i>	'grandfather'
<i>b̀̀b̀</i>	<i>b̀̀b̀</i>	<i>ń b̀̀b̀</i>	'father'
<i>s̀̀j̀</i>	<i>s̀̀j̀</i>	<i>ń s̀̀j̀</i>	'grandmother'
<i>ǹ̀l̀</i>	<i>ǹ̀l̀</i>	<i>ń ǹ̀l̀</i>	'friend'

b. prosodically heavy, no evidence for inalienability

<i>k̀̀</i> :	<i>k̀̀</i> :	<i>ń k̀̀</i> :	'agemate'
<i>̀̀mb̀l</i>	<i>̀̀mb̀l</i>	<i>ń ń-̀̀mb̀l</i>	'parent-in-law'
<i>ǹ̀mb̀l</i>	<i>ǹ̀mb̀l</i>	<i>ń ǹ̀mb̀l</i>	'person with the same name'
<i>s̀̀j̀-g̀</i>	<i>s̀̀j̀-g̀</i>	<i>ń s̀̀j̀-g̀</i>	'grandchild'

No special **vocatives** were elicitable. My assistant uses full kin terms like 'my father' in address, instead of a specialized vocative ('dad!').

*ẁ̀*: 'child', *b̀̀ǹ* 'man', and *ỳ̀*: 'woman' are alienable nouns, but they can take (alienable) possessors in kin-term contexts. With 1Sg possessors: *ń ẁ̀*: 'my

child' (also 'my nephew/niece'), *ɲ wàlá* 'my husband', *ɲ yò* 'my wife'. Possessed forms of *wè*: *wá lá* 'male child, boy' and of *wè*: *yò*: can mean either 'X's son' and 'X's daughter' from a parent's perspective, or 'X's girlfriend' and 'X's boyfriend' from the perspective of an opposite-sex person.

If a man has taken a second wife, the senior and junior wives can be distinguished adjectivally as 'big' versus 'small' or 'first' versus 'second'. 'Co-wife' is a compound *àmbàl-yò*:

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

There is no difference between alienable and inalienable possession in the tonal treatment of possessed N-Adj, N-Num, or N-Adj-Num combinations.

A possessed NP of the form N-Adj is treated the same way in alienable and inalienable possession. 'Stone' (*kìn-wè*:) and 'uncle' (*néjì*) have the same tonal treatments in unpossessed (xx2a), and again in possessed (xx2b-c).

- (xx2) a. *kìn-wè*:<sup>L</sup> / *nèjì*<sup>L</sup>      *dóŋgá*  
stone<sup>L</sup> / uncle<sup>L</sup>      heavy  
'(a) heavy stone/uncle'
- b. *ɲ*      <sup>LHL</sup>[*kìn-wè*: / *nèjì*      *dóŋgà*]  
1SgP      <sup>LHL</sup>[stone / uncle      heavy]  
'my heavy stone/uncle'
- c. *à:màdù*<sup>L</sup>      <sup>HL</sup>[*kín-wé*: / *néjí*      *dóŋgà*]  
Amadou<sup>L</sup>      <sup>HL</sup>[stone / uncle      heavy]  
'Amadou's heavy stone/uncle'

Similarly, if the possessed NP is N-Num, alienable 'stone' and inalienable 'uncle' have the same tonal treatments.

- (xx2) a. *kìn-wé*:-*gè*      *kèjò*  
stone-Pl      four  
'four stones'
- b. *néjí-gé*      *kéjò*  
uncle      four  
'four uncles'
- c. *ɲ*      <sup>LHL</sup>[*kìn-wé*:-*gè* / *nèjì-gè*      *kéjò*]  
1SgP      <sup>LHL</sup>[stone-Pl / uncle-Pl      four]  
'my four stones/uncles'

- d.  $\grave{a}:m\grave{a}d\grave{u}$  <sup>HL</sup> $[k\acute{in}-w\acute{e}:-g\acute{e} / n\acute{e}j\acute{i}-g\acute{e}]$   $k\acute{e}j\grave{o}$   
 Amadou<sup>L</sup> <sup>HL</sup> $[stone-Pl / uncle-Pl]$  four  
 'Amadou's four stones/uncles'

In a triple sequence N-Adj-Num, there is again no tonal alienability distinction. Possessed phrases with 'stone' and 'uncle' have the same tonosyntactic patterns in (xx3a-c).

- (xx3) a.  $k\acute{in}-w\acute{e}:- / n\acute{e}j\grave{i}$   $d\acute{o}ng\acute{a}-g\acute{e}$   $k\acute{e}j\acute{o}$   
 stone / uncle heavy-Pl four  
 'four heavy stones/uncles'
- b.  $\acute{n}$  <sup>LHL</sup> $[k\acute{in}-w\acute{e}:- / n\acute{e}j\grave{i}]$   $d\acute{o}ng\acute{a}-g\acute{e}$   $k\acute{e}j\grave{o}$   
 1SgP <sup>LHL</sup> $[stone / uncle]$  heavy-Pl four  
 'my four heavy stones/uncles'
- c.  $\grave{a}:m\grave{a}d\grave{u}$  <sup>HL</sup> $[k\acute{in}-w\acute{e}:- / n\acute{e}j\acute{i}]$   $d\acute{o}ng\acute{a}-g\acute{e}$   $k\acute{e}j\grave{o}$   
 Amadou<sup>L</sup> <sup>HL</sup> $[stone / uncle]$  heavy-Pl four  
 'Amadou's four heavy stones/uncles'

Conclusion: inalienability is only weakly distinguished from alienability, in the tones of unmodified, prosodically short 1Sg/2Sg possessor forms.

### 6.2.3 Recursive possession

Recursive possession of the type  $[[X's Y]'s Z]$  is possible. The formula for the embedded possessor as an independent NP is  $[X^L \text{ } ^{HL}Y]$  if X is a single word, as in (xx1a-b). The formula for the recursive possessive is  $[[X^L \text{ } ^{\cancel{HL}}Y^L] \text{ } ^{HL}Z]$ , where the outmost possessed noun Z requires that the final word in the preceding possessor be {L}-toned, erasing the previous {HL} overlay, as in (xx1c-d). The double strikethrough in  $\cancel{HL}$  indicates this erasure.

- (xx1) a.  $\acute{n}k\acute{e}$  <sup>HL</sup> $d\acute{f}\grave{o}$   
 dog <sup>HL</sup>tail  
 '(a/the) dog's tail'
- b.  $\grave{a}:m\grave{a}d\grave{u}$  <sup>HL</sup> $\acute{n}k\acute{e}$  / <sup>HL</sup> $n\acute{e}j\grave{i}$  / <sup>HL</sup> $b\acute{o}b\grave{o}$   
 Amadou<sup>L</sup> <sup>HL</sup>dog / <sup>HL</sup>uncle / <sup>HL</sup>father  
 'Amadou's dog/uncle/father' (for the tones of 'dog' see §3.2.8.1)
- c.  $[\grave{a}:m\grave{a}d\grave{u}]$   <sup>$\cancel{HL}$</sup>  $\acute{n}k\acute{e}$  <sup>HL</sup> $d\acute{f}\grave{o}$   
 [Amadou<sup>L</sup>  <sup>$\cancel{HL}$</sup> dog<sup>L</sup>] <sup>HL</sup>tail

'[Amadou's dog]'s tail'

- d.  $[\hat{a}:m\grave{a}d\grave{u} \quad \overset{\text{HL}}{\text{HL}}n\grave{e}j\grave{i}^L]$   $b\acute{o}b\hat{o}$   
 [Amadou  $\overset{\text{HL}}{\text{HL}}uncle^L$ ]  $\overset{\text{HL}}{\text{HL}}father$   
 '[Amadou's uncle]'s father'

### 6.3 Noun-adjective

#### 6.3.1 Noun plus regular modifying adjective

A noun can be followed by one or more modifying adjectives (including ordinals) within the NP. The noun is **tone-dropped** to {L} before an adjective, though if the adjective is /L/-toned the final syllable of the noun can be tone-raised by phonological rule. The first adjective retains its lexical tone melody. Plural *-gè*, if present, follows the adjective only (xx1b). The tonosyntactic formula (superscript <sup>L</sup> indicates tone-dropping), disregarding the tone of the plural morpheme, is therefore [N<sup>L</sup> Adj(-Pl)].

- (xx1) a.  $\acute{u}n\acute{a}$  'goat'  
 $\grave{u}n\grave{a}^L y\grave{c}rd\grave{e}$  'black goat'  
 $\grave{u}n\grave{a}^L b\grave{a}g\grave{a}l\grave{a}$  'big goat'
- b.  $\acute{u}n\acute{a}-g\acute{e}$  'goats'  
 $\grave{u}n\grave{a}^L y\grave{c}rd\grave{e}-g\acute{e}$  'black goats'  
 $\grave{u}n\grave{a}^L b\grave{a}g\grave{a}l\grave{a}-g\acute{e}$  'big goats'
- c.  $k\acute{a}y^n$  'work'  
 $k\grave{a}y^{nL} m\acute{a}:g\acute{a}$  'difficult (hard) work'

For [N<sup>L</sup> Adj<sup>L</sup> Adj(-Pl)] with two adjectives, see §6.3.3.1 below.

#### 6.3.2 Noun/adjective *ntǎ:-nà* 'some', adjective *yé:né* 'a certain (one)'

*ntǎ:-nà* 'some, certain ones' can be used one or more times to denote specific divisions of a larger set. It is distinct in form from *ntà-ná* 'his/her person'. The final syllable of *ntǎ:-nà* may or may not be a frozen 3Sg possessor suffix *-nà* etymologically (compare *tó:-nà* 'apart', §8.4.5.2). If there are two parallel occurrences, it is usually understood that the two divisions exhaust the set (xx1a). As a modifying adjective, *ntǎ:-nà* becomes {L}-toned *ntà:-nà* (xx1b).

- (xx1) a. *ntǎ:-nà ánd-yè,* *ntǎ:-nà wánj-yè*



certain go.Perf-3PIS, certain stay.Perf-3PIS  
'Some (people) went, (the) others stayed.'

- b. *yǎ:* *ntà:-nà(-gè)*  
woman<sup>LH</sup> certain(-Pl)  
'certain women, some (specific) women'

An explicitly plural form *ntà:-ná-gè* is possible, but *ntǎ:-nà* by itself is usually understood to be plural; note the 3Pl verb forms in (xx1a).

An explicitly singular quantifier of this type is *yé:né* 'a certain (one)', with tonally irregular plural *yé:né-gè* 'certain (ones)'. It is an adjective and requires a common noun: *yǎ: yé:né* 'a certain woman', plural *yǎ: yé:né-gè* (essentially synonymous with *yǎ: ntà:-nà*). *yé:né* is typically used to introduce a referent into a discourse such as a narrative ('a certain man', etc.).

### 6.3.3 Expansions of adjective

#### 6.3.3.1 Adjective sequences

Section §6.3.1 described the noun-adjective construction, i.e. [N<sup>L</sup> Adj(-Pl)]. When a second adjective is added, it keeps its lexical tones, the plural suffix is added to it, and the first adjective (as well as the noun) is tone-dropped, resulting in [N<sup>L</sup> Adj<sup>L</sup> Adj(-Pl)].

- (xx1) a. *ùná<sup>L</sup>* *yǎrdè* *dóngá(-gé)*  
dog<sup>L</sup> black<sup>L</sup> heavy(-Pl)  
'(a) heavy black goat' (*úná, yǎrdè*)
- b. *káy<sup>nL</sup>* *kándà* *pó:ló(-gé)*  
work(n)<sup>L</sup> new<sup>L</sup> good(-Pl)  
'good new job(s)' (*káy<sup>n</sup>, kándá*)
- c. *ɲkè<sup>L</sup>* *yǎrdè* *bàgàlà(-gé)*  
dog<sup>L</sup> black<sup>L</sup> big(-Pl)  
'big black dog(s)' (*ɲkè, yǎrdè*)

#### 6.3.3.2 Intensifying adjectives

Intensifying adjectives are a subset of adjectives that are associated with ordinary adjectives whose sense they reinforce or exaggerate. The intensifying

adjective normally follows the corresponding ordinary adjective. For examples, see §4.5.6.

### 6.3.3.3 'Good to eat'

A verbal noun of the relevant verb (here 'eat') is preposed to an adjectival predicate. The construction is therefore of the literal type '[eating X] is good'.

- (xx1) a. *[[è púló-gé] nǎ:-l] nsà bó-Ø*  
 [[Def flower-Pl] eat-VblN] sweet be-3SgS  
 'The flowers are good (sweet) to eat.'
- b. *nǎ:-l pólò wól-Ø*  
 eat-VblN good not.be-3SgS  
 'It (something) isn't good to eat.'

## 6.4 NPs containing a numeral

For the forms of cardinal numerals see §4.7.1. Ordinals are not considered here since they behave syntactically like other adjectives.

### 6.4.1 Ordinary N-(Adj-)Num sequences

Examples of N-Num sequences are in (xx1). '1' is syntactically an adjective. Plural *-gè* is required by numerals from '2' to '9' and is optional with higher numerals. In this combination, the plural noun has its regular tone except that *-gè* is not tone-raised to *-gé* after lexically /L/-toned nouns. Numerals have their lexical tones, but '2' and '4' shift between {H}- and {L}-toned forms. '10' usually omits the plural suffix on the noun. For details on the tone patterns for various numerals see §4.7.1.1-2.

- (xx1) a. *ɲkè<sup>L</sup> tà:ɲgà*  
 dog<sup>L</sup> one  
 'one dog' (*ɲkè*)
- b. *ɲkè-gè négá / tá:ndì / nó:m*  
 dog-Pl two / three / five  
 'two / three / five dogs'
- c. *ɲkè(-gè) pé:l(ú)*

dog(-Pl)      ten  
'ten dogs'

#### 6.4.2 Adj-Num Inversion absent

My assistant rejected inversion of Poss-N-Adj-Num to Poss-N-Num-Adj in e.g. 'Amadou's three black goats', see §6.2.1.2.

### 6.5 NP including a determiner

All determiners (definite, 'this', and 'that') are NP-initial. They normally precede a noun, but they can also precede a possessor ("this Seydou house" meaning 'this house of Seydou's').

#### 6.5.1 Definite *è* plus noun

Definite *è* (§4.4.1.1) can precede a singular or plural noun or a sequence like N-Adj or N-Num. It cannot be used absolutely (i.e. as one-word pronoun-like NP). It is always itself L-toned. It requires the following noun to begin with H-tone, tonosyntactic symbol {H+}. If the noun is already lexically /H/- or /HL/-toned, there is no overt change. An /L/-toned noun becomes {HL}, an /LH/-toned noun becomes {HLH}, and an /LHL/-toned noun becomes {HLHL}. The incremental initial H-tone can spread to a second syllable if not blocked. See §4.4.1.1 for fuller exemplification.

- (xx1) a. *è* <sup>H+</sup>*úná* / <sup>H+</sup>*dém* / <sup>H+</sup>*dùgù*  
 Def <sup>H+</sup>goat / <sup>H+</sup>house / <sup>H+</sup>village  
 'the goat/house/village' (*úná, dém, dùgù*)
- b. *è* <sup>H+</sup>*úná-gé* / <sup>H+</sup>*dém-gè* / <sup>H+</sup>*dùgù-gè*  
 Def <sup>H+</sup>goat / <sup>H+</sup>house / <sup>H+</sup>village  
 'the goats/houses/villages' (*úná, dém, dùgù*)

In (xx2), an adjective has been added to the definite noun. The adjective is tone-dropped, even if lexically /H/-toned ('old', 'heavy'). The initial H-tone (on one or two syllables) of the definite noun is retained, but subsequent syllables of the noun, and the entire adjective, are low-toned. One analysis is that *è* controls a {HL} overlay on the N-Adj sequence, but that the initial H of {HL} merges

with a lexical H on one or two initial syllables. Another is that *è* merely drops all H-tones after the initial H-tone in the noun or N-Adj sequence.

- (xx2) a. *è* <sup>H+</sup>*úná* <sup>L</sup>*tòmbò* / <sup>L</sup>*kà:mnò*  
 Def <sup>H+</sup>goat <sup>L</sup>white / <sup>L</sup>old  
 'the white/old goat' (*úná, è úná, tòmbò, kà:mnò*)
- b. *è* <sup>H+</sup>*dúgù* <sup>L</sup>*bàyn*  
 Def <sup>H+</sup>village <sup>L</sup>big  
 'the big village' (*dùgù, è dúgù, bàyn*)
- c. *è* <sup>H+</sup>*gè:ní* <sup>L</sup>*dòngà*  
 Def <sup>H+</sup>broom <sup>L</sup>heavy  
 'the heavy broom' (*gè:ní, è gè:ní, dòngà*)

A numeral is added to the noun in (xx3). It has no effect on the tones of the plural noun.

- (xx2) *è* <sup>H+</sup>*úná-gé* / <sup>H+</sup>*dúgù-gè* / <sup>H+</sup>*gè:ní-gè* *tá:ndì* / *kèjò* / *kúlé:ní*  
 Def <sup>H+</sup>goat / <sup>H+</sup>village / <sup>H+</sup>broom three / four / six  
 'the three goats/villages/brooms'

### 6.5.2 Demonstrative plus noun

Demonstratives are proximate *íní* (plural *íní-gè*) and distant *èmbá* (plural *èmbá-gè*), see §4.4.1.2. When they precede a noun, plurality is marked on the noun (or N-Adj sequence) but not on the demonstrative.

*íní* drops the initial H-tone sequence of a following lexically /H/- or /HL/-toned nouns to L-tone (xx1a), but does not drop noninitial H-tones in /LH/- or /LHL/-toned nouns (xx1b), see §4.4.1.2. The tonosyntactic symbol is therefore {L+} in this case, rather than {L}, to indicate that it changes tones at the left edge but not necessarily the entire stem (xx1ab). However, when *íní* is followed by a N-Adj sequence, this sequence as a whole is tone-dropped (xx1c). *íní* itself surfaces as *íní* by Rightward H-Spreading before the L-toned onset of the noun in both (xx1a) and (xx1b).

- (xx1) a. *íní* <sup>L+</sup>*ùnà(-gè)*  
 Prox <sup>L+</sup>goat(-Pl)  
 'this goat / these goats' (*úná, úná-gé*)
- b. *íní* <sup>L+</sup>*gè:ní(-gè)*  
 Prox <sup>L+</sup>broom(-Pl)

'this broom / these brooms' (*gè:ní, gè:ní-gè*)

- c. *íní* <sup>L</sup>[*káy<sup>n</sup>* *kándà(-gè)*]  
 Prox <sup>L</sup>[work(n) new(-Pl)]  
 'this new job / these new jobs' (*káy<sup>n</sup>, kándá, káy<sup>nL</sup> kándá*)

In the combination Dem-N-Num, proximate *íní* has its usual tone-dropping effect on the left edge of the noun before numerals '2' to '10' (xx2a). The numeral itself is {L}-toned. The numeral '1', syntactically an adjective, tone-drops the noun as it does when the demonstrative is absent. Therefore the tonosynactic formulae for (xx2a) is [[Dem <sup>L+</sup>N] Num] and that for (xx2b) is [Dem [N<sup>L</sup> 'one']].

- (xx2) a. *íní* <sup>L+</sup>*ùnà-gè* / *gè:ní-gè* *nègà* / *tà:ndì* / *nò:m*  
 Prox <sup>L+</sup>goat-Pl / broom-Pl two / three / five  
 'these two/three/five goats/brooms'
- b. *íní* *ɲkè* / *ùnà* / *gè:nì<sup>L</sup>* *tà:ɲgà*  
 Prox dog / goat / broom <sup>L</sup> one  
 'this one dog/broom' (*ɲkè, úná, gè:ní*)

Distant *èmbá* drops to *èmbà* before a noun but controls {HL} on the noun (xx3a-b). Alternatively, we could argue that it really controls tonosynactic {L} overlay, but then allows its own final H-tone to shift onto the first syllable of the noun (§4.4.1.2). If *èmbá* is followed by a N-Adj sequence, the {HL} contour is applied to this entire sequence (xx3c). Overall, *èmbá* behaves tonally like a nonpronominal possessor.

- (xx3) a. *èmbà* <sup>HL</sup>*únà* / <sup>HL</sup>*úná-gè*  
 Dist <sup>HL</sup>goat(-Pl)  
 'that goat / those goats' (*úná, úná-gé*)
- b. *èmbà* <sup>HL</sup>*gé:nì* / <sup>HL</sup>*gé:ní-gè*  
 Dist <sup>HL</sup>broom(-Pl)  
 'that broom / those brooms' (*gè:ní, gè:ní-gè*)
- c. *èmbà* <sup>HL</sup>[*káy<sup>n</sup>* *kándà* / *kándá-gè*]  
 Dist <sup>HL</sup>[work(n) new(-Pl)]  
 'that new job / those new jobs' (*káy<sup>n</sup>, kándá, káy<sup>n</sup> kándá*)

A numeral, whether nonsingular or '1', following the noun is likewise included in the domain of the {HL} overlay controlled by *èmbá* (xx4ab).

- (xx4) a. *èmbà* <sup>HL</sup>[*úná-gé* / *gé:ní-gé* *nègà* / *tá:ndì* / *nò:m*]

Dist <sup>HL</sup>[goat-Pl / broom-Pl two / three / five]  
 'those two/three/five goats/brooms'

- b. *èmbà* <sup>HL</sup>[*ɲké* / *gé:ní* *tá:ɲgà*]  
 Dist <sup>HL</sup>[dog / broom one]  
 'this one dog/broom' (*ɲkè*, *gè:ní*, *ɲkè*<sup>L</sup> *tá:ɲgà*, *gè:ní*<sup>L</sup> *tá:ɲgà*)

## 6.6 Universal and distributive quantifiers

### 6.6.1 'All' or 'each' (*sèlè*)

The universal quantifier *sèlè* 'all' occurs at the end of a NP, following even definite *rì*. It can also be used absolutely ('everything', 'everybody'). If the quantified-over NP is countable, plural *-gè* is present. A preceding {L}-toned word tone-raises its final syllable.

- (xx1) a. [*sàgàllà-gé* *sèlè*] [*gándà* *ɲ*] *ánd-yè*  
 [young.person-Pl all] [exodus Loc] go.Perf-3PlS  
 'All the young people have gone away (to work).'
- b. *sèlè* *sógú-lè-Ø*  
 all buy-Rev.Perf-3Sgs  
 'He/She sold everything.'
- c. [*ɲ* *sè:ɲgé* *sèlè*] *ɲ* *sógú-lè*  
 [1SgP millet all] 1SgS buy-Rev.Perf  
 'I sold all my millet.'

*sèlè* can also be used distributively ('each X'), with a singular common noun X. See (xx11) in text 1 ('he put each person's share ...'). For 'always' see §8.4.5.3.

### 6.7 Accusative (*-ɲ* ~ *-w̃<sup>n</sup>*)

The accusative suffix or enclitic (*-ɲ* ~ *-w̃<sup>n</sup>*) occurs at the end of NPs (including pronouns). It can be analysed morphologically as an encliticized postposition, and it may be the "same" morpheme in some sense as locative *ɲ* ~ *w̃<sup>n</sup>* (§8.2.3.2). The accusative is applied not only to direct objects but also to indirect objects (recipient of 'give' and 'say', referred-to addressee with 'say'); see §8.1.1. However, in practice it occurs only with personal pronouns and NPs

with animate (especially specific human) reference. Since locative PPs normally have inanimate complements, there is usually no confusion.

For pronouns, *-ŋ* is added to the independent (rather than proclitic) form of the pronoun. The nasal may be phonetically weakened to nasalization of the preceding vowel, but I have not heard it as rounded. 1Sg *mì-ŋ*, 2Sg *ò-ŋ*, and 3Sg *ànò-ŋ* are {L}-toned, but become *mí-ŋ*, *ó-ŋ*, and 3Sg *ànó-ŋ* before e.g. {L}-toned 3Sg-subject verbs or {L}-toned imperatives by Final Tone-Raising. Tables of independent and accusative pronouns are in §4.3.1.

Examples of *-w̃<sup>n</sup>* with NPs are in (xx1). That the morpheme is L-toned in this variant is observed with 'my father'. The rounding is heard inconsistently in isolation. In phrasal contexts *-w̃<sup>n</sup>* can appear as an assimilated homorganic nasal (before a stop) or as vocalic nasalization. Here as elsewhere *w̃<sup>n</sup>* functions as a lenited *ŋ*. In 'the big dog', the accusative morpheme follows the adjective.

(xx1)	unmarked	accusative	gloss
	<i>sěydù</i>	<i>sěydù-w̃<sup>n</sup></i>	'Seydou (man's name)'
	<i>ŋ b̀b̀b̀</i>	<i>ŋ b̀b̀b̀-ŋ</i>	'my father'
	<i>è wê:</i>	<i>è wê:-w̃<sup>n</sup></i>	'the child'
	<i>wè:-gé</i>	<i>wè:-gè-w̃<sup>n</sup></i>	'children'
	<i>è ŋkê</i>	<i>è ŋkê-w̃<sup>n</sup></i>	'the dog'
	<i>è ŋké bàgàlà</i>	<i>è ŋké bàgàlà-w̃<sup>n</sup></i>	'the big dog'

The accusative morpheme is usually omitted on NPs ending in a numeral ('two dogs'), but making the NP definite ('the two dogs', 'those two dogs', 'my two dogs') makes the accusative more felicitous.

(xx3)	<i>[è</i>	<i>ŋké-gé</i>	<i>nègà-w̃<sup>n</sup>]</i>	<i>gíyέ-Ø</i>
	[Def	dog-Pl	two-Acc]	kill.Perf-3SgS
	'He/She killed the two dogs.'			

The accusative is not used with focalized objects.

(xx4)	<i>mì=yò</i>	<i>búndé</i>	<i>ná</i>
	1Sg=Foc	hit.Perf	3SgS
	'It was <u>me</u> [focus] that he/she hit.'		

Accusative *-ŋ* ~ *-w̃<sup>n</sup>* is not pronounced before a second person subject proclitic (2Sg *á*, 2Pl *à*). See (xx1b) in §8.1.1 ('You didn't say anything to me'). These second person proclitics elsewhere have a strong tendency to merge phonologically with the preceding word.





## 7 Coordination

### 7.1 NP coordination

#### 7.1.1 NP conjunction ([X *ni*] [Y (*ni*)])

The conjunction particle *ni* 'and' is added to both left and right conjuncts. In isolation, prepausally, or before a H-tone, it gets its tone by spreading from the preceding syllable. However, in the left (or any nonfinal) conjunct, if it is preceded and followed by L-tones it is tone-raised to *ní*, as in (xx1ab).

- (xx1) a. *[yð:-gè ní]* *[wálá-gé ní]*  
 [woman-Pl and] [man-Pl and]  
 'women and men'
- b. *[á:mádù ní]* *[bðbð-nà ní]*  
 [Amadou and] [father-3SgP and]  
 'Amadou and his father'

This construction can be used to conjoin NPs (including pronouns and place names) and adverbial phrases (including PPs). If both conjuncts are complements of the same postposition, the postposition can be repeated and the PPs conjoined (xx2b), or the postposition can take the conjoined NP as complement (xx2c). *ni* is also the instrumental postposition (§8.xxx). When two instrumental PPs are conjoined, the logically expected double *ni ni* is avoided, and there is a single *ni* after each NP (xx1d).

- (xx2) a. *[bàmàkò ní]* *[mótti ní]* *bí-yà*  
 [Bamako and] [Mopti and] be-3PLS  
 'They are in Bamako and Mopti (cities).'
- b. *[dèm jángà<sup>n</sup> ní]* *[pàngà jángà<sup>n</sup> ní]* *bí-yà*  
 [house inside and] [granary inside and] be-3PLS  
 'They are [in the house] and [in the granary].'
- c. *[[[dèm ní] [pàngà ní]] jángà<sup>n</sup> bí-yà]*  
 [[[house and] [granary and] inside] be-3PLS  
 'They are [in [the house and the granary]].'

- d. *[dónjógó ní] [dâ:mbê nì] kùbó ń̀ b̀̀*  
 [pick-hoe Inst] [daba Inst] do.farm.work 1SgS Impf  
 'I work (in the fields) with a pick-hoe and a daba (hoe).'

My assistant did not accept accusative *-w<sup>n</sup>* (or variant) at the end of a conjoined NP, or on both conjuncts.

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

Verbs, VP's, and clauses are not conjoined by *yà*. The rough equivalent of conjunction for such elements is chaining, see chapter 15.

## 7.2 Disjunction

### 7.2.1 'Or' particle (*wàgà→*)

The disjunctive particle is *wàgà→*. It is normally grouped prosodically with the nonfinal disjunct, hence *[X [wàgà→ Y]]* 'X or Y'. The arrow indicates intonational prolongation of variable degree. The particle is most common in interrogative contexts, and it is difficult to elicit unambiguously noninterrogative examples. In a question (or a "statement" whose form is suggestive of a question), if *wàgà→* is prepausal or if the prolongation is considerable the usual interrogative intonation (final pitch rise) is applied: *wàgà→↑*, phonetic [*wàgàá→*].

Where logically possible, the disjunction is expressed at the level of a NP or similar constituent, which is extraposed.

- (xx1) *bàmàkò ándá-á wò [wàgà→ ségú]*  
 Bamako go-2SgS Impf [or Segou]  
 'Are you-Sg going to Bamako or (are you-Sg going) to Segou?' (cities)

#### 7.2.1.1 *wàgà→* 'or' preceding second disjunct in indicative context

*wàgà→* 'or' is added before the second NP coordinand in the disjunctive question (xx1). The 'or' phrase is added after a complete clause, in the fashion of an afterthought.

- (xx1) *[wá: sèlè] àlà̀m̀̀ǹ̀-̀̀-̀̀ sé̀m̀̀-̀̀-̀̀-̀̀*  
 [day all] sheep-Pl slaughter.Impf=2PlS-Ppl

[wàgǎ→      úná-gé]  
 [or            goat-Pl]  
 'Each day, do you-Pl slaughter sheep [focus], or goats?'

An attempt to elicit a noninterrogative disjunction by switching the subject to first singular resulted in (xx2). In theory this should be a statement, but the form is indistinguishable from that of a question.

(xx1) [wá: sèlè] àlà̀mùnò sémó      ń      b-yà  
 [day all]    sheep-Pl    slaughter.Impf    1SgS Impf-Ppl  
 [wàgà→      úná]\*  
 [or            goat-Pl]  
 'Each day, (do) I slaughter a sheep [focus], or a goat(?)'

#### 7.2.1.2 wàgà→ after each disjunct in interrogative context

Although my assistant preferred to extrapose the disjunctive phrase after the verb in examples like those given above, it was possible to elicit an example with fronted disjunct (xx1). The left but not right disjunct has the terminal pitch rise of the interrogative intonation pattern. The 'or' disjunctive particle occurs once, between the two disjunctive constituents.

(xx1) [àlà̀mùnò\*    [wàgà→    àlgà]] sémà-à  
 [sheep            [or            pig]]    slaughter.Impf-2SgS  
 'Will you-Sg slaughter a sheep or a pig [focus]?'

#### 7.2.2 Clause-level disjunction

As noted above, the preference is to express disjunction at the subclausal constituent level. However, where the two alternatives require different verbs there is no alternative to having the disjunctive particle unambiguously have scope over a clause.

(xx1) bà̀màkò            ándá-á            wò  
 Bamako            go.Impf-2SgS            Impf  
 [wàgà→            nùń            wánjá-á            wò]  
 [or            here            stay.Impf-2SgS            Impf]  
 'Are you-Sg going to Bamako, or are you-Sg staying here?'



## 8 Postpositions and adverbials

Penange has morphologically simple postpositions for the instrumental (*ni*) and locative (*ba*). Accusative *-ŋ* ~ *-w<sup>n</sup>* could also be considered to be a postposition since it follows complete NPs, and the same morpheme (or a homophone) is also used as locative postposition in some combinations (§6.7).

These elementary postpositions are complemented by many noun-like and compositive postpositions. Purposive-causal has the {HL} contour of a possessed noun (§8.3). There are many composite postpositions based on a (possessed) noun plus an elementary locative postposition (§8.2.4-10).

### 8.1 Dative and instrumental

#### 8.1.1 Dative absent

No dative postposition occurs with ditransitives like 'give', 'say', or 'do for'. The recipient or beneficiary is expressed as a direct object, often alongside another direct object. If animate and not directly followed by a second person subject clitic, the recipient or beneficiary can take accusative marking, as with 'Seydou' in (xx1a) and 'me' in (xx1c).

- (xx1) a. *sěydù-<sup>n</sup>*    *wálé*    *táb-yè*  
Seydou    money    give.Perf-3PlS  
'They gave the money to Seydou.'
- b. *yè:*    *mì*    *á*    *nè-l*  
thing    1Sg    2SgS    say-PerfNeg  
'You-Sg didn't say anything to me.'
- c. *yè:*    *mí-ŋ*    *nè-l-Ø*  
thing    1Sg    say-PerfNeg-3SgS  
'He/She didn't say anything to me.'
- d. *yè:*    *mì*    *á*    *kà:-ndè-l*  
thing    1Sg    2SgS    do-for-PerfNeg  
'You-Sg didn't do anything for me.'

### 8.1.2 Instrumental (*ní*)

Within the PP, this postposition acquires its tone by spreading from the preceding syllable. Its core sense is instrumental ('by means of X', 'using X'). It (or a homophonous morpheme) is also the 'and' conjunction (§7.1.1). L-toned *nì* as in 'with a stick' (xx1c) is tone-raised before a L-tone.

- (xx1) a. *dónjógó ní* 'with a pick-hoe'  
 b. *dà:mbè ní* 'with a daba'  
 c. *tùmà ní* 'with a stick'

Some examples are in (xx2).

- (xx2) a. *[tùmà ní bündè-l-Ø]*  
 [stick Inst] hit-PerfNeg-3SgS  
 'He/She did not hit (it) with a stick.'  
 b. *[gè:ní nì gé:nyè-Ø]*  
 [broom Inst] sweep.Perf-3SgS  
 'He/She swept with a broom.'  
 c. *[è námà] [tàlà ní] pùrùgò*  
 [Def meat] [knife Inst] cut.Imprt  
 'Cut-2Sg the meat with a knife!'  
 d. *[[í dǎ:mbè] nì kúbò bò-Ø]*  
 [[1SgP daba] Inst] do.farming.Impf Impf-3SgS  
 'He/She will farm with my daba.'

'By force' is *sèmbè nì*.

*nì* can also be used with nouns denoting **times or seasons**: *gè:nà nì* 'in (=during) the rainy season', *dògò nì* 'at night', *gè:<sup>n</sup> nì* 'during the day' (lit. 'with sun', cf. *gè:<sup>n</sup>* 'sun').

*nì* is also used with nouns denoting vehicles: *móbél nì* 'by motor vehicle (e.g. truck)', e.g. in 'I went to Bamako by truck'.

## 8.2 Locational postpositions

### 8.2.1 Locative, allative, and ablative functions

Verbs rather than postpositions are generally used to distinguish static locative 'at, in' from allative 'to' and ablative 'from'. The fact that verbs can be chained in various ways is helpful here. Most motion verbs imply an allative relationship to a locational complement. *gwé* 'go out, leave, depart' and its relatives are the usual verbs to indicate an ablative relationship.

However, an emphatic '(all the way) from X' can be expressed by adding *dígí* 'since' directly to the NP in the fashion of a PP, and emphatic '(all the way) to X' can be expressed as *hâl X (bà)*, with preposed (N.B.) *hâl* 'until, all the way to'.

- (xx1) a. *[mótti dígí dúgú-rè-Ø]*  
 [Mopti since run.Perf-3SgS]  
 'He/She ran all the way from Mopti.'
- b. *[dùgù-rè nà] [hâl mótti (bà)]*  
 [run.Perf 3SgS] [until Mopti (Loc)]  
 'He/She ran all the way to Mopti.'

### 8.2.2 Simple and complex postpositions

Most of the complex (compound, composite) postpositions are locationals of the type [[X's noun] in], compare English *in front of X* or *ahead (a-head) of X*. In several complex postpositions, the regular simple locative postposition *ba* is replaced by *ŋ* ~ *w<sup>n</sup>*, though there are some complex postpositions that do include *ba*. In the case of 'under', *ba* is used for human/animate landmark, *ŋ* for inanimate.

Since the noun is "possessed," it has variable tone depending on the possessor (its final syllable is also subject to tone-raising before a L-tone). Sample paradigms are in (xx1).

(xx1)	'under X'	'in front of X'	'on X'	'beside X'
1Sg	<i>ŋ sùgù bà</i>	<i>ŋ tègò bà</i>	<i>ŋ kò w<sup>n</sup></i>	<i>ŋ pǎ ŋ</i>
1Pl	<i>mbé súgú bá</i>	<i>mbé tégó bá</i>	<i>mbé kó w<sup>n</sup></i>	<i>mbé pá ŋ</i>
2Sg	<i>á sùgù bà</i>	<i>á tègò bà</i>	<i>á kò w<sup>n</sup></i>	<i>á pà ŋ</i>
2Pl	<i>ábé súgú bá</i>	<i>ábé tégó bá</i>	<i>ábé kó w<sup>n</sup></i>	<i>ábé pá ŋ</i>

3Sg	<i>sùgù-nà bà</i>	<i>tègò-nà bà</i>	<i>kó:-nà w<sup>n</sup></i>	<i>pă:-nà ŋ</i>
3Pl	<i>ŋké súgú bá</i>	<i>ŋké tégó bá</i>	<i>ŋké kó w<sup>n</sup></i>	<i>ŋké pá ŋ</i>
NP	<i>X súgù bà</i>	<i>X tégò bà</i>	<i>X kô w<sup>n</sup></i>	<i>X pâ ŋ</i>

### 8.2.3 Locative 'in, at, on'

#### 8.2.3.1 Locative (*ba*)

The unmarked locative postposition 'in, at' is *ba*. Its gets its tone by spreading from the preceding syllable. I have not observed Final Tone-Raising before a L-tone.

(xx1)	noun	locative	gloss
a. after H-tone			
	<i>éba</i>	<i>éba bá</i>	'in/at the market'
	<i>éndó</i>	<i>éndó bá</i>	'at the well'
b. after L-tone			
	<i>dùgù</i>	<i>dùgù bà</i>	'in the village'
	<i>dèm</i>	<i>dèm bà</i>	'in the house, at home'
	<i>kòy<sup>n</sup></i>	<i>kòy<sup>n</sup> bà</i>	'in the bush'
	<i>yàlà</i>	<i>yàlà bà</i>	'in the field'
	<i>bòmàkò</i>	<i>bàmàkò bà</i>	'in Bamako (city)'
	<i>è dúgù</i>	<i>è dúgù bà</i>	'in the village' (definite)

This postposition is used to specify location by reference to a landmark or zone. 'At X' is often the best English translation. It occurs in high-frequency expressions like 'in the (i.e. our) village', where a precise spatial relationship is not necessary. For enclosure inside a container or other confined space, [*X jáŋgà*] *ŋ* is used (§8.2.xxx).

#### 8.2.3.2 Locative *ŋ* ~ *w<sup>n</sup>*

This morpheme competes with *ba* as the locative postposition, and is therefore used almost exclusively with inanimate complements. It may be the "same" morpheme as the accusative (§6.7), which is effectively limited to humans. Before a C-initial word, both are realized as homorganic nasals.

*ŋ* ~ *w<sup>n</sup>* is added directly to a noun in certain common phrases, as in (xx1).

(xx1)	<i>[kíndó</i>	<i>ŋ]</i>	<i>dâ:y<sup>n</sup>-Ø</i>
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[shade Loc] sit.Perf-3SgS  
'He/She sat down in the shade.'

More often, locative  $\eta \sim w^n$  is part of complex postpositions, which are documented in the following sections. Here too it competes with *ba*.

#### 8.2.4 'Inside X' ( $[X \text{ ján}gà] \eta$ )

This complex postposition puts the trajector inside a container or other bounded zone. It is based on a possessed form of the noun *ján}gà* 'belly'.

- (xx1) a. after H-tone  
*kójí* *kójí ján}gà \eta* 'in the grass'
- b. after L-tone  
*dòn* *dòn ján}gà \eta* 'in(side) the mouth'  
*tègèlè* *tègèlè ján}gà \eta* 'in(side) the waterjar'  
*mì:* *mì: ján}gà \eta* 'in the water'  
*\eta yàlà* *[\eta yàlà] ján}gà \eta* 'in my field'  
*ín dùgù* *[\ín dùgù] ján}gà \eta* 'in this/that village'  
*è dúgú-gé sèlè* *è dúgú-gé sèlè ján}gà \eta* 'in all (the) villages'

An example is (xx2).

- (xx2) *sàkkó:sì* *[[dèm ján}gà] \eta]* *\eta* *nwà:-m*  
 bag [[house belly] Loc] 1SgS go.in-Caus.Perf  
 'I put the bag in(side) the house.'

#### 8.2.5 'Under, at the bottom/base of X' ( $[X \text{ sù}gù] w^n$ ), ( $[X \text{ sù}gù] bà$ )

$[X \text{ sù}gù] w^n$ , often heard with final  $\eta$  or vocalic nasalization for  $w^n$ , denotes a position at or just next to the base or bottom of an entity (tree, mountain, well), or directly under it. Noun *sù}gù* means 'base, bottom'. For a human or higher animate landmark ('under me', 'under the horse'), *bà* replaces  $w^n$ . The 3Sg pronominal form is *sù}gù-nà bà*.

- (xx1) a. *[è dúgù] [[kìnì sù}gù] \eta]* *bô-Ø*  
 [Def village] [[stone base] Loc] be-3SgS  
 'The village is at the base of the mountain.'
- b. *má:ngórò* *[[óy^n sù}gù] \eta]* *dù:ndò*

mango [[waterjar base] Loc] put.down.Imprt  
'Put the mangoes down under the waterjar.'

- c. *[ŋ sùgù bà]*  
[1SgP base] Loc  
'under me'

Adverbial PP *sùgù bà* means 'at the base/bottom' (e.g. of a well), French *au fond*.

Another semantically similar adverbial PP is *sígó-lò bà* or *sígó-lò w<sup>n</sup>* 'down below', for example referring to the ground floor from the perspective of an upper floor, or referring to the ground level from the perspective of the top of a tree. *sígó-* in *sígó-lò* is related to *síge* 'foot' and is parallel in structure to its antonym *kó:-lò bà* 'on top, above, overhead' (§8.2.6 below).

#### 8.2.6 'Above, over, at the top of X' (*[X kó:-lò] bà*) or (*[X kó:-lò] w<sup>n</sup>*)

This complex postposition is related to the adverbial phrase *kó:-lò bà* 'on top, above, overhead', denoting a position high above a landmark, or a position perched at the top of a tall landmark (tree, hill). The 3Sg pronominal form is *kó:-ló-nà bà* or *kó:-ló-nà w<sup>n</sup>* 'above/over him/her/it'.

- (xx1) *nèjjé-gè [[mbé kó:-ló] ŋ] pìrìgò bí-yà*  
bird-Pl [[1PIP above] Loc] fly.Prog Prog-3PlS  
'The birds are flying above us'

*kó:-lò* is evidently based on *kó:* 'head'. The morpheme *-lò* recurs in *sígó-lò* in the antonymic adverbial PP *sígó-lò bà* 'below, underneath' (§8.2.5 above).

#### 8.2.7 'On (the head of) X' (*[[X kò] ŋ]*)

This complex postposition is based on a possessed form of *kó:* 'head'. It is used not only in the more or less literal sense, as in 'a mango fell on me (=on my head)', but also when the landmark is a surface. In my data, the trajector is in contact with the object or surface, so 'on' is the best gloss. The 3Sg pronominal form is *kó:-ná ŋ* 'on him/her/it'. The final locative postposition *ŋ* is pronounced *w<sup>n</sup>* prepausally, as in other combinations.

- (xx1) a. *ámbugé [[bí:ngò kò] ŋ] bô-Ø*  
blanket [[mat head] Loc] be-3SgS

'The blanket is on the mat.' (*yòmbù, bì:*)

- b. *[[dógó kò] η] bô-Ø*  
 [[roof head] on] be-3SgS  
 'He/She is on the roof.'
- c. *[[ɛ́ kò] η] tíbè-Ø*  
 [1Sg head] Loc] fall.Perf-3SgS  
 'It fell on me (=on my head).'

#### 8.2.8 'Beside, next to (sth); against, on (wall)' (*[X pâ] η*)

This complex postposition is based on a noun (presumably) that is not attested elsewhere. It is used to describe horizontal proximity ('next to me', 'beside the tree'), including actual contact ('against the wall', 'on the wall'). The 3Sg pronominal form is *pă:-nà η* 'beside him/her/it'.

- (xx1) *[[tìndigò pâ] η] yàbà-Ø*  
 [[tree against] Loc] be.against.Stat-3SgS  
 'He/She is (leaning) against the tree.'

#### 8.2.9 'In front of' (*[X tégò] w<sup>n</sup>*)

Related to adverbial phrase *tégó bá* or *tégó w<sup>n</sup>* 'forward, ahead' is this complex postposition. The 3Sg pronominal form is *tégó-ná η* 'in front of him'.

- (xx1) a. *[[ɛ́ tégò] w<sup>n</sup>] bô-Ø*  
 [[1Sg front] Loc] be-3SgS  
 'He/She is in front of me.'
- b. *[[tìndigò tégò] w<sup>n</sup>] bì-ý-yè*  
 [[tree front] in] lie.down-MP.Perf.L-3PIS  
 'They lay down in front of the tree.'

#### 8.2.10 'Behind/after X' (*[X túndù] bà*)

Spatial 'behind X' is *[X túndù] bà*. Temporal 'after X' is *[X túndù] w<sup>n</sup>*. The related noun is *tùndù* 'rear (of sth)'.

- (xx1) a. *[[ɛ́ túndù] bà] bó-Ø*

[[1Sg behind] in.H] be-3SgS  
'He/She is behind me.'

- b. *[[sèndì túndù] w"] égó ñ 1SgS Impf*  
[[holy.day behind] L] come-Imprf  
'I will come (back) after the holy day.'

#### 8.2.11 'Chez' (*[X sôw"] bà*)

'Chez X', i.e. 'at the house (or in the presence of) X' is expressed by (*[X sôw"] bà*). For examples see (xx3) and (xx8) in Text 4.

#### 8.2.12 'Between' (*[[X nì Y] nâ:] ñ*)

The compound postposition *nâ: ñ* is added to a NP denoting a plurality, for example a plural noun or pronoun, or a conjoined NP *[X ni] [Y (ni)]* (§7.1.1). Before *nâ: ñ*, the second occurrence of the *ni* 'and' conjunction is reduced to [n] or omitted. A pronominal example is *mbé nâ: ñ* 'between us'.

- (xx1) a. *[mbé dúgú]*  
[1PIP village]  
*[[[séwá:rè nì] [dwá:ⁿsà (n)]] nâ:] ñ 1SgS*  
[[[Sevare and] [Douentza and]] middle] Loc] be-3SgS  
'Our village is located between Sevare and Douentza.'
- b. *[[mbé nâ:] ñ dà:yⁿà]*  
[[1PIP middle] Loc] sit.Imprf  
'Have a seat between us!'

#### 8.2.13 'In the possession/custody of X' (*[X kî:] ñ*)

A PP 'with (=in the temporary possession of) X' is produced by this composite postposition. No semantically related noun #*kî:* or the like is known.

- (xx1) a. *[è pô:y] [kî:-ná] ñ 1SgS*  
[Def sack] [custody-3SgP Loc] be-3Sgs  
'The sack is with him (=in his possession).' (*kî:-ná ñ*)
- b. *[è wê:] [[ñké kî:] ñ 1SgS dè:ndè]*  
[Def child] [3PIP custody] Loc] 1SgS leave.Perf

'I left the child in their custody.' ([*ɲké kî:*] *ɲ*)

This construction can also be used abstractly, as in 'Y take a credit (=buy on credit) from X', see (xx2) in text 2.

8.2.14 'From X to Y' (*X dígí, hâl Y*)

For *dígí* '(all the way) from' and *hâl* '(all the way) to/until', see §8.2.1.

### 8.3 Purposive-causal 'for' (*námù*)

[*X námù*] means 'for X', in a prospective sense (e.g. 'in order to get X'), as in (xx1). The postposition is treated tonally as a possessed noun, and X as a possessor (hence subject to tone-dropping). That this is a possessive is clearly shown by 3Sg *nám-nà ɲ* 'for him/her'.

The *mu* segment is often pronounced as a prolonged [m:], though it can also be pronounced as [mu] or apocopated to [m]. Combinations include 1Sg *ɲ námú* [ɲnám:], 1Pl *mbé námú* [mbénám:], and *sèydù námù* [sèjdùnâm:] 'for/because of Seydou'. The 3Sg form *nám-nà ɲ* 'for him/her' shows that *námù* is a possessed noun syntactically.

- (xx1) [*ɲgè*      *námù*]      *ég-yè*  
           [honey]<sup>L</sup>      <sup>HL</sup>for]      come.Perf-3PlS  
           'They have come for honey.' (*ɲgè*)

The sense can also be retrospective ('because of, due to, as a result of'), as in (xx2a), or abstract 'on account of', as in (xx2b-c).

- (xx2) a. [*kùmà:ɲgà*      *námù*]      *ɲ*      *nwé:*  
           [rain(n)]      for]      1PlS      go.in.Perf  
           'We went into the house because of the rain (outside).'
- b. [*ɲ*      *námú*]      *ég-yè*  
           [1Sg      for]      come.Perf-3PlS  
           'They have come for (i.e. to visit) me.'
- c. [*àmànà*      *námù*]      *ò-"*      *bàrgó*      *ɲ*      *bò*  
           [God      for]      2Sg-Acc      help      1SgS      Impf  
           'I will help you-Sg on account of God (i.e. as a charitable act).'

## 8.4 Other adverbs (or equivalents)

### 8.4.1 Similarity (*X pínà =:*, *X pínì =:* 'like X')

'Like (similar to) X' is [*X pínà*]=: or [*X pínì*]=:, with a "possessed" form of the stem and final 'it is' clitic. The clitic is audible as vowel length except before a 1st/2nd person proclitic. X may be a possessor pronoun, including 3Sg suffix *-nà*.

- (xx1) a. [*ǰ píná*]=:      *bò-Ø* / *wòl-Ø*  
 [1SgP like]=it.is      be-3SgS / not.be-3SgS  
 'He/She is / is not like me.'
- b. [*píná-nà*]=:      *b-yà*  
 [like-3SgS]=it.is      be-3PlS  
 'They are like him/her.'
- c. [*pínà-ná*]=Ø      *ǰ*      *bò*  
 [like-3SgS]=it.is      1SgS      be  
 'I am like him/her.'
- d. [*wè: píná*]=:      *wá-á*      *wò*  
 [child like]=it.is      weep.Impf-2SgS      Impf  
 'You-Sg weep like a child.'

For a 'like/as though' clause using a variant of this particle, see §15.3.2.2.  
 'Like this/that, thus' is *ènè*.

### 8.4.2 Extent (*jwá*→ 'a lot', *bà:lè*→ 'a little')

*jwá*→ 'a lot' can function as a NP argument (xx1a), or as an adverb (xx1b). It can also function as an adjective, tone-dropping a modified noun (xx1c).

- (xx1) a. *jwá*→      *mì-ǰ*      *tábé-Ø*  
 a.lot      1Sg-Acc      give.Perf  
 'He/She gave me a lot.'
- b. [*ùnù w<sup>n</sup>*]      *jwá*→      *ándó*      *ǰ*      *bò*  
 [travel(n) Loc]      a.lot      go.Impf      1SgS      Impf  
 'I travel a lot.'

- c. *kà:y<sup>n</sup>* *jwá→*  
 work(n) much  
 'a lot of work' (*ká:y<sup>n</sup>*)

The antonym is *bà:lè→* 'a little'.

- (xx2) a. *bà:lè→* *mì-ŋ* *tábé-Ø*  
 a.little 1Sg-Acc give.Perf-3SgS  
 'He/She gave me a little.'
- b. [*ùnú* *w<sup>n</sup>*] *bà:lè→* *ándó* *ŋ* *bò*  
 [travel(n) Loc] go-1SgS go.Impf 1SgS Impf  
 'I travel a little (i.e. occasionally).'

#### 8.4.3 Specificity

##### 8.4.3.1 'Approximately' (*dígí*)

To indicate that the figure given is correct as a minimum but might be slightly understated (cf. English odd), *dígí* can be added. It can be made into a predicate with *bò* 'be'.

- (xx1) *àlà̀mù̀nó* *dè:* *dígí* *bò*  
 sheep 40 approach  
 '(They are) forty oddsheep'

##### 8.4.3.2 'Exactly' (*gôn*)

With numbers (e.g. of livestock or currency units), *gôn* can be used (xx1).

- (xx1) *àlà̀mù̀nó* *dè:* *gôn* *kìyò*  
 sheep 40 exactly equal  
 '(it adds up to) exactly forty sheep'

#### 8.4.4 Spatiotemporal adverbials

##### 8.4.4.1 Temporal adverbs

Some of the major temporal adverbs are in (xx1). The element *-túná ~ -túnà* is understood by my assistant to be related to the numeral '3' (*tà:ndi*).

- (xx1)
- |    |  |  |
|----|--|--|
| a. | <i>njó</i><br><i>nsâ→</i><br><i>nè:gù-lò pé</i>  | 'today'<br>'now'<br>'again' (with <i>nè:gù-lò</i> ordinal 'second')                                    |
| b. | <i>yà:gù</i><br><i>yà:gù-n-túná</i><br><i>pàná:ngè</i><br><i>só→</i><br><i>ê: wâ:r</i> | 'yesterday'<br>'day before yesterday'<br>'in the past, long ago'<br>"<br>" (lit. "that-Definite time") |
| c. | <i>ògà</i><br><i>ògà-n-túná</i><br><i>màṅàṅà-n-túnà</i>                                | 'tomorrow; in the future'<br>'day after tomorrow'<br>'in (about) four days'                            |
| d. | <i>gò:lí</i><br><i>nà:ngòlì</i><br><i>nwá:</i>   | 'last year'<br>'next year'<br>'this year'  |

##### 8.4.4.2 'First' (*túndùṅ*)

*túndùṅ* 'at first, firstly, to begin with' is illustrated in (xx1).

- (xx1)
- |                |             |                |           |                |
|----------------|-------------|----------------|-----------|----------------|
| <i>[sègú</i>   | <i>ḡ</i>    | <i>ḡ-à:ndé</i> | <i>nè</i> | <i>túndùṅ]</i> |
| [Segou         | 1SgS        | Epen-go        | and.then  | firstly]       |
| <i>[bàmàkó</i> | <i>àndó</i> | <i>ḡ</i>       | <i>bò</i> |                |
| [Bamako        | go.Impf     | 1SgS           | Impf]     |                |
- 'First I'll go to Segou (city), but later on I'll go somewhere else.'

##### 8.4.4.3 Spatial adverbs

The following are the main nondemonstrative spatial adverbs. Some contain locative postposition *bà* or *w<sup>n</sup> ~ ḡ*. No terms meaning 'north' or 'south' could be elicited.



- (xx1) a. *kó:-lò bà, kó:-lò w<sup>n</sup>* 'above, on top, overhead' (§8.2.6)  
*sígó-lò bà, sígó-lò w<sup>n</sup>* '(down) below, underneath' (§8.2.5)
- b. *dúl* 'east'  
*gè:<sup>n</sup>-tíbí-l* 'west'
- c. *túndú bá* 'in the rear'  
*túndù ñ* 'afterward'  
*tégó bá* 'forward; in front'

For demonstrative locative adverbs, see §4.4.2.1.

'Left' (*nwá:gá*) and 'right' (*jà:*) are modifiers that follow e.g. 'hand' and 'foot'. *nwá:gá* behaves tonosyntactically like an adjective, and tone-drops the preceding noun: *sígé* 'foot', *sìgè nwá:gá* 'left foot'. *jà:*, which may be related in some way to *jé:* 'eat (meal)' since eating is strongly associated with the right hand, does not behave like an adjective tonosyntactically: *sígé jà:* 'right foot' and even *nwé: jà:* 'right hand' from L-toned *nwè:* 'hand'. Adverbial 'to the left, leftward' is *nwà:gà bà*, while 'to the right, rightward' is *nùmà bà*, based on an otherwise unattested archaic term for 'hand' (e.g. Penange *númè*)

#### 8.4.5 Expressive adverbials (EAs)

Expressive adverbials (aka ideophones) are basically one-word adverbial phrases, sometimes with colorful senses. They do not combine into other words into phrases like NP, they cannot be focalized, and they have no tonosyntactic interactions with other elements. There are, however, ways to make them predicative, see §11.1.3.1.

##### 8.4.5.1 Representative expressive adverbials

Expressive adverbials may be highly marked phonologically. Some have lexicalised "intonational" prolongation (xx1a). Others are iterated, often in a two-part form with an optional third part repeating the first (xx1b). The third part is generally used in isolation, but omitted before an auxiliary verb. Still others are more normal-looking (xx1c).

- (xx1) a. *kèy<sup>n</sup>→* '(teeth) sticking out, having buck teeth'
- c. *gèñ-gàñ(-gèñ)* 'walking with hips swinging'  
*yì:lì-yà:lì* 'flapping (in the wind)'

- c. *kéléw<sup>n</sup>* 'silent'

Adjectival intensifiers behave like adjectives rather than expressive adverbials, see §4.5.7.

Some interjection-like intensifiers or emphatics are associated with verbal concepts. An example is *péw* 'completely used up'. It can simply be added to a conjugated verb (xx2b). For 3Sg subject, an alternative construction with *3Sg nà* is possible (xx2c). In form this construction belongs to the tight perfective chain type (§15.2.1.5).

- (xx2) a. *ɲké-Ø*  
be.depleted.Perf-3SgS  
'It (e.g. sugar) is used up.'
- b. *ɲké-Ø* *péw*  
be.depleted.Perf-3SgS all.used.up  
'It is completely used up.'
- c. *[ɲké nà] péw*  
[be.depleted.Perf 3SgS] all.used.up  
'It is completely used up.'

#### 8.4.5.2 'Apart, separate' (*tó:-nà*)

This element is frequently used in parallelistic constructions, with NPs denoting the two separate sets. *-nà* is presumably a frozen 3Sg possessor morpheme (compare *ntă:-nà* 'some, certain ones' §6.3.2). 'Apart' constructions are generally parallelistic (xx1).

- (xx1) *àlāmùnò-gè* *tó:-nà,* *úná-gé* *tó:-nà*  
sheep-Pl **apart,** goat-Pl **apart**  
'The sheep apart (e.g. on one side), the goats apart (e.g. on the other side).'

When not spelled out in this parallelistic fashion, the sense can be expressed by the iteration *tó:-tó:* 'separately, apart (in distinct locations)'. All of these forms are derived from the adjective *tó:* 'other' (§4.7.1.1).

8.4.5.3 'Always' (*wá:r sèlè*), 'never' (*àbádá*)

*wá:r sèlè* ~ *wàgár sèlè* 'always, constantly, every time' is the combination of *wàgár* 'time, moment' with *sèlè* 'all'. 'Never' can be expressed emphatically by *àbádá* (regional, originally Arabic) in combination with a negative predicate. Alternatively, 'never' can be expressed as an experiential perfect negative (§10.2.3.2).

8.4.6 'Together' (*bòw<sup>n</sup>*)

Adverb *bó:gù* 'together' is illustrated in (xx1).

- (xx1) *bòw<sup>n</sup>*      *káy<sup>n</sup>*      *kánù*      *ỳ*      *bò*  
together      work(n)      do.Impf      1PlS      Impf  
'We will all work together.'



## 9 Verbal derivation

The productive suffixal derivations (stem to stem) for verbs are reversible *-lè* ~ *-lè* ('un-...'), causative *-mì* (less often *-gè*) and the often paired mediopassive *-yè* ~ *-yè* and transitive *-rè* ~ *-rè* ~ *-ndè*. Also included in this chapter are deadjectival inchoatives.

### 9.1 Reversible verbs (*-lè* ~ *-lè*)

The reversible suffix is *-lè* or *-lè* (perfective) depending on the ATR-harmonic class of the verb. The majority of reversives are from bisyllabic inputs, including *CvC-* syncopated from */CvCv/*. A third (underlying) syllable in the input consisting of a mediopassive or transitive derivational suffix is omitted from the reversible. The medial syllable in reversible *CvCv-lè* is weakened to a high vowel *u* (or *i* if the first syllable has *i*). This medial high vowel is subject to syncope in some consonantal environments, notably after *{l r m y}* (xx1b).

A preceding action (e.g. 'tie') that produces a resulting state is presupposed. The reversible action brings back the original state. The range of senses can be observed in the data in (xx1).

(xx1)	input	gloss	reversible	gloss
a. simple inputs, no syncope				
	<i>twé:<sup>n</sup></i>	'step on'	<i>twí:<sup>n</sup>-lè</i>	'remove foot from'
	<i>dájé</i>	'attach blade'	<i>dájú-lè</i>	'remove blade'
	<i>sójé</i>	'tie (up)'	<i>sójú-lè</i>	'untie'
	<i>pégé</i>	'button'	<i>pégú-lè</i>	'unbutton'
	<i>púlé</i>	'cover (sb)'	<i>púl-lè</i>	'uncover (sb)'
	<i>díngé</i>	'bury'	<i>díngí-lè</i>	'disinter'
	<i>púndé</i>	'roll up; fold'	<i>púndú-lè</i>	'unroll; unfold'
	<i>nándé</i>	'tangle [tr, intr]'	<i>nándú-lè</i>	'become untangled; tangle (sth)'
	<i>kónjé</i>	'roll up (pants)'	<i>kónjú-lè</i>	'unroll (pants)'
	<i>dángé</i>	'paste, glue'	<i>dángú-lè</i>	'un-glue'
	<i>dágé</i>	'lock'	<i>dágú-lè</i>	'unlock'
b. syncope				

<i>táré</i>	'affix, post'	<i>tál-lè</i>	'un-post (remove)'
<i>yélé</i>	'hook, hang'	<i>yél-lè</i>	'unhook'
<i>nólé</i>	'sag'	<i>nól-lè</i>	'bounce back (after sagging)'
<i>wéré</i>	'braid (rope)'	<i>wér-lè</i>	'unravel (rope)'
<i>kúmí</i>	'clench (fist)'	<i>kúm-lè</i>	'unclench (fist)', homonym 'open eyes'

c. mediopassive and transitive inputs, no syncope

*mediopassive, from Cv- stem*

<i>dú-yè</i>	'carry on head'	<i>dú:-lè</i>	'take (load) off head'
--------------	-----------------	---------------	------------------------

*mediopassive, from (syncopated) bisyllabic stem*

<i>íb-yè</i>	'put on (wrap)'	<i>íbí-lè</i>	'take off (wrap)'
<i>kúm-yè</i>	'shut (eye)'	<i>kúm-lè</i>	'open (eye)', homonym 'unclench (fist)'

<i>dómb-yè</i>	'put on (hat)'	<i>dómbú-lè</i>	'take off (hat)'
<i>ám-b-yè</i>	'get dressed'	<i>ám-bú-lè</i>	'get undressed'

*transitive*

<i>tímbí-rè</i>	'stack up'	<i>tímbí-lè</i>	'unstack'
<i>kágú-rè</i>	'slip (sth) in'	<i>kágú-lè</i>	'slip (sth) out'

d. causative -gè input

<i>gíndá-gè</i>	'bend into a curve'	<i>gíndú-lè</i>	'unbend, straighten'
-----------------	---------------------	-----------------	----------------------

e. CvCvle input

<i>púndólè</i>	'crumple (sth)'	<i>púndú-lè</i>	'uncrumple'
<i>nágálè</i>	'load (cart)'	<i>nágú-lè</i>	'unload'

f. irregular (archaic phonology)

<i>té:-rè</i>	'cover (sth)'	<i>téwú-lè</i>	'uncover (sth)'
<i>bá:-ndè</i>	'shut (door)'	<i>bángú-lè</i>	'open (door)'
<i>génjè</i>	'(sth) tilt'	<i>géndú-lè</i>	'become un-tilted (straighten back up)'

g. suppletive

<i>múndé</i>	'braid (sb)'	<i>sáy-lè</i>	'unbraid (sb)'
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Reversive verbs are optionally combined with a following 'go out' (*gwé:*) or 'take out' (*gó:-mì*), with the same subject. Intransitive *gwé:* is combined with intransitive verbs, causative *gó:-mì* with transitives. In other words, there is transitivity harmony between the two verbs. Literal exiting from a space may or may not be involved; 'go/take out' may be abstract. If the event is completed, the construction used is the tight perfective chain (§15.2.1.5), as in (xx2a-b). Note the {L}-toned *bàngù-lè* and the following 3Sg postverbal subject *nà* in (xx2a).

For uncompleted and future events, the first verb has nonpast anterior *né ~ nè* (§15.2.2.2), as in (xx2c).

- (xx2) a. *bòw<sup>n</sup>* [*bàngù-lè* *nà*] *gwé:-Ø*  
door [close-Rev.Perf 3SgS] go.out.Perf-3SgS  
'The door opened (by itself).'
- b. *bòw<sup>n</sup>* [*ŋ̃* *bàngú-lè*] *ŋ̃* *gǒ:-mì*  
door [1SgS close-Rev.Perf] 1SgS go.out-Caus.Perf  
'I opened the door.'
- c. *bòw<sup>n</sup>* [*bàngú-lé* *né*] *gô:* *bò-Ø*  
door [close-Rev and.then] go.out.Impf Impf-3SgS  
'The door will open (by itself).'

## 9.2 Deverbal causative verbs

### 9.2.1 Productive causative (-*mì*)

The productive causative suffix added to verb inputs is *-mì* (perfective). The suffix can be added to a wide variety of verbs, including transitives, in a range of causative senses ('force X to VP', 'have X VP', 'let X VP'). It also makes factitives out of deadjectival inchoatives, e.g. 'make (sth) small(er)' from inchoative 'become small(er)'.

All causatives belong to the final-high-vowel verb class. Partial paradigms of *sígó-mì* 'take down' and of *yéba-mì* 'cause to dance', with tones based on 3Sg forms, are in (xx1). The input verb takes the **A/O-stem**.

(xx1) category	'take down' (< <i>sígé</i> )	'cause to dance' (< <i>yébé</i> )
perfective	<i>sígó-mì</i>	<i>yéba-mì</i>
imperfective	<i>sígó-m bò</i>	<i>yéba-m bò-</i>
imperfective neg	<i>sìgò-mù:-ndí</i>	<i>yèbà-mù:-ndí</i>
capacitative	<i>sìgò-m-mâ: bò</i>	<i>yèbà-m-mâ: bò</i>
imperative	<i>sìgò-mú</i>	<i>yèbà-m-á</i>

Further examples of causatives are in (xx2). Note in particular the -ATR input stems in (xx2b).

(xx2)	input	gloss	causative	gloss
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a. monosyllabic

<i>né:</i>	'drink'	<i>ná:-mì</i>	'give drink to'
<i>ɲé:</i>	'eat (meal)'	<i>ɲá:-mì</i>	'feed'
<i>nwé:</i>	'enter'	<i>nwá:-mì</i>	'make enter, take in'
<i>jwé:</i>	'(sth) fill up'	<i>jó:-mì</i>	'fill (sth)'
<i>gwé:</i>	'go out'	<i>gó:-mì</i>	'take out, remove'
<i>hybrid mono- and bisyllabic (§10.1.2.5)</i>			
<i>mé:</i>	'(sth) dry'	<i>méá-mì</i>	'dry (sth)'

b. bisyllabic

*input already +ATR compatible*

<i>tábé</i>	'give'	<i>tábá-mì</i>	'cause to give'
<i>tángé</i>	'go past'	<i>tángá-mì</i>	'take past'

*input -ATR*

<i>sógé</i>	'fall'	<i>sógá-mì</i>	'cause to fall'
<i>sémé</i>	'slaughter'	<i>sémá-mì</i>	'cause to slaughter'
<i>kómé</i>	'shout'	<i>kómá-m(ú)-</i>	'cause to shout'
<i>démdè</i>	'budge'	<i>démdá-m(ú)-</i>	'move (sth) over'

c. trisyllabic

<i>dúgú-rè</i>	'run'	<i>dúgú-ró-mì</i>	'cause to run'
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e. input already has derivational suffix

*reversive*

<i>bángú-lè</i>	'open (door)'	<i>bángú-lá-mì</i>	'have (sb) open (door)'
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*causative -gè*

<i>pánjá-gè</i>	'tear, rip'	<i>pánjá-gá-mì</i>	'have (sb) rip (sth)'
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*causative -m̀*

<i>sígó-m̀</i>	'take down'	<i>sígó-mú-m̀</i>	'have (sb) take down (sth)'
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I can cite no example where *-m̀* is added to a mediopassive or transitive derivational suffix (the transitive form it itself the usual causative of the mediopassive).

For *gó:-m̀* 'take out, remove' and *gó-m-dè* 'cause to go out, cause to leave', see §10.xxx.

Causatives from final-high-vowel input verbs are in (xx3). Those with a in the nonfinal syllable have stem-final a before *-m̀*, which could be taken as the A/O- or A-stem. Others have the U-stem.

(xx3)	input	gloss	causative	gloss
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- a. nonfinal *a* in stem  
*dám* 'speak'      *dámá-mì* 'make speak'
- b. nonfinal nonlow vowel in stem  
*sé:mì* 'look'      *sé:mú-mì* 'cause to look'

The causative of 'come' is *égó-mì* 'cause to come' with the A/O-stem.

## 9.2.2 Minor causative suffix *-gè* (*-gè*)

Several well-lexicalized causative-like action verbs, generally involving destructive impact, have a suffix *-gè* (perfective form) added to that A-stem or to the I/U-stem, depending on the verb. With the A-stem, the suffix always takes the +ATR form *-gè*, but the limited data show lexical variation as to whether a nonfinal -ATR vowel shifts to +ATR (xx1a). With the U-stem, the ATR value observed in the stem-final syllable in the perfective of the input is transferred to the suffixal syllable in the derivative, so both *-gè* and *-gè* are represented in (xx1b).

### (xx1) Causative *-gè* (all known examples)

input	gloss	causative	gloss
a. A-stem			
<i>máré</i>	'be lost'	<i>márá-gè</i>	'cause to be lost'
<i>ṣámí</i>	'malfunction'	<i>ṣámá-gè</i>	'ruin (sth)'
<i>pánjé</i>	'be torn'	<i>pánjá-gè</i>	'tear, rip'
<i>gílé</i>	'(sth) snap'	<i>gílá-gè</i>	'snap, break (sth)'
<i>gíndé</i>	'(sth) be curved'	<i>gíndá-gè</i>	'bend (sth) into a curve'
<i>with overt ATR alternation in nonfinal syllable</i>			
<i>tébé</i>	'be shattered'	<i>téba-gè</i>	'shatter'
<i>no ATR alternation in nonfinal syllable</i>			
<i>nólé</i>	'(sth) crumple'	<i>nólá-gè</i>	'crumple (sth)'
b. U-stem			
+ATR			
<i>gúmbé</i>	'be split'	<i>gúmbú-gè</i>	'split (wood, nut)'
<i>káyé</i>	'be incised'	<i>káy-gè</i>	'make incision in'
<i>kúré</i>	'be roiled'	<i>kúru-gè</i>	'roil, muddy'
<i>múré</i>	'be punctured'	<i>múru-gè</i>	'puncture'
<i>nímbé</i>	'(fire) go out'	<i>nímbú-gè</i>	'extinguish (fire)'
<i>púré</i>	'be severed'	<i>púru-gè</i>	'cut off, sever'

<i>-ATR</i>			
<i>yúlé</i>	'wake up'	<i>yúl-gè</i>	'wake (sb) up'
<i>túyé</i>	'be dumped'	<i>tú:-gè</i>	'dump' (slightly irregular)

Several verbs ending in *gè* or *gè* probably originated as suffixal derivatives, but are not synchronically paired with an unsuffixed intransitive. Examples are *pélgè* 'strike (e.g. a match), hone (a razor blade in one's palm)', *tírgè* 'pour (into a container)', *wélgè* 'dispossess (sb, of sth)', *bálgè* 'gather', and *wélagè* 'divide, share'.

The *-gè* in *yígíl-gè* 'be dizzy' is segmentable, compare noun *yìgìl* 'dizziness', but the verb does not fit the usual semantic profile here.

The final syllable of *málgè* 'see' is arguably segmentable (*mál-gè*) based on comparison with stative *málà*, but *málà* could alternatively be derived by applying a templatic target *CvCv* to *málgè* (derived statives do not allow nonhomorganic medial clusters), see §10.4.1.1.

A different *-gè* suffix is used with prosodically light verbs as a reciprocal (§9.5). Another *-gè* suffix occurs in some deadjectival inchoatives (§9.6).

### 9.2.3 Minor causative suffix *-ndè*

The examples of this formation are in (xx1).

(xx1) Causative *-ndè* (all known examples)

input	gloss	causative	gloss
a. sense is causative			
<i>dá:y<sup>m</sup>i</i>	'sit down'	<i>dá:-ndè</i>	'cause to sit, seat (sb)'
b. idiosyncratic senses			
<i>gí:y<sup>m</sup>i</i>	'(sth) be smelly'	<i>gí:-ndè</i>	'sniff, smell (sth)'
<i>sáyé</i>	'be untied'	<i>sáy-ndè</i>	'scatter [tr]; be scattered [intr]'
<i>yél-yè</i>	'cling, be held'	<i>yélé-ndè</i>	'hold onto'
<i>púru-gè</i>	'cut (off)'	<i>púr-gú-ndè</i>	'cross (river, road)'

In (xx1b), *sáyé* (e.g. knot, bundle) become untied, undone' is much more clearly related to transitive *sáy-lè* 'undo (sth tied)'.

*gú:ndè* 'go out' probably originated as a derived stem (*gú:-ndè*), cf. *gwé:* 'leave' (imperative *gó:*). Comparative evidence suggests that *núndé* 'hear' might also have originated in the fashion, cf. Ben Tey *nũ-*, Yanda Dom and Tebul Ure

*nó*. This *-nde* does not seem to have altered the valency of the verb. Both *gú:ndè* and *núndé* have similar counterparts in some other western Dogon languages, e.g. Bunoge.

#### 9.2.4 *kání* 'do', *ká:-ndè* 'do for', *kándí-gè* 'fix'

The simple transitive 'do' verb is *kání*, as in 'what are you doing?' It also occurs in a number of collocations as a semantically light auxiliary verb (§xxx).

*ká:-ndè* means 'do (sth) for (sb)'. If derived from *kání*, it adds a beneficiary (morphosyntactically, an additional direct object) to the case frame.

*kándí-gè* 'fix, repair' is vaguely similar to 'do' and 'do for' but it fits into no transparent derivational relationship.

#### 9.2.5 *núndé* 'hear' and *núnd-yè* 'listen'

*núndé* 'hear' and *núnd-yè* 'listen (to)' do not fit the usual semantic profile for mediopassive derivatives.

### 9.3 Passive *-m-û:* or *-û:*

For a resultative passive (e.g. 'be hanging' in stative intransitive sense) in *-é:* ~ *-é:* ~ *-í:* *bò*, see §10.4.1.2.

A suffixal passive with *-m-û:* is attested with three transitive verbs ('see', 'get', 'encounter'). The sense is 'be VERB-able'. Only 3Sg subject forms are attested. The negative counterpart is *-mù:-ndí*, with imperfective negative *-ndí*.

(xx1)	verb	gloss	'be VERB-able'	'not be VERB-able'
	<i>díné</i>	'get, obtain'	<i>dìnà-m-û:</i>	<i>dìnà-m-ù:-ndí</i>
	<i>màlgè</i>	'see'	<i>màlgà-m-û:</i>	<i>màlgà-m-ù:-ndí</i>
	<i>témbé</i>	'encounter'	<i>tèmbò-m-û:</i>	<i>tèmbò-m-ù:-ndí</i>

A verb form in final *û:* is also attested without the *-m(i)* suffix in *kànû:* 'it is do-able, it can be done', from *kání* 'do'. This form can be combined with another verb: *ɲɔ:-w<sup>n</sup> kànû:* 'it is eatable', *nɔ:-w<sup>n</sup> kànû:* 'it is drinkable', *ùmyɔ:-w<sup>n</sup> kànû:* 'it is endurable'.

For mediopassives with *-yè* ~ *-yè*, see the following section. For resultative passive with *-é:* ~ *-é:* ~ *-í:* plus *bò*, see §10.4.1.2.

## 9.4 Mediopassive and transitive

### 9.4.1 Mediopassive *-yè* ~ *-yè* and transitive *-rè-* ~ *-rè* (*-dè*, *-ndè*)

There is a fairly productive alternation of mediopassive *-yè* ~ *-yè* and transitive *-rè-* ~ *-rè*. The latter has a variant *-ndè* after contraction in some combinations and there are two other cases of *-dè* ~ *-dè*.

The mediopassive denotes an internally experienced event (voluntary or not), while the corresponding transitive requires an external agent. The transitive is therefore essentially the causative of the mediopassive. Some mediopassives, especially verbs of carrying, are syntactically transitive in that they have a direct object. In this case, the form with *-rè-* ~ *-rè* is ditransitive.

Transitive *-ró-* ~ *-ró-* is easily distinguished from reversive *-lè* ~ *-lè*, which can occur with some of the same verb stems (§9.1), and from reciprocal allomorph *-lè* (§9.5).

(xx1)	MP	gloss	Tr	gloss
a. stance				
	<i>bí-yè</i>	'lie down'	<i>bí:-rè</i>	'have lie down, put to sleep'
	<i>dá:y"i</i>	'sit down'	<i>dá:-ndè</i>	'have (sb) sit, seat (sb)', see §9.2.3
	<i>ínjè</i>	'stand up, stop'	<i>ínjí-rè</i>	'stop (sth)'
	<i>sómb-yè</i>	'squat!'	<i>sómbú-rè</i>	'cause to kneel'
b. wearing clothes				
	<i>ám-b-yè</i>	'put on (clothes)'	<i>ám-bú-rè</i>	'put (clothes) on (sb)'
	<i>dóm-b-yè</i>	'put on (headware)'	<i>dóm-bú-rè</i>	'put (headware) on (sb)'
	<i>íb-yè</i>	'tie on (wrap)'	<i>íbí-rè</i>	'tie (wrap) on (sb)'
	<i>tulé</i>	'put on (shoe)'	<i>tú:-rè</i>	'put (shoe) on (sb)'
c. carrying/holding				
	<i>bám-b-yè</i>	'carry on back'	<i>bám-bú-rè</i>	'put on (sb's) back'
	<i>dú-yé</i>	'carry on head'	<i>dú:-rè</i>	'put on (sb's) head'
d. other				
	<i>mì: dú-yé</i>	'bathe'	<i>mì: dú:-rè</i>	'bathe (sb)'
	<i>úr(i)-yè</i>	'get sick'	<i>úr-dè</i>	'make (sb) sick'
	<i>núm-b-yè</i>	'rub (oil, on self)'	<i>núm-bú-rè</i>	'rub (oil, on sb)'
	<i>kúyé</i>	'hide (oneself)'	<i>kúy-rè</i>	'hide (sth, sb)'
	<i>dábálè</i>	'whisper'	<i>dábál-dè</i>	'whisper to (sb)'

Transitive stems *bí:-rè* (xx1a) 'put (sb) to sleep', *tú:-rè* 'put (shoe) on (sb)' (xx1b), and *dú:-rè* 'put on (sb's) head' (xx1c) are somewhat problematic phonologically. for *bí:-rè* and *dú:-rè* there is a possibility that the lengthened vowel preserves part of the mediopassive suffix in *bí-yè* and *dú-yè*. *tú:-rè*, by contrast, involves loss of the medial l in *túlé*.

Transitive *íngí-rè* 'stop (sth)' in (xx1a) has its own apparently transitive or causative derivative *íngí-r-dè* 'have (sb) stop (sth)'.

*dúgú-rè* 'run' is only weakly segmentable by comparison with the cognate nominal *dúgú* 'running'. There are many verbs ending in *-rè* or *-rè* that may have originated as suffixal derivatives but that are now isolated.

*gálé* 'put (sth) in (sth)', which is already transitive syntactically, has an irregular transitive (causative) derivative *gá:-rè* 'put (sth) in (sth) for (sb)', with a benefactive indirect object indexed.

## 9.5 Reciprocal (-gè, -lè)

The reciprocal verb form has (in the perfective) suffix *-gè* after prosodically light stems, and suffix *-lè* after heavy stems. The verb is in the A/O-stem, requiring +ATR-compatible vocalism in nonfinal syllables. As elsewhere (i.e. tones for 3Sg perfective, tones for imperative), the light/heavy distinction groups *Cv*, *Cv:*, *CvCv*, and most *CvNCv* with homorganic nasal/voiced-stop cluster as light, and remaining *CvCCv* plus *Cv:Cv* and all trisyllabic and longer stems as heavy. The verb is optionally preceded by *bòw* 'reciprocally, together'.

- (xx1) a. (*bòw*)    *ḡ / à*                    *málgá-lè*  
 (together)    1PIS / 2PIS                    see-Recip.Perf  
 'We/You-Pl saw each other'
- b. (*bòw*)    *málgá-l-yè*  
 (together)    see-Recip.Perf-3PIS  
 'They saw each other.'
- c. *málgá-lò*    *ḡ*            *bò*  
 tomorrow    1PIS            hit  
 'We will see each other'

Since *-lè* ~ *-lè* is also one variant of the reversive suffix (i.e. after +ATR stems), it may be useful to give parsing tips. There is a complementarity, since reversive *-lè* ~ *-lè* is added to prosodically light stems, while reciprocal allomorph *-lè* occurs only with heavy stems. In addition, the reciprocal is always +ATR *-lè*.

Likewise, *-gè* is homonymous with a causative-like suffix *-gè* used with a fairly small set of impact transitives like 'puncture' and 'shatter' (§9.2.2). Since the underived verbs that can add causative *-gè* are intransitive, while those that can add reciprocal *-gè* are transitive, there is little danger of confusion.

Some further examples are in (xx2). As usual the perfective 3Sg is the citation form, but in the case of reciprocals a plural subject is required, so in citing forms that are actually in use one can either add 1Pl *ṛ* or 2Pl *à* (*ṛ sójá-gè* 'we tied each other') or replace *-gè* and *-lè* with 3Pl *-g-yè* and *-l-yè* (*sójá-g-yè* 'they tied each other').

(xx2)	input	gloss	reciprocal ('each other')
a. prosodically light			
	<i>twé:<sup>n</sup></i>	'step on'	<i>twá:<sup>n</sup>-gè</i>
	<i>sójé</i>	'tie (up)'	<i>sójá-gè</i>
	<i>gíyé</i>	'kill'	<i>gíyá-gè</i>
	<i>dúgè</i>	'insult'	<i>dúgá-gè</i>
	<i>tábé</i>	'give (to)'	<i>tábá-gè</i>
	<i>káyé</i>	'shave'	<i>káyá-gè</i>
	<i>náré</i>	'touch'	<i>nará-gè</i>
	<i>búndé</i>	'hit'	<i>búndó-gè</i>
	<i>dúndé</i>	'look for'	<i>dúndá-gè</i>
b. prosodically heavy			
	<i>bárgè</i>	'help'	<i>bárgá-lè</i>
	<i>kábájè</i>	'scratch'	<i>kábájá-lè</i>
	<i>pábálè</i>	'massage'	<i>pábálá-lè</i>
	<i>yígírè</i>	'shake'	<i>yígíró-lè</i>

There are two semantically related (antonymous) verbs, structurally quadrisyllabic, that end in *gè* and have more or less reciprocal sense: *ségál(í)gè* ' (people, animals) assemble, come together' and *píjól(í)gè* 'scatter, disperse [intr]'. The morphological structure is synchronically not transparent in the absence of corresponding underived input forms.

## 9.6 Deadjectival inchoative and factitive verbs

All adjectives denoting states have some way to indicate a transition into that state or an intensification/increase of that state. Typically the modifying adjective is paired with an inchoative verb of the sense 'become ADJ', cf. English (intransitive) *redden* (or *blush*), *grow* (or *expand*), *fill up*, and so forth. In some cases the relationship between the paired adjective and inchoative verb

is irregular or suppletive, and in some other cases an auxiliary verb like 'do' is added directly to the adjective. The data in this section are organized by formal relationships.

In (xx1), the modifying adjective is **identical segmentally to the perfective** (and citation form) of the inchoative verb, allowing for vocalism-stem changes affecting the final vowel (the perfective citation form of the verb must end in {*i e ε*}). One is tempted to analyse the "adjective" as the perfective participle of the verb as in a relative clause ('a dry garment' < 'a garment that dried'). However, this does not quite work. The relative clause would have to be a subject relative, but perfective participles in subject relatives are {H}-toned (§14.4.2). Furthermore, true relative clauses allow additional constituents, both before the head noun and between it and the verbal participle, and this is not observed in normal N-Adj combinations. So I take the adjectives and inchoatives in (xx1) as members of equally independent status of the same word-families, rather than deriving one from the other.

(xx1)	modifying	inchoative	gloss of adjective
a. adjective ends in { <i>i e ε</i> }			
	<i>bòrè</i>	<i>bóré</i>	'cooked'
	<i>dèmè</i>	<i>démé</i>	'ripe (grain)'
	<i>èmbè</i>	<i>émbé</i>	'wet'
	<i>gòmè</i>	<i>gómé</i>	'rotten (meat, fruit)'
	<i>kàmmì</i>	<i>kámmi</i>	'hard (e.g. rock, wood)'
	<i>kùnè</i>	<i>kúné</i>	'plump, fatty'
	<i>kùrè</i>	<i>kúré</i>	'undiluted, full-strength (e.g. milk)'
	<i>jwè:</i>	<i>jwé:</i>	'full'
	<i>mè:</i>	<i>mé:</i>	'dry'
	<i>nàm</i>	<i>nám(i)</i>	'malfunctioning'
	<i>ònjè</i>	<i>ónjé</i>	'lean (animal, meat)'
	<i>sèlè</i>	<i>sélé</i>	'diluted (e.g. milk)'
	<i>ùlè</i>	<i>ulé</i>	'worn-out'
	<i>ùlgè</i>	<i>úlgé</i>	'ripe (fruit)'
b. irregular			
	<i>nwá:gá</i>	<i>nú:gè</i>	'hot'
	"	<i>nwá:jè</i>	'fast'
	<i>jámá</i>	<i>jámmi</i>	'close, nearby'

In (xx2), an inchoative suffix *-yè* ~ *-yè* (becoming *-jè* ~ *-jè* after *g*) is added to a syncopated form of the adjective. Presumably the stem-final vowel is raised to *i* before being syncopated.

(xx2)      modifying      inchoative      gloss of adjective

a. -yè ~ -yè after vowel or nonnasal sonorant

*after vowel*

*nsì:*<sup>n</sup>      *nsí-yé*      'sweet' or 'sharp (blade)'

*after l*

*élò*      *él-yè*      'delicate (fabric)'  
*kòlò*      *kól-yè*      'fresh; raw'

b. -jè ~ -jè after *g*

*/ŋg-y/ reducing to n-j*

*dóŋgá*      *dón-jè*      'heavy'  
*nòŋgò*      *nón-jè*      'thin, slender'

*/g-y/ becoming j-j*

*yágá*      *yáj-jè*      'pretty'  
*wàgè*      *wáj-jè*      'distant'  
*má:gá*      *má:j-jè*      'difficult (work)'

In (xx3), the inchoative suffix is -gè.

(xx3)      modifying      inchoative      gloss of adjective

a. after vowel

*stem-final vowel already u*

*kùrjù*      *kúrjú-gè*      'coarse'  
*pèmbù*      *pémbú-gè*      'cramped'

*stem-final u shifted from another vowel*

*tòmbò*      *tómbú-gè*      'white'  
*bámbá*      *bámbú-gè*      'wide, spacious'  
*sùmbè*      *súmbú-gè*      'deep'  
*bòmbè*      *bómbú-gè*      'red'

*stem-final u syncopated after unclustered sonorant*

*tà:mì*      *tá:m-gè*      'slow'

*irregular with ATR-harmonic shift*

*yòrdè*      *yórádí-gè*      'black'

b. after consonant

*unsyncopated*

*báy<sup>n</sup>*      *báy<sup>n</sup>-gè*      'big'

*syncopated*

*gòlò*      *gól-gè*      'long, tall'  
*gà:là*      *gá:l-gè*      'bitter'  
*bàgàlà*      *bágál-gè*      'big, fat, massive'  
*ònàrà*      *ónán-gè*      'smooth, sleek'

*irregular*



<i>tà yè</i>	<i>támál-gè</i>	'cold'
<i>diminutive adj</i>		
<i>dùṅgùrí-yè</i>	<i>dùṅgúr-gè</i>	'short'
<i>ṅkà:lí-yè</i>	<i>ṅkà:l-gè</i>	'small'

Of morphological interest is the fact that several adjectives with obligatorily iterated stems correspond to inchoatives based either on uniterated versions of the stem (xx4ab), or on a special **final-reduplicated** *CvC<sub>2</sub>vC<sub>2</sub>*- stem (xx4c).

(xx4)      modifying      inchoative      gloss of adjective

a. unsuffixed, perfective-like inchoative

<i>tóm-tóm</i>	<i>tómí</i>	'sour'
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b. inchoative with *-yè ~ -yê*

<i>yáw-yáw</i>	<i>yáw-yè</i>	'lightweight'
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c. inchoative with final-reduplicated stem and *-gè*

<i>éb-éb</i>	<i>ébáb-gè</i>	'supple'
<i>sém-sém</i>	<i>sémém-gè</i>	'pointed'
<i>búlá-búlà</i>	<i>búlál-gè</i>	'blue'

One adjective has a **suppletive** inchoative *yé*: 'become good' (xx5) when the referent is inanimate.

(xx5)	<i>pó:ló</i>	<i>yé</i> : (Inan)	'good'
		<i>pó:l-gè</i> (An)	

Adjectives appear as regularly adjectival form with a following **auxiliary verb** are in (xx6).

(xx6) a. with *bílé* 'become'

<i>kará-kará</i>	<i>kará-kará bílé</i>	'bitter'
<i>kándá</i>	<i>kándá bílé</i>	'new'

b. with *kání* 'do'

<i>ká:mnó</i>	<i>ká:mnó kání</i>	'old (person)'
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c. with *né* 'say'

<i>yáw-yáw</i>	<i>yáw-yáw né</i>	'lightweight' (alongside <i>yáw-yè</i> )
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The factitive 'make (sth) ADJ (or ADJ-er)' is the causative of the inchoative (xx7).

(xx7)	factitive	gloss	inchoative
a.	<i>dón-jó-mì</i>	'make heavy, weigh down'	<i>dón-jò</i>
b.	<i>ɲká:l-gá-mì</i>	'make small(er), shrink'	<i>ɲká:l-gè</i>
c.	<i>yó:-mì</i>	'make better, improve'	<i>yé:</i>
d.	<i>yáw-yá ná-mì</i>	'make lighter, lighten'	<i>yáw-yáw né</i>

## 10 Verbal inflection

### 10.1 Inflection of regular indicative verbs

For indicative categories, the verb occurs in a vocalism stem form, which is followed by an aspect-negation suffix (except that perfective positive is unmarked suffixally). The past clitic =*ye* (§10.6.1) can be added to an already conjugated verb of any aspect-negation category. Verbs have a similar structure in deontic modal categories such as imperative and hortative, with imperative (singular) being unmarked.

Pronominal subject category for indicative categories is marked by suffixes for 3Pl, by proclitics for 1st/2nd persons, and by zero for 3Sg (transcribed as suffixed -*Ø*). For the deontic moods, plural addressee is marked suffixally.

Verbs in relative clauses have special tonal and/or (participial) suffixal forms, see §14.4.

#### 10.1.1 Overview of indicative (aspect-negation) categories

The nonpronominal inflectional categories marked on verbs in indicative clauses are those in (xx1), which is organized into four groups based on aspect and polarity.

(xx1)	a. perfective positive system	E/I-stem, no other suffix A/O-stem plus <i>-tê:</i>
	perfective experiential perfect	
	b. imperfective positive system	
	imperfective progressive	O-stem plus <i>bò ~ wò</i> O-stem plus <i>bô</i> 'be'
	c. perfective negative system	
	perfective negative	E/I-stem plus <i>-l</i> (3Pl: A-stem plus <i>-ndá</i> )
	experiential perfect negative	A/O-stem plus <i>-tê:-ndí</i>
	d. imperfective negative system	
	imperfective negative	O-stem plus <i>-ndí ~ -l ~ -lí</i>

progressive negative

O-stem plus *wòl* 'not be'

Unusual in Dogon is the fact that the Penange perfective negative is based on the same E/I-stem as the corresponding positive. Therefore the E/I-stem and the O-stem function in Penange as perfective and imperfective, respectively, regardless of polarity. On the other hand, the experiential perfect has a distinctive vocalism stem (A/O), and its negative form does not (synchronically) end in the regular perfective negative suffix. Therefore the relationship of the experiential perfect and the perfective systems is weaker in Penange than in most other Dogon languages.

However, in Penange the perfective/imperfective division is also marked by the position of 1st/2nd person subject pronominals. In the perfective systems, positive and negative, these pronominals precede the verb with its aspect-negation marking: Pron Verb-AN. This includes the experiential perfect (positive and negative), which I therefore place with perfectives rather than imperfectives in spite of the vocalism. By contrast, 1st/2nd person subject pronominals intervene between the verb and the following suffix (or auxiliary) in the imperfective systems (including progressive). Examples with 1Sg *ń* and allomorphs are in (xx2), using *égé* 'come'.

(xx2) a. perfective system (positive and negative)

<i>ń yègè</i>	'I came'	perfective
<i>ń yègè-l</i>	'I did not come'	perfective negative
<i>ń yègò-tê:</i>	'I have (once) come'	experiential perfect
<i>ń yègò-té:-ndí</i>	'I have never come'	experiential perfect neg.

b. imperfective system (positive and negative)

<i>égó ń bò</i>	'I will come'	imperfective
<i>égó-ò-l</i>	'I will not come'	imperfective negative
<i>égó ń bò</i>	'I am coming'	progressive
<i>égó ń wòl</i>	'I am not coming'	progressive negative

Other indicative categories not fitting into these four systems are the derived **stative** (e.g. 'be sitting' from active verb 'sit down'), which is marked primarily by vocalic ablaut, and the capacitative ('can VP') with suffix *-má-*. Based on the position of 1st/2nd person subject pronominals, the capacitative is affiliated with the perfective systems. This test works less cleanly for the stative, which (in the positive) has a kind of initial iteration instead of an aspectual suffix, with the 1st/2nd person pronominal intercalated. However, the pronoun precedes the verb in the (uniterated) stative negative, so a (weak) case can be made for aligning the stative with the perfective systems.

(xx3) a. capacitative

<i>ń</i> <i>bì-yò-má</i>	'I can lie down'	capacitative
<i>ń</i> <i>bì-yò-má-ndà</i>	'I cannot lie down'	capacitative negative

b. stative (positive and negative)

<i>bì ń</i> <i>bì-yà</i>	'I am lying down'	stative
<i>ń</i> <i>bìyà-ndá</i>	'I am not lying down'	stative negative

Past clitic =*ye* can be added to an already inflected aspect-marked, stative, or capacitative verb, positive or negative. There is one exception: the past imperfective is quite different in form from the (nonpast) imperfective (§10.6.1.4).

### 10.1.2 Verb stem shapes

The stem-classes (syllabic shape, final high versus nonhigh vowel) will be described in the sections below (§10.1.2.1-xxx). This will be followed by sections on the various inflectional (e.g. aspect-negation) categories.

#### 10.1.2.1 *Cv* verb (*né* 'say')

I can cite only *né* 'say' as a short-voweled monosyllabic verb. It competes with *dám* 'speak, say'. In partial paradigms like that in (xx1), unless otherwise indicated, the form (especially tonal) of the stem is that of the 3Sg form. The E-stem is *ne* and the O-stem is *no*.

(xx1)	form	category
	<i>né</i>	perfective (3Pl <i>ńíy-y<sup>n</sup>è</i> , 1Pl <i>ń nê</i> )
	<i>nè-l</i>	perfective negative (3Pl <i>ná-ndá</i> )
	<i>ná</i>	imperative
	<i>nó bò</i>	imperfective
	<i>nò-ndí</i>	imperfective negative

*né* owes its subminimal shape to elision of an original first syllable. Its cognates include Bunoge *ńúnè* and Mombo *gúné*.

### 10.1.2.2 *Cv*: verbs

The known *Cv*: verbs are listed in (xx1) in the most important vocalism stems. Tones are omitted. All known examples have {*e* *ɛ*} rather than *i* in the E/I-stem; i.e. there are no final-high-vowel *Cv*: stems. *Cv*:<sup>n</sup> with nasalized vowel is attested but rare. I know of no *Cv*: stems with irregular inflectional morphology, though *gwé*: 'go out' has some variant stems (§10.1.2.3 just below). The consonantal onset of the E/I-stem for -ATR verbs (*Cwɛ*:- versus *Cɛ*:-) depends on the point of articulation of the initial *C*, palatoalveolar {*y* *ɲ*} versus other. For +ATR stems, even *y* does not prevent the following *w*, see 'fill up' in (xx1c), where *yw* is pronounced as IPA [y<sup>h</sup>w] with front rounded [y].

(xx1) *Cv*: verbs

	vocalism stems						gloss
	O	A/O	A	E	I	U	
a. -ATR							
<i>Cw</i> onset in A/O- and E/I-stems, <i>u</i> : in U-stem							
	<i>dɔ</i> :	<i>dwa</i> :	<i>dwa</i> :	<i>dwe</i> :	<i>duy</i>	<i>du</i> :	'pound'
	<i>nɔ</i> :	<i>nwa</i> :	<i>nwa</i> :	<i>nwe</i> :	<i>nuy</i>	<i>nu</i> :	'sing'
	<i>nɔ</i> :	<i>nwa</i> :	<i>nwa</i> :	<i>nwe</i> :	<i>nuy</i>	—	'go in'
	<i>sɔ</i> :	<i>swa</i> :	<i>swa</i> :	<i>swe</i> :	<i>suy</i>	—	'vomit'
	<i>tɔ</i> :	<i>twa</i> :	<i>twa</i> :	<i>twe</i> :	<i>tuy</i>	<i>tu</i> :	'make bunches'
<i>C</i> onset in A/O- and E/I-stems, <i>i</i> : in U-stem							
	<i>ɲɔ</i> :	<i>ɲa</i> :	<i>ɲa</i> :	<i>ɲɛ</i> :	<i>ɲiy</i> <sup>n</sup>	<i>ɲi</i> :	'eat (meal)'
	<i>yɔ</i> :	<i>ya</i> :	<i>ya</i> :	<i>yɛ</i> :	—	—	'(day) break'
	<i>nɔ</i> :	<i>na</i> :	<i>na</i> :	<i>nɛ</i> :	<i>niy</i> <sup>n</sup>	<i>ni</i> :	'drink'
<i>w</i> -initial							
	<i>wɔ</i> :	<i>(w)wa</i> :	<i>(w)wa</i> :	<i>(w)wɛ</i> :	<i>wiy</i>	<i>wu</i> :	'weep' (noun <i>wɔ</i> :)
b. <i>Cv</i> : with long oral vowel, +ATR							
<i>Cw</i> onset in E/I-stem							
	<i>jo</i> :	<i>jo</i> :	<i>jwa</i> :	<i>jwe</i> :	<i>juy</i>	—	'(sth) fill up'
	<i>go</i> :	<i>go</i> :	<i>gwa</i> :	<i>gwe</i> :	<i>guy</i>	—	'go out; (sun) rise'
	<i>ko</i> :	<i>ko</i> :	<i>kwa</i> :	<i>kwe</i> :	<i>kuy</i>	<i>ku</i> :	'sew'
<i>w</i> -initial							
	<i>wo</i> :	<i>wo</i> :	<i>(w)wa</i> :	<i>(w)we</i> :	<i>wuy</i>	<i>wu</i> :	'draw (water)'
<i>y</i> -initial							
	<i>yo</i> :	<i>yo</i> :	<i>ya</i> :	<i>ye</i> :	<i>yiy</i>	—	'be fixed'
c. <i>Cv</i> : <sup>n</sup> with long nasal vowel							
<i>Cw</i> onset in A/O- and E/I-stems							

<i>tɔː<sup>n</sup></i>	<i>twaːː<sup>n</sup></i>	<i>twaːː<sup>n</sup></i>	<i>twɛːː<sup>n</sup></i>	<i>twiɣ<sup>n</sup></i>	<i>tuːː<sup>n</sup></i>	'step on' or '(God) create'
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d. *Ciː-* in E/I-stem  
[none]

Penange cognates of *Caː-* verbs in some other Dogon languages are bisyllabic, of the shape *Cayv-* (e.g. perfective *náyé-* 'spend the night', *káyé-* 'shave'). For *méː* 'dry, become dry' and *géːː<sup>n</sup>* 'fart', which are partly monosyllabic and partly bisyllabic, see §10.1.2.5.

#### 10.1.2.3 *gwéː* 'go out' and its relatives

*gwéː* 'go out' co-occurs with two bisyllabic near-synonyms (xx1). The morphology is obscure, but a very similar trio of forms occurs in Bunoge.

(xx1)	Perf 3Sg	Imprt	gloss
	<i>gwéː</i>	<i>góː</i>	'leave, go away' (Fr <i>quitter</i> )
	<i>gúːndè</i>	<i>gùːndó</i>	'go out (from a structure)'
	<i>góːngè</i>	<i>gòːngó</i>	'come (back) out, emerge'

The two causatives are those in (xx2).

(xx1)	Perf 3Sg	Imprt	gloss
	<i>góː-mì</i>	<i>gòː-mú</i>	'take out, remove (sth)' (Fr <i>enlever</i> )
	<i>gó-m-gè</i>	<i>gò-m-gó</i>	'take out (of a container)'
	<i>gó-m-dè</i>	<i>gò-m-dó</i>	'cause (sb/sth) to go out, cause to leave'

#### 10.1.2.4 Lexically *CvC* verb stems absent

No lexically *CvC* stems have been observed. Some *CvCv* verbs with final high vowel have a surface form *CvC*, either word-final or presuffixal, but I attribute this to apocope/syncope from /*CvCi*/ or /*CvCu*/. An example is *jáy<sup>n</sup>* 'fight', which is often collocated with cognate nominal *jòy<sup>n</sup>* 'fighting, (a) fight'. As shown in (xx1), some inflected forms have *CvC* (xx1b), but others are based on bisyllabic *CvCv* (xx1a).

(xx1)	form	category
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a. bisyllabic stem

*jáy<sup>n</sup>á*  
*jáy<sup>n</sup>ù-ndí*

imperative (A/O-stem)  
imperfective negative (U-stem)

b. syncopated/apocopated to *CvC*

*jáy<sup>n</sup>(í)*  
*jáy<sup>n</sup>-lí*  
*jáy<sup>n</sup> bò*  
*jáy<sup>n</sup>-mâ: bò*

perfective (I-stem)  
perfective negative (I-stem)  
imperfective (U-stem)  
capacitative ('can')

10.1.2.5 *mé:* 'dry, become dry' and *gé:<sup>n</sup>* 'fart'

*mé:* 'dry, become dry', which is related to the adjective *mè:*, behaves like a monosyllabic verb in the E, I, and (presumably) U stems, but as a bisyllabic in the other attested stems. The same is true of *gé:<sup>n</sup>* 'fart', which is related to the noun *gè:<sup>n</sup>* '(a) fart'. In (xx1), which shows the vocalism stems (without tones), we can see that the regular monosyllabic verb 'drink' matches 'dry' and 'fart' in the E, I, and U stems, i.e. those stems that (for such verbs) end in a front vowel. On the other hand, 'drink' is clearly monosyllabic in the O, A/O, and A stems, while 'dry' and 'fart' have vowel sequences in these stems.

vocalism stems						gloss
O	A/O	A	E	I	U	
<i>nɔ:</i>	<i>na:</i>	<i>na:</i>	<i>nɛ:</i>	<i>níy<sup>n</sup></i>	<i>ní:</i>	'drink'
<i>mɛɔ</i>	<i>meo</i>	<i>mea</i>	<i>mɛ:</i>	<i>miy<sup>n</sup></i>	—	'dry'
<i>gɛɔ:<sup>n</sup></i>	<i>gea:<sup>n</sup></i>	<i>geá:<sup>n</sup></i>	<i>gɛ:<sup>n</sup></i>	<i>giy<sup>n</sup></i>	<i>gi:<sup>n</sup></i>	'fart'

It is likely that 'dry' and 'fart' were original *\*Cvy<sup>n</sup>v* stems whose *\*y<sup>n</sup>* was elided. Cognates of the verb 'dry' include Toro Tegu and Jamsay *màý<sup>n</sup>á* and Mombo *máýé*. Cognates of the verb 'fart' include Nanga *giy<sup>n</sup>é* and Mombo *gy<sup>n</sup>é:*.

10.1.2.6 *NCv-* verbs (*ɲké* 'be depleted')

'Give', which has this shape in some Dogon languages, is *tábé* in Penange. The only *NCv-* verb known is *ɲké* 'be depleted, exhausted, used up' (as in the context: we're out of sugar). Since in practice it always has a third person subject, the otherwise likely confusion with 1Sg and 1Pl subject proclitics does not arise.



Basic paradigm forms are in (xx1). Postpausally, the tone of the nasal is polarized to the following tone, as indicated in the bracketed IPA transcriptions.

(xx1)	3Sg	3Pl
perfective	<i>ɲké</i> [ɲkɛ́]	<i>ɲkíy-yè</i> [ɲkíjǽ]
perfective negative	<i>ɲkè-lì</i> [ɲkɛ̀lì]	<i>ɲky-ándá</i> [ɲkjándá]
imperfective	<i>ɲkó bò</i> [ɲkó bò]	<i>ɲkó b-yà</i> [ɲkóbjà]
imperfective negative	<i>ɲkò:-ndí</i> [ɲkò:ndí]	<i>ɲkò:-nd-yà</i> [ɲkò:ndjà]

An initial *NC* cluster was observed in one bisyllabic verb stem: *ɲkíndè* 'die'.

#### 10.1.2.7 Bisyllabic stems

Bisyllabic verbs may be *CvCv*, *CvCCv*, *Cv:Cv*, and in a few cases *Cv:NCv* (*Cv:ndv* or in one case *Cv:ɲgv*). The initial *C* position may be vacant (vowel-initial stems). Most bisyllabic verbs end in a nonhigh vowel in all vocalism stems. There is a small class of bisyllabic verbs that end in a high vowel (subject to deletion) in some inflectional categories.

*Cv:NCv* verbs appear to derive in at least some cases from trisyllabic etyma. An example is *já:ndè* 'put (sth) up on (sth)', perhaps from \**jáɲgú-lè*, cf. the reversive antonym *jáɲgú-lè* 'take (sth) down from on (sth)'. For *gú:ndè* 'go out' and *gó:ɲgè* 'come (back) out, emerge' see §10.1.2.3.

**Final-nonhigh-vowel** stems are illustrated in (xx1). These verbs do not allow syncope/apocope of the final vowel in any inflected form. The 3Sg perfective (E/I-stem) is the citation form. Verbs of this class are either +ATR or -ATR, with no mixing. The majority are lexically -ATR, but often become +ATR in the A/O-stem (i.e. in the imperative). -ATR verbs have the vowel sequences (in the perfective) *ɛ...ɛ*, *ɔ...ɛ*, *i...ɛ*, and *u...ɛ*. +ATR verbs have the sequences *e...e*, *o...e*, *i...e*, *u...e*, and *a...e*. Bisyllabic verbs with *a* in the initial syllable are always +ATR.

In (xx1) the attested vowel sequences for bisyllabic verbs are illustrated.

(xx1) Final-nonhigh-vowel class (one example per vowel sequence)

stem	gloss
a. <i>CvCv</i>	
-ATR	
<i>neme</i>	'pick up'
<i>sɔge</i>	'buy'

<i>sime</i>	'build'
<i>duge</i>	'insult'
+ATR	
<i>yele</i>	'drape (sth, over sth)'
<i>CoCe</i>	—
<i>nare</i>	'touch'
<i>giye</i>	'harvest (millet)'
<i>guye</i>	'steal'
b. <i>CvCCv</i>	
-ATR	
<i>penje</i>	'milk (a cow)'
<i>jonje</i>	'treat (medically)'
<i>gimbe</i>	'pull'
<i>dunde</i>	'look for'
+ATR	
<i>tembe</i>	'find'
<i>tombe</i>	'jump'
<i>imbe</i>	'catch'
<i>bunde</i>	'hit'
<i>ande</i>	'go'
c. <i>Cv:Cv</i>	
-ATR	
<i>Cε:Cε</i>	—
<i>Cɔ:Cε</i>	—
<i>Ci:Cε</i>	—
<i>tu:ge</i>	'throw'
+ATR	
<i>Cε:Cε</i>	—
<i>no:ye</i>	'sleep'
<i>si:re</i>	'point at'
<i>Cu:Cε</i>	—
<i>na:le</i>	'think'
d. <i>Cv:CCv</i>	
-ATR	
<i>dε:nde</i>	'abandon'
<i>Cɔ:CCε</i>	—
<i>Ci:CCε</i>	—
<i>Cu:CCε</i>	—
+ATR	

Ce:CCe	—
Co:CCe	—
Ci:CCe	—
gu:nde	'go out'
go:ŋge	'come (back) out, emerge'
na:nde	'taste'
ba:nde	'lock up, confine'
ja:nde	'put (sth) up on (sth)'

The major ablauted stems are illustrated for representative *CvCCv* verbs in (xx2). *CvCv*, *Cv:Cv*, and *Cv:CCv* verbs follow the same vocalism patterns. The A/O-stem, the A-stem, and the U-stem require +ATR-compatible vocalism in nonfinal as well as final syllables, as seen in 'milk (a cow)' and 'treat (medically)'.

(xx2) Final-nonhigh-vowel *CvCv* vocalism stems

	vocalism stems					gloss
O	A/O	A	E/I	I	U	
a. -ATR						
<i>penjo</i>	<i>penja</i>	<i>penja</i>	<i>penje</i>	<i>penji</i>	<i>penju</i>	'milk (a cow)'
<i>jɔŋɔ</i>	<i>jɔŋga</i>	<i>jɔŋga</i>	<i>jɔŋge</i>	<i>jɔŋgi</i>	<i>jɔŋgu</i>	'treat (medically)'
<i>gimbo</i>	<i>gimba</i>	<i>gimba</i>	<i>gimbe</i>	<i>gimbi</i>	<i>gimbu</i>	'pull'
<i>dundo</i>	<i>dunda</i>	<i>dunda</i>	<i>dunde</i>	<i>dundi</i>	<i>dundu</i>	'look for'
b. +ATR (vowel other than <i>a</i> in penult)						
<i>tembo</i>	<i>tembo</i>	<i>temba</i>	<i>tembe</i>	<i>tembi</i>	<i>tembu</i>	'find'
<i>tombo</i>	<i>tombo</i>	<i>tomba</i>	<i>tombe</i>	<i>tombi</i>	<i>tombu</i>	'jump'
<i>imbo</i>	<i>imbo</i>	<i>imba</i>	<i>imbe</i>	<i>imbi</i>	<i>imbu</i>	'catch'
<i>bundo</i>	<i>bundo</i>	<i>bunda</i>	<i>bunde</i>	<i>bundi</i>	<i>bundu</i>	'hit'
c. +ATR ( <i>a</i> in penult)						
<i>ando</i>	<i>anda</i>	<i>anda</i>	<i>ande</i>	<i>andi</i>	<i>andu</i>	'go'

The O- and A/O-stems are identical in (xx2b), but not in (xx1a) or (xx1c). For discussion, see §3.3.6.

There are two types of *CvCCv* verb with slightly different tonal properties. One type consists entirely of *CvNCv* verbs with medial homorganic nasal plus voiced stop cluster {*mb nd nj ng*}. This type behaves tonally exactly like *CvCv*. All of the examples in (xx1b), repeated in (xx2), are of this type. The other consists mainly of *CvCCv* verbs with various other medial *CC* clusters such as *lg*, *rg*, *ld*, *yr*, *mj*, and *by*, but also in one case each of *nd* and *nj*. These verbs

behave tonally like *CvCvCv* (and *Cv:Cv*) verbs, and they are arguably treated as though syncopated from /*CvCvCv*/. Examples of this class are in (xx3).

(xx3)	cluster	gloss	perfective	imperative
a. <i>CvCCv</i> treated tonally like <i>CvCvCv</i>				
<i>medial homorganic nasal-stop cluster</i>				
	<i>nd</i>	'go'	<i>ándè</i>	<i>àndá</i>
	<i>nj</i>	'stand, stop'	<i>ínjè</i>	<i>ìnjá</i>
<i>medial geminate</i>				
	<i>ll</i>	'escape'	<i>póllè</i>	<i>pòlló</i>
<i>other medial clusters</i>				
	<i>lg</i>	'dispossess'	<i>wélgè</i>	<i>wèlgá</i>
	<i>rg</i>	'help'	<i>bárgè</i>	<i>bàrgá</i>
	<i>ld</i>	'forget'	<i>íldè</i>	<i>ìldá</i>
	<i>yr</i>	'add'	<i>báyrè</i>	<i>bàyrá</i>
	<i>mj</i>	'squeeze'	<i>kámjè</i>	<i>kàmjá</i>
	<i>by</i>	'arrive'	<i>túbyè</i>	<i>tùbyá</i>
b. <i>CvCCv</i> treated tonally like <i>CvCv</i> , see (xx1b), (xx2) above				
	<i>nd</i>	'hit'	<i>búndé</i>	<i>búndó</i>
c. irregular <i>CvCCv</i> intermediate between (a) and (b)				
	<i>nd</i>	'convey'	<i>síndé</i>	<i>síndò</i>

The difference between the type in (xx3a) and other *CvCCv* verbs is observed in the tones of the perfective (positive) and the imperative. The verbs in (xx3a), like trisyllabic *CvCvCv* verbs, have {HL} melody in the 3Sg perfective and {LH} in the imperative. By contrast, the majority of *CvNCv* verbs with homorganic nasal-stop cluster, like *CvCv* verbs, have {H} melody in both the 3Sg perfective and the imperative. The fact that 'stand, stop' belongs in (xx3a) even though *nj* counts as a homorganic nasal-stop cluster may be a vestige of its origin as a trisyllabic verb (e.g. Tiranige *ígí-yó*, Yanda Dom *íngílé*).

Irregular verb *síndé* 'convey, take (away)' (xx3c) has {H} melody in the perfective, but {HL} melody in the imperative, so it straddles the line between the two types.

We now consider **final-high-vowel** verbs. These are a small minority of *CvCv*, *CvCCv*, and *Cv:Cv* verbs. Some verbs that belong to this class in closely Dogon languages are regular final-nonhigh-vowel verbs in Penange: *nímbé* 'fire die out', *túlé* 'put (object) in', *gálé* 'put (liquid, grain) in'.

In Penange the final *i* or *u* is often lost by syncope/apocope, since it is preceded by an unclustered sonorant in all cases. After syncope/apocope, the verbs appear in the form *CvC* or *Cv:C*. Partial paradigms are in (xx4).

(xx4)	gloss	Perf	PerfNeg	Impprt	Impf	ImpfNeg
a. first syllable has nonlow vowel, imperative ends in <i>u</i>						
	<i>final C is a sonorant, allows syncope/apocope</i>					
	'look'	sé:m(i)	sè:mì-l	sè:mú	sê:m bò	sè:mò:-ndí
	<i>nv-final, perfective negative -lì</i>					
	'scoop'	kín(i)	kìn-lì	kínú	kîn bò	kìnò:-ndí
	<i>perfective negative (i)-l</i>					
	'clench fist'	kúmí	kùmì-l	kúmó	kûm bò	kùmò:-ndí
b. first syllable has <i>a</i> , imperative ends in <i>a</i>						
	<i>perfective negative (i)-l</i>					
	'speak'	dám	dàmì-l	dámá	dâm bò	dàmò:-ndí
	<i>nv-final, perfective negative -lì</i>					
	'do'	kán	kàn-lì	káná	kân bò	kànò:-ndí

For most of these verbs, the final high vowel surfaces reliably the perfective negative (*dàmì-l*, *dà:y"i-l*), but is subject to syncope/apocope in the other forms. 'Do' and 'scoop', both of shape *Cvn(i)*, have an irregular perfective negative with suffix allomorph *-lì*. For these *Cvn(i)* verbs, the stem-final high vowel is syncopated in this form also, due to the attraction of the two flanking alveolars.

All final-high-vowel verbs "happen to" end in *Nv* in an unclustered nasal (or nasalized semivowel) plus short high vowel, which is why they allow syncope/apocope of the final vowel. These stems also have a distinctive 3PI perfective form where this nasal is geminated and following by *i*, e.g. *dám-mì* 'they spoke'.

For the inventory of known underived final-high-vowel verbs, see §10.1.2.9 below. An open-ended source of derived final-high-vowel verbs is causatives with suffix *-mì* (perfective), see §9.2.1.

'Come' and 'bring', which of course are semantically related as intransitive and transitive, have mixed paradigms. They have some final-nonhigh-vowel and some final-high-vowel features. Since both verbs have medial consonants or clusters that block syncope/apocope, while all verbs of the final-high-vowel class have a medial unclustered nasal or nasalized semivowel and do allow syncope/apocope, it is possible that 'come' and 'bring' once belonged to the final-high-vowel class but split off. In (xx5), note that the perfective and perfective negative are of the final-nonhigh-vowel type, but the imperative ends in *u*, like some final-high-vowel verbs with nonhigh vowel in the penult.

(xx5) 'Come' and 'bring'

Perf	PerfNeg	Imprt	gloss
ii. medial obstruent or <i>CC</i> cluster (no syncope/apocope)			
<i>éǵé</i>	<i>èǵè-l</i>	<i>éǵù</i>	'come'
<i>sónǵé</i>	<i>sònǵè-l</i>	<i>sónǵù</i>	'bring'

#### 10.1.2.8 Trisyllabic stems

Causatives in *-mì* and *-ǵè* are treated separately below.

Other trisyllabic stems, including other suffixal derivatives, belong to the final-nonhigh-vowel class of verbs. Attested syllabic shapes are *CvCvCv*, *CvCCvCv*, and *Cv:CvCv*. The medial syllable is in a weak metrical position and is reduced to a short high vowel *i* or *u*, which is often syncopated before *y*, even after a cluster. The choice between *i* and *u* is influenced by neighboring consonants and by vowels in flanking syllables. The lexically distinctive vowels are therefore those of the initial and final syllables. The final-syllable vowel is predictable from the initial-syllable vowel except when the latter is a high vowel, in which case the ATR value of the stem is only observable in the final syllable. (xx1) gives one example for each attested vowel-quality sequence.

(xx1) Trisyllabic stems (excluding causatives)

stem	gloss
a. initial high vowel	
<i>CiCiCǎ</i>	—
<i>CuCuCǎ</i>	—
<i>yíǵírè</i>	'shake'
<i>yúǵúrè</i>	'flip, invert'
b. initial mid-height vowel	
<i>ǵé:n(ǐ)yè</i>	'sweep' (imperative <i>ǵè:nyá</i> )
<i>CǎCiCǎ</i>	—
<i>CeCiCo</i>	—
<i>sóǵú-lè</i>	'sell' (reversive of 'buy')
c. initial <i>a</i> (treated as +ATR)	
<i>bámǵ(ǐ)-yè</i>	'carry (on back)'
<i>nánǵúrè</i>	'send'

Trisyllabic causatives with suffix *-m(ú)* or *-gó* have different vocalism, frequently with a nonhigh vowel in the medial syllable: *égó-mì* 'cause to come', *téba-gè* 'shatter (sth)'. See §9.2.1-2 for discussion.

#### 10.1.2.9 Inventory of final-high-vowel verbs

The full set of underived (i.e. non-causative) verbs with final high vowel is (xx1). All known examples have a nasal {*m n ŋ p y<sup>n</sup>*} in the stem-final syllable.

(xx1) Complete list of final-high-vowel verbs (except causatives)

Perf	PerfNeg	Imprt	gloss
a. penult has non-low vowel			
i. imperative ends in <i>u</i> or is unattested			
<i>sé:mì</i>	<i>sè:mì-l</i>	<i>sè:mú ~ sě:m</i>	'look'
<i>gf:y<sup>n</sup>ì</i>	<i>gi:y<sup>n</sup>ì-l</i>	—	'(sth) be smelly'
<i>tómí</i>	<i>tómi-l</i>	—	'become sour'
<i>dímí</i>	<i>dími-l</i>	<i>dímú</i>	'transplant'
<i>kíní</i>	<i>kìn-lì</i>	<i>kínú</i>	'scoop'
<i>síní</i>	<i>sìn-lì</i>	—	'be sated'
<i>píní</i>	<i>pìn-lì</i>	<i>pínú</i>	'wring'
<i>júní</i>	<i>jùnì-l</i>	<i>júnú</i>	'doze' (with <i>nò:rè</i> )
<i>úní</i>	<i>ùnì-l</i>	<i>únú</i>	'walk'
ii. imperative ends in nonhigh vowel			
<i>kúmí</i>	<i>kùmì-l</i>	<i>kúmó</i>	'clench (fist)'
b. penult has <i>a</i> (long or short) (allow syncope/apocope)			
i. regular (perfective negative ... <i>Cì-l</i> )			
<i>dámí</i>	<i>dàmì-l</i>	<i>dámá</i>	'speak'
<i>námí</i>	<i>nàmì-l</i>	<i>námá</i>	'malfunction'
<i>námí</i>	<i>nàmì-l</i>	<i>námá</i>	'stone-grind'
<i>kámí</i>	<i>kàmì-l</i>	<i>kámá</i>	'squeeze'
<i>wá:ɲì</i>	<i>wà:ɲì-l</i>	<i>wà:ɲá</i>	'come to a boil'
<i>kámmì</i>	<i>kàmmì-l</i>	—	'become tight'
<i>ámmì</i>	<i>ámmì-l</i>	—	'(wound) swell'
ii. <i>y<sup>n</sup></i> -final, perfective negative ... <i>C-lì</i> ~ ... <i>C-lì</i>			
<i>jáy<sup>n</sup>(í)</i>	<i>jây<sup>n</sup>ì-l ~ jây<sup>n</sup>-lì</i>	<i>jáy<sup>n</sup>á</i>	'fight'
<i>páy<sup>n</sup>(í)</i>	<i>pây<sup>n</sup>ì-l ~ pây<sup>n</sup>-lì</i>	<i>páy<sup>n</sup>á</i>	'put across'
<i>dá:y<sup>n</sup>ì</i>	<i>dâ:y<sup>n</sup>ì-l ~ dâ:y<sup>n</sup>-lì</i>	<i>dâ:y<sup>n</sup>á</i>	'sit'
~ <i>dâ:y<sup>n</sup></i>			
iii. <i>nv</i> -final, perfective negative ... <i>C-lì</i>			

*kán(i)*    *kàn-lì*                      *káná*                      'do'

## 10.2 Positive indicative AN categories

### 10.2.1 Perfective positive system (including perfect)

Perfective positive categories are associated with the E/I-stem, i.e. with stem-final front vowel. For the majority final-nonhigh-vowel verb class, the E/I-stem ends in *e* or *ɛ* depending on the ATR-harmonic class of the stem. For the small number of final-high-vowel verbs, the E/I-stem ends in *i*, which is usually apocopated (§3.xxx).

#### 10.2.1.1 Perfective (E/I-stem, no aspectual suffix)

The basic perfective form has no suffix. Instead, it is characterized by final {*e* *ɛ*} replacing the stem-final {*o* *ɔ*} for the majority final-nonhigh-vowel class (**E-stem**), and by final *i* replacing *u* (or zero after apocope/syncope) for the minority final-high-vowel class (**I-stem**). I refer to the combination of E-stem and I-stem in the two verb classes as the **E/I-stem**, since in both cases we have a front vowel.

Since the stem-final vowel is regularly syncopated in the 3Pl form even for final-nonhigh-vowel verbs, it may be that the 3Pl perfective form for those verbs is really based on the **I-stem**. This is because syncope normally applies only to short high vowels.

The tones of the stems depend not only on the pronominal subject, but also on the prosodic weight of the verb itself. *Cv*, *Cv*·, *CvCv*, and most *CvNCv* with homorganic nasal plus voiced stop cluster are **prosodically light**. A handful of exceptional *CvNCv* verbs (e.g. *ándè* 'go', *ínjè* 'stand/stop'), plus *CvCCv* verbs with other cluster types and all verbs with three or more vocalic moras (*Cv*·*Cv*, *CvCvCv*, etc.), are **prosodically heavy**. For the split in *CvNCv* verbs see §10.1.2.5. The tones of the verbs are as indicated in (xx1).

(xx1)	1Sg/2Sg	1Pl/2Pl	3Sg	3Pl
light	{L}	{HL}	{H}	{H}-
heavy	{LHL}	"	{HL}	{H(L)}- (syncopated)

The 3Pl suffix is L-toned suffix *-yè* ~ *-yè* with the vowel depending on the ATR-harmonic class of the verb. Before this 3Pl suffix, a stem-final vowel is



deleted, presumably by raising to /i/ in a weak metrical position) then syncope. Pronunciations with a faint stem-final *í* are sometimes heard, especially when H-toned before L-toned suffix, as in *ń bàmíbí-yè* 'I carried (on back)'.<sup>1</sup>

(xx2) presents paradigms for prosodically light stems. Featured are a -ATR verb ('fall'), a +ATR verb ('come'), and a final-high-vowel verb ('do'), all of lexical *CvCv-* shape, plus one *Cv:* verb ('drink') and one *Cv* verb ('say'). For these prosodically light stems, the verb is {H}-toned in the 3Sg and {L}-toned in the 1Sg/2Sg. 'Drink' and 'say' are homophonous in the 3Pl form but not elsewhere. 1Pl *ń nê* 'we said' and 2Pl *à nê* 'you-Pl said' are rare examples of a word-final <HL>-toned *Cv* syllable.

(xx2) Perfective of prosodically light verbs

categ.	form	'fall'	'come'	'do'	'drink'	'say'
1Sg	<i>ń</i> {L}	<i>ń tìbè</i>	<i>ń yègè</i>	<i>ń kàn</i>	<i>ń nè:</i>	<i>ń nè</i>
1Pl	<i>ń</i> {HL}	<i>ń tìbè</i>	<i>ń yégè</i>	<i>ń kân</i>	<i>ń nè:</i>	<i>ń nê</i>
2Sg	<i>á</i> {L}	<i>á tìbè</i>	<i>á yègè</i>	<i>á kàn</i>	<i>á nè:</i>	<i>á nè</i>
2Pl	<i>à</i> {HL}	<i>à tìbè</i>	<i>à yégè</i>	<i>à kân</i>	<i>à nè:</i>	<i>à nê</i>
3Sg	{H}	<i>tíbè-Ø</i>	<i>égé-Ø</i>	<i>kán-Ø</i>	<i>né:-Ø</i>	<i>né-Ø</i>
3Pl	{H} -yè/-yè	<i>tíb-yè</i>	<i>ég-yè</i>	<i>kán-nì:</i>	<i>níy<sup>n</sup>-y<sup>n</sup>è</i>	<i>níy<sup>n</sup>-y<sup>n</sup>è</i>

Prosodically heavy verbs are illustrated in (xx3). The verb is now {HL}-toned in the 3Sg and {LHL}-toned in the 1Sg/2Sg. For trisyllabics, the {HL} melody is realized as H.H.L. The 3Pl is superficially {H}-toned but since the stem-final vowel is syncope, this form is compatible with the {HL} of the 3Sg.

(xx3) Perfective of prosodically heavy verbs

category	form	'push'	'think'	'go'
1Sg	<i>ń</i> {LHL}	<i>ń tùmbugè</i>	<i>ń ná:lè</i>	<i>ń j-ǎ:ndè</i>
1Pl	<i>ń</i> {HL}	<i>ń tùmbugè</i>	<i>ń ná:lè</i>	<i>ń j-á:ndè</i>
2Sg	<i>á</i> {LHL}	<i>á tùmbugè</i>	<i>á ná:lè</i>	<i>á j-ǎ:ndè</i>
2Pl	<i>à</i> {HL}	<i>à tùmbugè</i>	<i>à ná:lè</i>	<i>à j-á:ndè</i>
3Sg	{HL}	<i>tùmbugè-Ø</i>	<i>ná:lè-Ø</i>	<i>ándè-Ø</i>
3Pl	{H} -yè/-yè	<i>tùmbug-yè</i>	<i>ná:l-yè</i>	<i>ánd-yè</i>

(xx4) gives further examples of verbs of various syllabic shapes in the majority final-nonhigh-vowel class. The 3Pl suffix *-yè* ~ *-yè* requires a special syllabification of *Cv*: stems in the form *Cúy-* or *Cíy-*, which makes these 3Pl forms of *Cv*: verbs resemble their counterparts among *CvCv* verbs after the final vowel is syncope. For *gwé*: 'leave' I have also heard *gwíy-yè* alongside *gúy-yè*. The resulting *y-y* cluster is nasalized to *y<sup>n</sup>-y<sup>n</sup>* if the stem begins with a nasal (see 'sing'/'go in', 'drink', and 'eat').

(xx4) Perfective of final-nonhigh-vowel verbs

3Sg	3Pl	gloss
a. monosyllabic <i>Cv</i> :- (all known examples)		
<i>-ATR stems, initial Cw with nonpalatal C</i>		
<i>dwé</i> :	<i>dúy-yè</i>	'pound'
<i>swé</i> :	<i>súy-yè</i>	'vomit'
<i>twé</i> :	<i>túy-yè</i>	'make bunches'
<i>nwé</i> :	<i>núy<sup>n</sup>-y<sup>n</sup>è</i>	'sing' or 'go in'
<i>(w)wé</i> :	<i>wúy-yè</i>	'weep'
<i>twé</i> : <sup>n</sup>	<i>túy<sup>n</sup>-y<sup>n</sup>è</i>	'step on'
<i>-ATR stems, initial C (alveolar or palatal)</i>		
<i>né</i> :	<i>níy<sup>n</sup>-y<sup>n</sup>è</i>	'drink'
<i>né</i> :	<i>níy<sup>n</sup>-y<sup>n</sup>è</i>	'eat (meal)'
<i>yé</i> :	—	'day break'
<i>wé</i> :	<i>wíy-yè</i>	'weep'
<i>gé</i> : <sup>n</sup>	<i>gíy<sup>n</sup>-y<sup>n</sup>è</i>	'fart'
<i>+ATR stems, initial Cw</i>		
<i>gwé</i> :	<i>gúy-yè</i> ~ <i>gwíy-yè</i>	'leave, come out'
<i>jwé</i> :	<i>júy-yè</i>	'fill up'
<i>kwé</i> :	<i>kúy-yè</i>	'sew'
<i>(w)wé</i> :	<i>wúy-yè</i>	'draw water'
<i>+ATR stems, initial C (alveolar or palatal)</i>		
<i>yé</i> :	<i>yíy-yè</i>	'be fixed'
b. <i>CvCv</i>		
<i>-ATR stems</i>		
<i>gíy</i>	<i>gíy-yè</i>	'kill'
<i>dúg</i>	<i>dúg-yè</i>	'insult'
<i>sóg</i>	<i>sóg-yè</i>	'buy'
<i>sém</i>	<i>sém-yè</i>	'slaughter'
<i>+ATR stems</i>		
<i>nál</i>	<i>nál-yè</i>	'give birth'

<i>gújé</i>	<i>gúj-yè</i>	'throw'
<i>sígé</i>	<i>síg-yè</i>	'go down'
<i>yélé</i>	<i>yél-yè</i>	'drape (sth, over sth)'

c. *CvCCv*

*prosodically light, most CvNCv with homorganic nasal-stop*

<i>búndé</i>	<i>búnd-yè</i>	'hit'
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*treated as prosodically heavy, a few CvNCv stems*

<i>ínjè</i>	<i>ínj-yè</i>	'stand/stop'
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*prosodically heavy, medial CC other than nasal-stop*

<i>wélgè</i>	<i>wélg-yè</i>	'dispossess'
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c. three or more vocalic moras

<i>yígírè</i>	<i>yígír-yè</i>	'shake'
<i>púrúgè</i>	<i>púrúg-yè</i>	'cut'
<i>sógú-lè</i>	<i>sógú-l-yè</i>	'sell' (reversive of 'buy')
<i>nánǵúrè</i>	<i>nánǵúr-yè</i>	'send'
<i>bámb-yè</i>	<i>bámbí-y-yè</i>	'carry (on back)'

*causatives*

<i>téba-gè</i>	<i>téba-g-yè</i>	'shatter (sth)'
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*wwé:-Ø* 'he/she drew water' is pronounced with a lengthened initial semivowel. A transcription *wóé:* would be phonologically more correct.

The verb 'drink' is slightly irregular in that other *Cv* verbs with nonpalatal *C* have *Cw* onsets before unrounded vowels, and have 3Pl perfective forms with medial *u* (*Cúy-yè/-yè*). For 'drink' the forms are *né:-Ø* 'he/she drank' and 3Pl *níy<sup>n</sup>-y<sup>n</sup>è*. Comparison with 'eat (meal)' and (in part) 'day break' suggests that the alveolar *n* of 'drink' is treated phonologically as though palatal, in contrast to the "same" alveolar *n* in 'sing' and 'go in' (perfective 3Sg *nwé:-Ø*, 3Pl *núy<sup>n</sup>-y<sup>n</sup>è*). Perhaps the semantic association between 'eat (meal)' and 'drink' is responsible for this anomaly. (Cognate 'drink' and 'eat meal' verbs have converged completely into a single lexical item in Tiranige, with palatoalveolar *j* generalizing to 'drink'.)

Verbs of the final-high-vowel class are in (xx5). They are sharply differentiated from the final-nonhigh-vowel class. In the 3Pl form, the final nasal is geminated and followed by *i*.

(xx5) Perfective of final-high-vowel verbs

3Sg	3Pl	gloss
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a. penult with *a*

<i>kán(i)</i>	<i>kán-nì</i>	'do'
<i>dám(i)</i>	<i>dám-mì</i>	'speak'
<i>ńámí</i>	<i>ńám-mì</i>	'malfunction'
<i>ńámí</i>	<i>ńám-mì</i>	'stone-grind'
<i>dá:y<sup>n</sup></i>	<i>dá:y<sup>n</sup>-y<sup>n</sup>ì</i>	'sit'
<i>jáy<sup>n</sup></i>	<i>jáy<sup>n</sup>-y<sup>n</sup>ì</i>	'fight'

b. penult with nonlow vowel

<i>kúmí</i>	<i>kúm-mì</i>	'clench (fist)'
<i>sé:m(i)</i>	<i>sé:m-mì</i>	'look'

The final short L-toned *i* in the 3Pl forms becomes lengthened (and raised to H-tone) in combination with nonpast anterior subordinator *né* ~ *nè* (§15.2.2.2).

'Come' and 'bring', which elsewhere have some morphological affinities with the final-high-vowel class, are treated like final-nonhigh-vowel verbs in the perfectives.

(xx6) Perfective of 'come' and 'bring'

3Sg	3Pl	gloss
<i>égé</i>	<i>ég-yè</i>	'come'
<i>sóngé</i>	<i>sóng-yè</i>	'bring'

In one construction with near future sense, the perfective is combined with a clause-final particle *nèw* 'first'. The clause in question denotes an event that must take place before some other event (overtly stated or implied). An example is (xx1b) in §19.2.1.

#### 10.2.1.2 Perfective-1a and -1b absent

Suffixally marked perfectives (as opposed to perfects) of the type found widely in eastern Dogon languages have not been observed in Penange.

#### 10.2.1.3 Experiential perfect 'have ever' (A/O- or U-stem, *-tê:*)

This form is used in contexts like 'have you ever (been to Paris, seen an elephant, etc.)?' Suffix *-tê:* is added to the **A/O-stem** of the verb for final-nonhigh-vowel verbs, and (arguably) for some final-high-vowel verbs.

The paradigm is (xx1). 1st/2nd person subject pronominals precede the verb. The suffix is <HL>-toned throughout. The verb is **{H}-toned** after the L-toned 1Pl and 2Pl pronominals, otherwise **{L}-toned**.

(xx1) Experiential perfect

category	form	'see'	'go'
1Sg	<i>ń {L} -tê:</i>	<i>ń màlgà-tê:</i>	<i>ń àndà-tê:</i>
1Pl	<i>ń {H} -tê:</i>	<i>ń màlgá-tê:</i>	<i>ń ándá-tê:</i>
2Sg	<i>á {L} -tê:</i>	<i>á màlgà-tê:</i>	<i>á àndà-tê:</i>
2Pl	<i>à {H} -tê:</i>	<i>à màlgá-tê:</i>	<i>à ándá-tê:</i>
3Sg	<i>{L} -tê:-Ø</i>	<i>màlgà-tê:-Ø</i>	<i>àndà-tê:-Ø</i>
3Pl	<i>{L} -tê:-yà</i>	<i>màlgà-tê:-yà</i>	<i>àndà-tê:-yà</i>

A few more examples of the 3Sg form are in (xx2).

(xx2) 3Sg Perf 3Sg ExpPf gloss

a. with final *a*

*lexically -ATR*

<i>ně</i>	<i>nà-tê:</i>	'say'
<i>dwé:</i>	<i>dwà:-tê:</i>	'pound'
<i>ně:</i>	<i>nà:-tê:</i>	'drink'
<i>yébé</i>	<i>yèbà-tê:</i>	'dance'
<i>tólé</i>	<i>tòlà-tê:</i>	'butcher'

*nonfinal a*

<i>ná:ndè</i>	<i>nà:ndà-tê:</i>	'taste'
<i>bárgè</i>	<i>bàrgà-tê:</i>	'help'

b. with final *o* (lexically +ATR, nonfinal nonlow vowels)

<i>gwé:</i>	<i>gò:-tê:</i>	'come out'
<i>yélé</i>	<i>yèlò-tê:</i>	'drape (sth, over sth)'
<i>sógú-lè</i>	<i>sògù-lò-tê:</i>	'sell'

For **final-high-vowel** verbs, we get forms like those in (xx3). Those with a nonfinal *a* have stem-final *a*, which could be either the A/O-stem (as for the final-nonhigh-vowel verbs) or the A-stem (xx3a). Other verbs of this class have what is probably the **U-stem**, though the /u/ is apocopated (xx3b).

(xx3) 3Sg Perf 3Sg ExpPf gloss

a. nonfinal <i>a</i>		
<i>dám</i>	<i>dàmà-tê:</i>	'speak'
<i>kán</i>	<i>kànà-tê:</i>	'do'
b. nonfinal nonlow vowel		
<i>sé:mì</i>	<i>sè:m-tê:</i>	'look'

For the past-tense version, see §10.6.1.5.

The negative counterpart is common ('have never VPed'); see §10.2.3.2.

#### 10.2.1.4 Recent perfect absent

No recent perfect category ('has recently VPed' or 'has recently finished VPing') has been observed.

#### 10.2.1.5 Resultative absent

No resultative category has been observed.

#### 10.2.1.6 Reduplicated perfective absent

Reduplicated perfectives have not been observed.

### 10.2.2 Imperfective positive system

#### 10.2.2.1 Imperfective (*bò* ~ *wò*)

The basic imperfective (positive) verb form ends in *bò*, an auxiliary verb that is historically related to the quasi-verb *bô* 'be (somewhere)' (§11.2.2.2), though the synchronic relationship is attenuated due to phonological divergences. 1st/2nd person subject pronouns intervene between the verb and *bò*. *bò* lenites to *wò* systematically after 2nd person pronominals. I have also heard lenition in the 3Sg form, but unlenited *bò* is usual in elicitation.

The verb is in the **O/U-stem**, which denotes the combination of the **O-stem** for final-nonhigh-vowel verbs and the **U-stem** for final-high-vowel verbs. The O-stem ends in *o* or *ɔ* depending on the ATR-harmonic class of the verb. The {*o* *ɔ*} or *u* contracts with second person *a* morphemes to form a long *a:* that is transcribed here as hyphenated *a-a* to make the morphological structure clearer.

The verb has **{HL} stem melody** for 3Sg and 3Pl. {HL} is realized as H.H.L on trisyllabic verbs. Before a H-toned pronominal (1Sg or 2Sg), the stem has **{H} melody**. Before a L-toned pronominal (1Pl or 2Pl), the maximal melody is **{LHL}**, as with 'shake'. This is reduced to H.L for bisyllabics and to H-tone for monosyllabics.

(xx1) Imperfective paradigm

category	form	'go in'	'slaughter'	'shake'
1Sg	{H} <i>ɲ bō</i>	<i>nó: ɲ bō</i>	<i>sémó ɲ bō</i>	<i>yígíró ɲ bō</i>
1Pl	{HL} <i>ɲ bō</i>	<i>nó: ɲ bō</i>	<i>sémò ɲ bō</i>	<i>yígíró ɲ bō</i>
2Sg	{H} <i>-á wò</i>	<i>nwá-á wò</i>	<i>sémá-á wò</i>	<i>yígírá-á wò</i>
2Pl	{HL} <i>-à wò</i>	<i>nwá-à wò</i>	<i>sémà-à wò</i>	<i>yígírá-à wò</i>
3Sg	{HL} <i>bò-Ø</i>	<i>nô: bò-Ø</i>	<i>sémò bò-Ø</i>	<i>yígíró bò-Ø</i>
3Pl	{HL} <i>b-yà</i>	<i>nô: b-yà</i>	<i>sémò b-yà</i>	<i>yígíró b-yà</i>

Verbs with nonfinal -ATR vowels {*ɛ ɔ*} usually shift them to +ATR {*e o*} when the stem-final contracts with 2nd person *a*. My assistant tended to restore the -ATR vowel in elicitation, but in unmonitored speech I heard +ATR vowels in the 2Sg and 2Pl in stems like 'slaughter' in (xx1).

The imperfective is distinguishable tonally from the progressive (§10.xxx below), which has the same segmental forms, except that progressive *bô* does not lenite to #*wô* in the second person forms.

Further examples of the 2Sg, 1Pl, and 3Sg forms of final-nonhigh-vowel verbs are in (xx2).

(xx2) Imperfective (final-nonhigh-vowel class)

Perf 3Sg	2Sg	Imperfective 1Pl	3Sg	gloss
a. <i>Cv</i> and <i>Cv</i> :				
<i>Cv</i>				
<i>né</i>	<i>ná-á wò</i>	<i>nó ñ bò</i>	<i>nó bò</i>	'say'
<i>Cv</i> :				
<i>dwé:</i>	<i>dwá-á wò</i>	<i>dó: ñ bò</i>	<i>dô: bò</i>	'pound'
<i>twé:<sup>n</sup></i>	<i>twá<sup>n</sup>-á<sup>n</sup> wò</i>	<i>tó: ñ bò</i>	<i>tô:<sup>n</sup> bò</i>	'step on'
<i>ɲé:</i>	<i>ɲá-á wò</i>	<i>ɲó: ñ bò</i>	<i>ɲô: bò</i>	'eat'
<i>né:</i>	<i>ná-á wò</i>	<i>nó: ñ bò</i>	<i>nô: bò</i>	'drink'
<i>gwé:</i>	<i>gwá-á wò</i>	<i>gó: ñ bò</i>	<i>gô: bò</i>	'come out'

b. bisyllabic

<i>sóǵé</i>	<i>sóǵá-á wò</i>	<i>sóǵò ñ bò</i>	<i>sóǵò bò</i>	'buy'
<i>yébé</i>	<i>yéba-á wò</i>	<i>yébò ñ bò</i>	<i>yébò bò</i>	'dance'
<i>ǵúǵé</i>	<i>ǵúǵá-á wò</i>	<i>ǵúǵò ñ bò</i>	<i>ǵúǵò bò</i>	'throw'
<i>sígé</i>	<i>sígá-á wò</i>	<i>sígò ñ bò</i>	<i>sígò bò</i>	'go down'
<i>ándè</i>	<i>ándá-á wò</i>	<i>ándò ñ bò</i>	<i>ándò bò</i>	'go'
<i>ná:lè</i>	<i>ná:lá-á wò</i>	<i>ná:lò ñ bò</i>	<i>ná:lò bò</i>	'think'

e. trisyllabic

<i>yígíré</i>	<i>yígírá-á wò</i>	<i>yígíró ñ bò</i>	<i>yígíró bò</i>	'shake'
<i>téba-gè</i>	<i>téba-gá-á wò</i>	<i>téba-gò ñ bò</i>	<i>téba-gò bò</i>	'shatter (sth)'

Stems with **final high vowel** are illustrated in (xx3). The verb is in the U-stem, but the final /u/ is only reliably audible in the first person forms due to VV-Contraction in the second person forms and due to syncope in the third person.

(xx3) Imperfective (final-high-vowel class)

Perf 3Sg	2Sg	Imperfective 1Pl	3Sg	gloss
a. nonfinal nonlow vowel				
<i>sé:mì</i>	<i>sé:má-á wò</i>	<i>sé:mù ñ bò</i>	<i>sé:m bò</i>	'look'
b. nonfinal <i>a</i>				
<i>dám</i>	<i>dámá-á wò</i>	<i>dámù ñ bò</i>	<i>dám bò</i>	'speak'
<i>dá:y<sup>n</sup></i>	<i>dá:y<sup>n</sup>á-á wò</i>	<i>dá:y<sup>n</sup>ù ñ bò</i>	<i>dá:y<sup>n</sup> bò</i>	'sit'
<i>kán</i>	<i>káná-á wò</i>	<i>kánù ñ bò</i>	<i>kán bò</i>	'do'

'Come' and 'bring' follow the lead of the final-nonhigh-vowel class.

(xx4) Imperfective ('come' and 'bring')

Perf 3Sg	2Sg	Imperfective 1Pl	3Sg	gloss
<i>éǵé</i>	<i>éǵá-á wò</i>	<i>éǵò ñ bò</i>	<i>éǵò bò</i>	'come'
<i>sónǵé</i>	<i>sónǵá-á wò</i>	<i>sónǵò ñ bò</i>	<i>sónǵò bò</i>	'bring'

This is a broad imperfective that is sometimes used as a general (i.e. habitual) present ('I work here'), but it is especially common as a future ('I will go there tomorrow').



While most aspect-negation categories simply add clitic =*ye* to shift the temporal reference point to the past, the imperfective (positive) has a special past construction (§10.6.1.4).

#### 10.2.2.2 Final-long-vowel imperfective

An alternative imperfective is formed by lengthening a stem-final vowel with falling tone. For final-nonhigh-vowel verbs ('go in', 'slaughter', 'shake'), this form is based on the O-stem. For final-high-vowel verbs ('do'), it is the U-stem. In short, this is the **O/U-stem**. The word-level tone melody is {LHL} except in the 1Pl/2Pl forms.

(xx1)	category	form	'go in'	'slaughter'	'shake'	'do'
	1Sg	<i>ŋ</i> {HLH}	<i>ŋ nɔ̃:</i>	<i>ŋ sɛmɔ̃:</i>	<i>ŋ yìgìrò:</i>	<i>ŋ kànû:</i>
	1Pl	<i>ŋ</i> {HL}	<i>ŋ nɔ̃:</i>	<i>ŋ sɛmɔ̃:</i>	<i>ŋ yígíró:</i>	<i>ŋ kánû:</i>
	2Sg	<i>á</i> {HLH}	<i>á nɔ̃:</i>	<i>á sɛmɔ̃:</i>	<i>á yìgìrò:</i>	<i>á kànû:</i>
	2Pl	<i>à</i> {HL}	<i>à nɔ̃:</i>	<i>à sɛmɔ̃:</i>	<i>à yígíró:</i>	<i>à kánû:</i>
	3Sg	{LHL} -Ø	<i>nɔ̃:-Ø</i>	<i>sɛmɔ̃:-Ø</i>	<i>yìgìrò:-Ø</i>	<i>kànû:-Ø</i>
	3Pl	{L} -â:	<i>nw-â:</i>	<i>sɛm-â:</i>	<i>yìgìr-â:</i>	<i>kàn-â:</i>

In my data, the final-long-vowel imperfective is mainly a general (i.e. habitual) imperfective. The frame 'every day I \_\_\_' regularly elicited this form rather than the *bò* imperfective (preceding section), though in this case the verb has {L} melody.

(xx2)	<i>[wá: sɛ̀lɛ̀]</i>	<i>sɛ̀m-â:</i>	/	<i>ŋ</i>	<i>sɛ̀mɔ̃:</i>
	[day all]	slaughter.Impf-3PlS	/	1SgS	slaughter.Impf
	'Every day they / I slaughter (sc. an animal)'				

For the 'be able (i.e. be in a position) to VP' construction with e.g. 3Sg *dìnɔ̃:-Ø* 'gets', see §10.5.2.

A tonally slightly different form of the final-long-vowel imperfective occurs in a purposive clause construction (§17.5.2).

#### 10.2.2.3 Reduplicated imperfective absent

Reduplicated imperfectives have not been observed.

#### 10.2.2.4 Progressive (*bô*)

This is one of two progressive constructions, the other involving auxiliary *túlá* (§10.2.2.4 below).

Except in the second person forms, the progressive with auxiliary *bô* is segmentally identical to the regular imperfective (§10.2.2.2 just above). The verb has the same **O/U-stem** in both combinations. However, in the second person, *bô* **does not lenite** to #*wô* in the progressive. This suggests that the synchronic relationship to quasi-verb *bô* 'be (somewhere)' is stronger for the progressive than for the imperfective. This view is strengthened by the fact that the progressive, but not the imperfective, is negated by replacing *bô* 'be (somewhere)' by its suppletive negative counterpart *wól* 'be absent, not be (somewhere)', see §10.2.3.xxx below.

The progressive is always distinguishable from the imperfective by tones. Among other differences, the verb always begins with a H-tone in the imperfective, and **always begins with a L-tone** in the progressive. In fact, the progressive verb stem is entirely {L}-toned, except for a final H-tone before tautosyllabic H-toned 1Sg and 2Sg pronominals. The auxiliary *bô* is <HL>-toned, except L-toned *bò* after a H-toned 1Sg or 2Sg pronominal.

(xx1) Paradigm of the progressive with *bô*

category	form	'go in'	'drape (sth)'	'shake'
1Sg	{L} <i>ń bò</i>	<i>nò: ń bò</i>	<i>yèlò ń bò</i>	<i>yìgìrò ń bò</i>
1Pl	{L} <i>ń bô</i>	<i>nò: ń bô</i>	<i>yèlò ń bô</i>	<i>yìgìrò ń bô</i>
2Sg	{L} <i>-á bò</i>	<i>nwà-á bò</i>	<i>yèlà-á bò</i>	<i>yìgìrà-á bò</i>
2Pl	{L} <i>-à bô</i>	<i>nwà-à bô</i>	<i>yèlà-à bô</i>	<i>yìgìrà-à bô</i>
3Sg	{L} <i>bô-Ø</i>	<i>nò: bô-Ø</i>	<i>yèlò bô-Ø</i>	<i>yìgìrò bô-Ø</i>
3Pl	{L} <i>bí-yà</i>	<i>nò: bí-yà</i>	<i>yèlò bí-yà</i>	<i>yìgìrò bí-yà</i>

As usual, the contracted *a-a* in second person forms requires +ATR compatible vocalism in preceding syllables (see 'buy' below).

Representative 2Sg and 3Sg forms for verbs ending in nonhigh vowel are displayed in (xx2).

(xx2) Progressive (final-nonhigh-vowel class)

Perf 3Sg		progressive		gloss
	2Sg	1Pl	3Sg	

a. <i>Cv</i> :				
<i>nwé:</i>	<i>nwà-á bò</i>	<i>nò: ìy bô</i>	<i>nò: bô-Ø</i>	'go in'
<i>gwé:</i>	<i>gwà-á bò</i>	<i>gò: ìy bô</i>	<i>gò: bô-Ø</i>	'go out'
<i>ɲé:</i>	<i>ɲà-á bò</i>	<i>ɲò: ìy bô</i>	<i>ɲò: bô-Ø</i>	'eat'
b. bisyllabic				
-ATR				
<i>yébé</i>	<i>yèbà-á bò</i>	<i>yèbò ìy bô</i>	<i>yèbò bô-Ø</i>	'dance'
<i>sógé</i>	<i>sògà-á bò</i>	<i>sògò ìy bô</i>	<i>sògò bô-Ø</i>	'buy'
+ATR				
<i>gújé</i>	<i>gùjà-á bò</i>	<i>gùjò ìy bô</i>	<i>gùjò bô-Ø</i>	'throw'
<i>nálé</i>	<i>nàlà-á bò</i>	<i>nàlò ìy bô</i>	<i>nàlò bô-Ø</i>	'give birth'
<i>nà:lè</i>	<i>nà:là-á bò</i>	<i>nà:lò ìy bô</i>	<i>nà:lò bô-Ø</i>	'think'
c. trisyllabic				
<i>sógú-lè</i>	<i>sògù-là-á bò</i>	<i>sògùlò ìy bô</i>	<i>sògùlò bô-Ø</i>	'sell'

Progressives from verbs with final high vowel are in (xx3). The verb takes the U-stem, but the final /u/ is only audible in the first person forms. It contracts with *á* (2Sg) or *à* (2Pl) and is syncopated in the third person forms.

(xx3) Progressive (final-nonhigh-vowel class)

Perf 3Sg	2Sg	progressive 1Pl	3Sg	gloss
a. nonfinal nonlow vowel				
<i>sé:mì</i>	<i>sè:mà-á bò</i>	<i>sè:mù ìy bô</i>	<i>sè:m bô</i>	'look'
b. nonfinal <i>a</i>				
<i>dám</i>	<i>dàmà-á bò</i>	<i>dàmù ìy bô</i>	<i>dàm bô</i>	'speak'
<i>dá:y<sup>n</sup></i>	<i>dà:y<sup>n</sup>à-á bò</i>	<i>dà:y<sup>n</sup>ù ìy bô</i>	<i>dà:y<sup>n</sup> bô</i>	'sit'
<i>kán</i>	<i>kànà-á bò</i>	<i>kànù ìy bô</i>	<i>kàn bô</i>	'do'

Progressives from 'come' and 'bring' follow the model of the final-nonhigh-vowel class (xx4).

(xx4) Progressive ('come' and 'bring')

Perf 3Sg	2Sg	progressive 1Pl	3Sg	gloss
<i>égé</i>	<i>ègà-á bò</i>	<i>ègò ìy bô</i>	<i>ègò bô</i>	'come'

sòngé sòngà-á bò sòngò ñ bò sòngò bò 'bring'

Examples of the progressive are in (xx5).

- (xx5) a. *ṣǎ:* *ṣà:* *ṣ* *bò*  
meal eat 1SgS be  
'I am eating.' (*ṣà:*)
- b. *kǎy<sup>n</sup>* *kànù* *ṣ* *bò*  
work(n) do.Prog 1PlS Prog  
'We are working.' (*kǎy<sup>n</sup>*)
- c. *sèndí* *kàn* *bò:-Ø*  
prayer do.Prog Prog-3SgS  
'He/She is praying.'

For the past progressive with additional clitic =*ye-*, see §10.6.1.4.

#### 10.2.2.5 Progressive with *túlà*

This is another construction that competes with progressive *bò*. The verb has the same form as with *bò*. The basic form of the auxiliary is *túlà* with {HL}-contour, dropping to {L} after H-toned pronominals (1Sg, 2Sg). In 3Pl *túlá-yà*, regular Rightward H-Spreading has occurred.

Unlike the progressive with *bò*, that with *túlà* requires *-n* suffix on the verb in third person subject contexts. The (accidental) effect is that there is no clearly audible distinction between the 1Pl and 3Sg forms, although they can be distinguished orthographically, e.g. 1Pl *nò: ṣ túlà* versus 3Sg *nò:-n túlà-Ø* in (xx1).

#### (xx1) Paradigm of the progressive with *túlà*

categ.	form	'go in'	'drape (sth)'	'shake'
1Sg	{L} <i>ṣ túlà</i>	<i>nò: ṣ túlà</i>	<i>yèlò ṣ túlà</i>	<i>yìgìrò ṣ túlà</i>
1Pl	{L} <i>ṣ túlà</i>	<i>nò: ṣ túlà</i>	<i>yèlò ṣ túlà</i>	<i>yìgìrò ṣ túlà</i>
2Sg	{L} <i>-á túlà</i>	<i>nwà-á túlà</i>	<i>yèlò á túlà</i>	<i>yìgìrò á túlà</i>
2Pl	{L} <i>-à túlà</i>	<i>nwà-à túlà</i>	<i>yèlò à túlà</i>	<i>yìgìrò à túlà</i>
3Sg	{L} <i>-n túlà-Ø</i>	<i>nò:-n túlà-Ø</i>	<i>yèlò-n túlà-Ø</i>	<i>yìgìrò-n túlà-Ø</i>
3Pl	{L} <i>-n túlá-yà</i>	<i>nò:-n túlá-yà</i>	<i>yèlò-n túlá-yà</i>	<i>yìgìrò-n túlá-yà</i>

#### 10.2.2.6 Future tense absent

There is no categorial distinction between present and future tense. The imperfective is often used for future time reference but can also be a general present.

#### 10.2.3 Negation of indicative verbs

##### 10.2.3.1 Perfective negative (-*l*, 3Pl *-ndá*)

The perfective negative suffix is *-l*, except for a 3Pl subject portmanteau *-ndá*. As with the (positive) perfective, 1st/2nd person subjects are expressed by proclitics, 3Sg is unmarked, and 3Pl is suffixal. Except in the 3Pl subject form, the verb appears in the same E/I-stem as the (positive) perfective. In the divergent 3Pl form, the verb is in the A-stem, which requires +ATR-compatible vocalism throughout the stem. The verb is {L}-toned in the 3Sg, 1Sg, and 2Sg. It is {H}-toned in the 1Pl, 2Pl, and 3Pl. Sample paradigms are in (xx1).

(xx1) Paradigm of perfective negative

category	PerfNeg	'go in'	'dance'	'shake'
1Sg	<i>ń</i> {L} <i>-l(i)</i>	<i>ń nwè:-l(i)</i>	<i>ń yèbè-l(i)</i>	<i>ń yìgìrè-l(i)</i>
1Pl	<i>ṅ</i> {H} <i>-l(i)</i>	<i>ṅ nwé:-l(i)</i>	<i>ṅ yébé-l(i)</i>	<i>ṅ yígíré-l(i)</i>
2Sg	<i>á</i> {L} <i>-l(i)</i>	<i>á nwè:-l(i)</i>	<i>á yèbè-l(i)</i>	<i>á yìgìrè-l(i)</i>
2Pl	<i>à</i> {H} <i>-l(i)</i>	<i>à nwé:-l(i)</i>	<i>à yébé-l(i)</i>	<i>a yígíré-l(i)</i>
3Sg	{L} <i>-l(i)-Ø</i>	<i>nwè:-l(i)-Ø</i>	<i>yèbè-l(i)-Ø</i>	<i>yìgìrè-l(i)-Ø</i>
3Pl	{H} <i>-ndá</i>	<i>nwá:-ndá</i>	<i>yéba-ndá</i>	<i>yígírá-ndá</i>

The imperfective negative 1Sg/2Sg subject forms also end in *-l*, but they lack the proclitic subject pronominal, and they are based on the O-stem with lengthened final vowel (§10.2.3.4 below).

3Pl imperfective negative portmanteau *-ndá* should be distinguished from stative negative allomorph *-ndá*, used (for all pronominal categories) to negate derived statives along with lexical statives 'have' and 'resemble' (§10.4.2.1).

Further examples of the perfective negative (3Sg and 3Pl) for final-nonhigh-vowel verbs are in (xx2).

(xx2) Perfective negative (final-nonhigh-vowel class)

Perf	PerfNeg		gloss
	3Sg	3Pl	
a. <i>Cv</i> and <i>Cv</i> :			
<i>Cv</i>			
<i>né</i>	<i>nè-l</i>	<i>ná-ndá</i>	'say'
-ATR, <i>Cw</i> onset			
<i>dwé:</i>	<i>dwè:-l</i>	<i>dwá:-ndá</i>	'pound'
<i>twé:<sup>n</sup></i>	<i>twè:<sup>n</sup>-l</i>	<i>twá:<sup>n</sup>-ndá</i>	'step on'
-ATR, <i>C</i> onset			
<i>yé:</i>	<i>yè:-l</i>	<i>yá:-ndá</i>	'day break'
<i>né:</i>	<i>nè:-l</i>	<i>ná:-ndá</i>	'drink'
<i>jé:</i>	<i>jè:-l</i>	<i>já:-ndá</i>	'eat (meal)'
+ATR, <i>Cw</i> onset			
<i>gwé:</i>	<i>gwè:-l</i>	<i>gwá:-ndá</i>	'come out'
<i>wwé:</i>	<i>wwè:-l</i>	<i>wwá:-ndá</i>	'draw water'
b. bisyllabic			
-ATR			
<i>sémé</i>	<i>sèmè-l</i>	<i>sémá-ndá</i>	'slaughter'
<i>sógé</i>	<i>sògè-l</i>	<i>sógá-ndá</i>	'buy'
+ATR			
<i>sígé</i>	<i>sìgè-l</i>	<i>sígá-ndá</i>	'go down'
<i>ábé</i>	<i>àbè-l</i>	<i>ábá-ndá</i>	'accept'
<i>nó:yè</i>	<i>nò:yè-l</i>	<i>nó:yá-ndá</i>	'sleep'
<i>ná:lè</i>	<i>nà:lè-l</i>	<i>ná:lá-ndá</i>	'think'
<i>íldè</i>	<i>ìldè-l</i>	<i>íldá-ndá</i>	'forget'
c. trisyllabic			
<i>dúgú-rè</i>	<i>dùgù-rè-l</i>	<i>dúgú-rá-ndá</i>	'run'
<i>tébá-gè</i>	<i>tèbà-gè-l</i>	<i>tébá-gá-ndá</i>	'shatter (sth)'

Examples of verbs with final high vowels are in (xx3). The verbs in (xx1) are intermediate, and their E/I-stem is not distinct from that of final-nonhigh-vowel verbs. The more resolutely final-high-vowel verbs in (xx3b) reveal the stem-final *i* before *-l*, except that irregular 'do' adds a syllabic allomorph *-lì*, which allows the stem to syncopate its final *i*, resulting in *kàn-lì*. The fact that *n* and *l* are homorganic may have been a factor in favoring syncope.

(xx3) Perfective negative (final-high-vowel class)

Perf	PerfNeg		gloss
	3Sg	3Pl	

a. nonapocopating, final <i>e</i> in E/I-stem			
<i>égé</i>	<i>ègè-l</i>	<i>égá-ndá</i>	'come'
<i>sóngé</i>	<i>sòngè-l</i>	<i>sóngá-ndá</i>	'bring'
b. apocopating, final <i>i</i> ~ $\emptyset$ in E/I-stem			
<i>sé:mì</i>	<i>sè:mì-l</i>	<i>sé:má-ndá</i>	'look'
<i>dámí</i>	<i>dàmì-l</i>	<i>dámá-ndá</i>	'speak'
<i>dá:y"i</i>	<i>dà:y"i-l</i>	<i>dá:y"á-ndá</i>	'sit'
irregular			
<i>kání</i>	<i>kàn-lì</i>	<i>káná-ndá</i>	'do'

### 10.2.3.2 Experiential perfect negative (*-té:-ndí*)

This is the normal way to express 'have never VP-ed', denying any occurrence of the VP event type during the lifetime of the subject (xx2).

Experiential perfect *-té:-* is negated as *-té:-ndí*. The final *-ndí* may have originated as an allomorph of perfective negative *-l*, given the history of *l* ~ *nd* alternations in Dogon languages. There is some resemblance between *-ndí* and 3Pl perfective negative portmanteau *-ndá*. However, synchronically the closest parallel is with 3rd person imperfective negative *-ndí* (3Pl *-nd-yà*), though the parallelism does not extend to 1st/2nd person forms. This raises the possibility that, unlike the case in most Dogon languages, the experiential perfect in Penange has some affinities to the imperfective as well as perfective systems. However, the position of 1st/2nd person subject pronominals before the verb aligns the experiential perfect with the perfective system.

The vocalism and tones of the verb are the same as for the positive counterparts: A/O-stem, {L}-toned in 3Sg, 3Pl, 1Sg, and 2Sg, {H}-toned in 1Pl and 2Pl. The aspectual suffix is H-toned *-té:-* after {L}-toned stem in the 3rd person forms. In the 1st/2nd person forms, the tone of the verb spreads to the aspectual suffix. The paradigm is (xx1).

#### (xx1) Experiential perfect negative

category	suffix	'see'	'go'
1Sg	<i>í {L} -tè:-ndí</i>	<i>í màlgà-tè:-ndí</i>	<i>í p-à:ndà-tè:-ndí</i>
1Pl	<i>ì {H} -té:-ndí</i>	<i>ì màlgá-té:-ndí</i>	<i>ì p-á:ndá-té:-ndí</i>
2Sg	<i>á {L} -tè:-ndí</i>	<i>á màlgà-tè:-ndí</i>	<i>á p-à:ndà-tè:-ndí</i>
2Pl	<i>à {H} -té:-ndí</i>	<i>à màlgá-té:-ndí</i>	<i>à p-á:ndá-té:-ndí</i>
3Sg	<i>{L} -té:-ndí-<math>\emptyset</math></i>	<i>màlgà-té:-ndí-<math>\emptyset</math></i>	<i>àndà-té:-ndí-<math>\emptyset</math></i>

3Pl {L} -té:-ndí-yà màlgà-té:-ndí-yà àndà-té:-ndí-yà

Examples are in (xx2).

- (xx2) a. *nìgè* *màlgà-té:-ndí-Ø*  
 elephant see-ExpPf-Neg-3SgS  
 'He/She has never seen an elephant.' (*nìgè*)
- b. *bàmàkó* *ŋ* *jà:ndà-tè:-ndí*  
 B 1SgS go-ExpPf-Neg  
 'I have never gone to Bamako.' (*bàmàkò*)

### 10.2.3.3 Imperfective negative (-ndí, -l, -lí)

The imperfective negative has the following suffix allomorphs: L-toned *-l* ~ *-lí* (1Sg, 2Sg), H-toned *-lí* (1Pl, 2Pl), and *-ndí* (3rd person). The nonsyllabic 1Sg/2Sg *-l* allomorph is L-toned, but since the L-tone diacritic accent doesn't work typographically on *l* it is indicated as falling tone on the preceding vowel. The 3Pl adds *-yà* (arguably *-à*) to *-ndí*, resulting in *-nd-yà*. The morphology is parallel to that of the imperfective positive. Specifically, the verb is in the **O/U-stem**, i.e. the O-stem for final-nonhigh-vowel verbs and the U-stem for final-high-vowel verbs. This is the same stem-vocalism for the imperfective positive (and for the corresponding progressives). **1st/2nd person subject pronominals intervene** between the verb and the suffix, and second person *a* contracts with the verb-final {*o* *ɔ*} or *u* to form a long *a*: that is here transcribed as hyphenated *a-a*.

However, there are some unique details not shared with the imperfective positive. The final {*o* *ɔ*} or *u* is lengthened in the 3rd person forms, where (unlike the 1st/2nd forms) there is no pronominal morpheme that could explain the long vowel as due to contraction. One might posit an underlying 3rd person suffix /-vndí/ with some vowel *v* that contracts with the preceding vowel. However, *né* 'say' has unlengthened 3Sg *nè-ndí* (compare 2Sg *nǎ-à-l* with long vowel).

The first person forms are unusual. Instead of the usual *n* pronominal, the first person forms simply **lengthen the verb-final** {*o* *ɔ*}. Presumably *n* would be awkward phonetically before the final suffix *-l* or *-lí*. It is possible that the first person forms were originally more regular, e.g. 1Sg \*CvCò ñ lì and 1Pl \*CvCò ñ lí. If so, the shift to 1Sg *CvCò-ò-l* and 1Pl *CvCò-ò-lí* might be attributed to two factors: a) the awkwardness of the \*nl cluster, whose \*n might have weakened to lengthening and nasalization of the preceding vowel, and b) imitation of the corresponding second person forms with their vocalic



contractions. I transcribe the first person forms with hyphenated *o-o* or *ɔ-ɔ* to bring out this parallelism.

The verb is **{L}-toned** in the 3Sg, and 3Pl. Similarly, the combination of verb plus subject pronominal is {L}-toned before H-toned suffix in the 1Pl and 2Pl. However, the 1Sg and 2Sg forms have a **rising {LH} melody** on the verb followed by L-tone on the pronominal (structurally, the L-tone it belongs to the *-l* suffix). For a monosyllabic verb like 'go in' in (xx1), the 1Sg and 2Sg forms have a bell-shaped <LHL> tone. Pronunciations with syllabic *-li* in 1Sg/2Sg combinations are also attested, e.g. *nwà-á-li* alongside *nwǎ-à-l* 'you-Sg don't go in'.

For nonmonosyllabic verbs, the 1Sg and 2Sg have L-toned nonfinal syllables, followed by a falling tone on the final syllable.

(xx1) Paradigm of imperfective negative

category	ImpfNeg	'go in'	'drape (sth)'	'shake'
1Sg	{LH} -ò/ɔ- <i>l</i>	<i>nǎ-ɔ-l</i>	<i>yèló-ò-l</i>	<i>yìgìró-ò-l</i>
"	{LH} -ó/ɔ- <i>li</i>	~ <i>nò-ɔ-li</i>	~ <i>yèló-ó-li</i>	~ <i>yìgìró-ó-li</i>
1Pl	{L} -ò/ɔ- <i>lí</i>	<i>nò-ɔ-lí</i>	<i>yèlò-ò-lí</i>	<i>yìgìrò-ò-lí</i>
2Sg	{LH} -à- <i>l</i>	<i>nwǎ-à-l</i>	<i>yèlá-à-l</i>	<i>yìgìrá-à-l</i>
"	{LH} -á- <i>li</i>	~ <i>nwà-á-li</i>	~ <i>yèlá-á-li</i>	~ <i>yìgìrá-á-li</i>
2Pl	{L} -à- <i>lí</i>	<i>nwà-à-lí</i>	<i>yèlà-à-lí</i>	<i>yìgìrà-à-lí</i>
3Sg	{L}:- <i>ndì-Ø</i>	<i>nò:-ndì-Ø</i>	<i>yèlò:-ndì-Ø</i>	<i>yìgìrò:-ndì-Ø</i>
3Pl	{L}:- <i>nd-yà</i>	<i>nò:-nd-yà</i>	<i>yèlò:-nd-yà</i>	<i>yìgìrò:-nd-yà</i>

In the second person forms of monosyllabic stems, the contracted *a-a* induces a shift of nonfinal -ATR vowels {*ɛ ɔ*} to +ATR {*e o*}. For example, from *témé* 'eat (meat)' we get 3Sg *tèmò:-ndì-Ø*, 1Sg *témɔ-ɔ-l*, but 2Sg *témá-à-l* with *e* replacing *ɛ*.

A sample of 2Sg and 3Sg imperfective negative forms from verbs ending in nonhigh vowels is in (xx2). In the *Cv* stems, the distribution of *Cw* onset in the 2Sg is the same as that of *Cw* in the 3Sg perfective.

(xx2) Imperfective negative (final-nonhigh-vowel class)

Perf 3Sg	ImpfNeg	gloss
	2Sg      3Sg	
a. <i>Cv</i> and <i>Cv</i> :		

<i>Cv</i>			
<i>né</i>	<i>nǎ-à-l</i>	<i>nò:-ndí-Ø</i>	'say'
<i>-ATR with Cw onset before unrounded vowel</i>			
<i>dwé:</i>	<i>dwǎ-à-l</i>	<i>dò:-ndí-Ø</i>	'pound'
<i>nwé:</i>	<i>nwǎ-à-l</i>	<i>nò:-ndí-Ø</i>	'go in' or 'sing'
<i>swé:</i>	<i>swǎ-à-l</i>	<i>sò:-ndí-Ø</i>	'vomit'
<i>twé:</i>	<i>twǎ-à-l</i>	<i>tò:-ndí-Ø</i>	'make bunches'
<i>twé:<sup>n</sup></i>	<i>twǎ-à<sup>n</sup>-l</i>	<i>tò:<sup>n</sup>-ndí-Ø</i>	'step on'
<i>-ATR with C onset before unrounded vowel</i>			
<i>yé:</i>	—	<i>yò:-ndí-Ø</i>	'day break'
<i>né:</i>	<i>nǎ-à-l</i>	<i>nò:-ndí-Ø</i>	'drink'
<i>jé:</i>	<i>jǎ-à-l</i>	<i>jò:-ndí-Ø</i>	'eat (meal)'
<i>+ATR with Cw onset before unrounded vowel</i>			
<i>jwé:</i>	<i>jwǎ-à-l</i>	<i>jò:-ndí-Ø</i>	'fill up'
<i>gwé:</i>	<i>gwǎ-à-l</i>	<i>gò:-ndí-Ø</i>	'come out'
<i>wwé:</i>	<i>wwǎ-à-l</i>	<i>wò:-ndí-Ø</i>	'draw water'

b. bisyllabic

<i>-ATR with nonlow penult vowel</i>			
<i>sógé</i>	<i>sògá-à-l</i>	<i>sògò:-ndí-Ø</i>	'buy'
<i>digé</i>	<i>dìgá-à-l</i>	<i>dìgò:-ndí-Ø</i>	'go up'
<i>tú:gè</i>	<i>tù:gá-à-l</i>	<i>tù:gò:-ndí-Ø</i>	'pour out'
<i>+ATR with nonlow penult vowel</i>			
<i>yélé</i>	<i>yèlá-à-l</i>	<i>yèlò:-ndí-Ø</i>	'drape (sth, over sth)'
<i>sígé</i>	<i>sìgá-à-l</i>	<i>sìgò:-ndí-Ø</i>	'go down'
<i>nó:yè</i>	<i>nò:yá-à-l</i>	<i>nò:yò:-ndí-Ø</i>	'sleep'
<i>+ATR with penult a</i>			
<i>nálé</i>	<i>nàlá-à-l</i>	<i>nàlò:-ndí-Ø</i>	'give birth'
<i>ná:lè</i>	<i>nà:lá-à-l</i>	<i>nà:lò:-ndí-Ø</i>	'think'
<i>bá:ndè</i>	<i>bà:ndá-à-l</i>	<i>bà:ndò:-ndí-Ø</i>	'shut (door)'

c. trisyllabic and longer

<i>+ATR</i>			
<i>púrugè</i>	<i>pùrugá-à-l</i>	<i>pùrugò:-ndí-Ø</i>	'cut'
<i>sógú-lè</i>	<i>sògù-lá-à-l</i>	<i>sògù-lò:-ndí-Ø</i>	'sell'
<i>tébá-gè</i>	<i>tèbá-gá-à-l</i>	<i>tèbá-gò:-ndí-Ø</i>	'shatter (sth)'

Verbs ending in a high vowel are illustrated in (xx3). For the core members of this class, the third person forms have long *u:*. For the intermediate members ('go', 'bring'), the vowel is long *o:* as with the final-nonhigh-vowel verbs.

(xx3) Imperfective negative (final-high-vowel class)

Perf 3Sg	ImpfNeg 2Sg	1Pl	3Sg	gloss
a. nonfinal nonlow vowel				
<i>sé:mì</i>	<i>sè:má-à-l</i>	<i>sè:mò-ò-lí</i>	<i>sè:mù:-ndí</i>	'look'
b. nonfinal <i>a</i>				
<i>dámí</i>	<i>dámá-à-l</i>	<i>dàmù-ù-lí</i>	<i>dàmù:-ndí</i>	'speak'
<i>dá:y<sup>n</sup>i</i>	<i>dà:y<sup>n</sup>á-à-l</i>	<i>dà:y<sup>n</sup>ù-ù-lí</i>	<i>dà:y<sup>n</sup>ù:-ndí</i>	'sit'
<i>kání</i>	<i>káná-à-l</i>	<i>kànù-ù-lí</i>	<i>kànù:-ndí</i>	'do'

'Come' and 'bring' are treated as final-nonhigh-vowel verbs, with O-stem rather than U-stem.

(xx4) Imperfective negative ('come' and 'bring')

Perf 3Sg	ImpfNeg 2Sg	1Pl	3Sg	gloss
<i>égé</i>	<i>ègá-à-l</i>	<i>ègò-ò-lí</i>	<i>ègò:-ndí</i>	'come'
<i>sóngé</i>	<i>sòngá-à-l</i>	<i>sòngò-ò-lí</i>	<i>sòngò:-ndí</i>	'bring'

#### 10.2.3.4 Progressive negative with *wǒl* 'not be'

The progressive negative replaces *bô* 'be' in the positive progressive by *wǒl*, the suppletive 'not be (somewhere), be absent' quasi-verb (§11.2.2.3). The form of the verb is the same as in the positive: **O/U-stem, {L}-toned**. For final-nonhigh-vowel verbs, this means the O-stem (xx1).

(xx1) Paradigm of progressive negative with *wǒl* (final-nonhigh-vowel)

category	form	'go in'	'drape (sth)'	'shake'
1Sg	{L} <i>ń wòl</i>	<i>nò: ń wòl</i>	<i>yèlò ń wòl</i>	<i>yìgìrò ń wòl</i>
1Pl	{L} <i>ń wǒl</i>	<i>nò: ń wǒl</i>	<i>yèlò ń wǒl</i>	<i>yìgìrò ń wǒl</i>
2Sg	{L} <i>-á wòl</i>	<i>nwà-á wòl</i>	<i>yèlò á wòl</i>	<i>yìgìrò á wòl</i>
2Pl	{L} <i>-à wǒl</i>	<i>nwà-à wǒl</i>	<i>yèlò à wǒl</i>	<i>yìgìrà à wǒl</i>
3Sg	{L} <i>wǒl-Ø</i>	<i>nò: wǒl-Ø</i>	<i>yèlò wǒl-Ø</i>	<i>yìgìrò wǒl-Ø</i>
3Pl	{L} <i>wǒl-yà</i>	<i>nò: wǒl-yà</i>	<i>yèlò wǒl-yà</i>	<i>yìgìrò wǒl-yà</i>

For final-high-vowel verbs, we have the U-stem.

(xx2) Paradigm of progressive negative with *wǒl* (final-high-vowel)

category	form	'speak'	'do'	'look'
1Sg	{L} <i>ɲ wòl</i>	<i>dàmù ɲ wòl</i>	<i>kànù ɲ wòl</i>	<i>sè:mù ɲ wòl</i>
1Pl	{L} <i>ɲ wǒl</i>	<i>dàmù ɲ wǒl</i>	<i>kànù ɲ wǒl</i>	<i>sè:mù ɲ wǒl</i>
2Sg	{L} <i>-á wòl</i>	<i>dàmà = á wòl</i>	<i>kànà = á wòl</i>	<i>sè:mà = á wòl</i>
2Pl	{L} <i>-à wǒl</i>	<i>dàmà = à wǒl</i>	<i>kànà = à wǒl</i>	<i>sè:mà = à wǒl</i>
3Sg	{L} <i>wǒl-Ø</i>	<i>dàm wǒl-Ø</i>	<i>kàn wǒl-Ø</i>	<i>sè:m wǒl-Ø</i>
3Pl	{L} <i>wǒl-yà</i>	<i>dàm wǒl-yà</i>	<i>kàn wǒl-yà</i>	<i>sè:m wǒl-yà</i>

An example of the progressive negative is (xx3).

(xx3) *má:ɲgórò* *ɲǎ:* *ɲ* *wòl*  
 mango eat 1SgS not.be  
 'I am not (engaged in) eating mangoes.'

#### 10.2.3.5 Progressive negative with *túlá-ndà*

The progressive negative construction with *túlà* is negated by adding the stative negative morpheme *-ndà*. Rightward H-Spreading applies to produce *túlá-ndà* and 3Pl *túlá-ndá-yà*.

(xx1) Paradigm of the progressive negative with *túlá-ndà*

categ.	form	'go in'	'drape (sth)'
1Sg	{LH} <i>ɲ tülà-ndà</i>	<i>nò: ɲ tülà-ndà</i>	<i>yèló ɲ tülà-ndà</i>
1Pl	{L} <i>ɲ tülá-ndà</i>	<i>nò: ɲ tülá-ndà</i>	<i>yèlò ɲ tülá-ndà</i>
2Sg	{LH} <i>-á tülà-ndà</i>	<i>nwà-á tülà-ndà</i>	<i>yèlá-á tülà-ndà</i>
2Pl	{L} <i>-à tülá-ndà</i>	<i>nwà-à tülá-ndà</i>	<i>yèlà-à tülá-ndà</i>
3Sg	{L} <i>-n tülá-ndà-Ø</i>	<i>nò:-n tülá-ndà-Ø</i>	<i>yèlò-n tülá-ndà-Ø</i>
3Pl	{L} <i>-n tülá-ndá-yà</i>	<i>nò:-n tülá-ndá-yà</i>	<i>yèlò-n tülá-ndá-yà</i>

### 10.3 Pronominal paradigms for non-imperative verbs

#### 10.3.1 Subject pronominal suffixes

1st/2nd person subject categories are expressed by proclitics. In the perfective system, they precede the verb. 3Sg is unmarked; I transcribe -Ø suffix. 3Pl is marked by a variable suffix, often *-yà* (but see below). 1Sg and 1Pl are segmentally identical, as are 2Sg and 2Pl. Segmentally, the first person pronominals are both *n*, actually a variable nasal that assimilated in position to a following consonant. The second person pronominals are both segmentally *a*.

(xx1) Subject pronominals in perfective main clauses

category	affixes
1Sg	<i>ŋ</i> VERB
1Pl	<i>ɲ</i> VERB
2Sg	<i>á</i> VERB
2Pl	<i>à</i> VERB
3Sg	VERB
3Pl	VERB- <i>yà</i> / <i>-yê</i> (or other suffix)

In the imperfective systems, the 1st/2nd person pronominals intervene between verb and suffix/auxiliary. In the imperfective positive, the pronominal forms are the same as those in (xx1). In the imperfective negative, the first person forms lengthen the stem-final {*o ɔ*} rather than adding a nasal segment: *yèlò-ò-I* 'I will not hang up'.

In nonsubject relatives, a pronominal subject is expressed in the same way for 1st/2nd person categories. However, 3Pl is expressed by a proclitic *ɲké*, and 3Sg by a suffixed *-ná*. The resulting paradigm resembles that for possessors (§4.xxx).

(xx2) Subject pronominals in nonsubject relatives

category	affixes
1Sg	<i>ŋ</i> VERB
1Pl	<i>ɲ</i> VERB
2Sg	<i>á</i> VERB

2Pl	à VERB
3Sg	VERB- <i>ná</i>
3Pl	<i>ŋké</i> VERB

The 3Pl category is the most irregular, though not as much as in some other Dogon languages. The various forms are listed in (xx2).

(xx2) 3Pl subject

- a. *-ya*  
*L-toned*
- |            |  |
|------------|--|
| <i>-ya</i> | derived statives (with final <i>a</i> )  |
| <i>-ya</i> | 'have' ( <i>sá:<sup>n</sup>-ya</i> )   |
| <i>-ya</i> | 'be' ( <i>bô</i> → <i>bí-ya</i> ) and related inflections (imperfective, progressive, some lexical statives, capacitative) |
| <i>-ya</i> | progressive ( <i>túlá-ya</i> )   |
| <i>-ya</i> | experiential perfect ( <i>-té:-ya</i> )  |
| <i>-ya</i> | experiential perfect negative ( <i>-té:-ndí-ya</i> )   |
| <i>-ya</i> | imperfective negative ( <i>-nd-ya</i> from <i>-ndí</i> )   |
- b. *-yè* ~ *-yè* perfective (after syncopated stem-final vowel)
- c. *-ndá* perfective negative portmanteau (cf. regular *-l*)
- d. *-Cì:* (with preceding *C* doubled) perfective of most final-high-vowel bisyllabic verbs

### 10.3.2 Tones of subject pronominals

1Sg *ŋ* and 2Sg *á* are H-toned, versus L-toned 1Pl *ŋ* and 2Pl *à*. The tonal distinction is clear except in the morphologically rather messy imperfective negative, where suffix allomorph *-l* has been apocopated from L-toned *\*-lì*. The upshot is that e.g. 1Sg *yèló-ò-l* 'I do/will not hang up', whose morphemic segmentation is problematic, has a final falling melody.

The tone melody of the stem depends on the aspect-negation (or other inflectional) category, and on the subject category. The 1Sg and 2Sg forms are always parallel, as are the 1Pl and 2Pl forms. Typically we get a {L}-toned verb after a H-toned 1Sg/2Sg pronominal, and a {H}-toned verb after a L-toned 1Pl/2Pl pronominal, but the details for particular aspect-negation categories may be more complex. The tonal relationship between 3rd person and either 1Sg/2Sg or 1Pl/2Pl also depends on the inflectional category.

The summary formulae below show the stem melody in curly brackets. Tones are marked on x (aspect-negation suffix), y (1st/2nd person pronominal), and z (3Pl suffix). Absence of a tone indicates atonality (e.g. a consonant). Unhyphenated xz in 3Pl forms indexes fusion into one syllable or into a portmanteau.

(xx1)	category	1Sg/2Sg	1Pl/2Pl	3Sg	3Pl
a. perfectives and affiliates (1st/2nd pronominal precedes verb)					
Perf (prosodically light)	$\acute{y}$ {L}	$\acute{y}$ {HL}	{H}	{H}	$-\acute{z}$
'not know' ( <i>índó</i> )	$\acute{y}$ {L}	$\acute{y}$ {HL}	{H}	{H}	$-\acute{z}$
'not resemble' ( <i>pímá-ndá</i> )	$\acute{y}$ {L-L}	$\acute{y}$ {H-L}	{H-H}	{H-H}	$-\acute{z}$
derived stative negative	$\acute{y}$ {L-L}	$\acute{y}$ {H-L}	{H-H}	{H-H}	$-\acute{z}$
'be (somewhere)' ( <i>bô</i> )	$\acute{y}$ {L}	$\acute{y}$ {HL}	{HL}	{H(L)}	$-\acute{z}$
'have' ( <i>sâ<sup>n</sup></i> )	$\acute{y}$ {L}	$\acute{y}$ {HL}	{HL}	{H(L)}	$-\acute{z}$
derived stative	$\acute{y}$ {L}	$\acute{y}$ {HL}	{HL}	{H(L)}	$-\acute{z}$
'know' ( <i>nêy<sup>n</sup></i> )	$\acute{y}$ {L}	$\acute{y}$ {HL}	{HL}	L {HL}	L- $\acute{z}$
'want' ( <i>kêy<sup>n</sup></i> )	$\acute{y}$ {L}	$\acute{y}$ {HL}	—	—	—
'resemble' ( <i>pímà</i> )	$\acute{y}$ {L}	$\acute{y}$ {HL}	—	—	—
PerfNeg (-l, 3Pl -ndá)	$\acute{y}$ {L} -x	$\acute{y}$ {H} -x	{L} -x	{H}	$-\acute{x}\acute{z}$
ExpPf (-tê:)	$\acute{y}$ {L} -x̂	$\acute{y}$ {H} -x̂	{L} -x̂	{L}	$-\acute{x}\acute{z}$
Perf (prosodically heavy)	$\acute{y}$ {LHL}	$\acute{y}$ {HL}	{HL}	{H(L)}	$-\acute{z}$
'not want' ( <i>kêy-lâ</i> )	$\acute{y}$ {LH-L}	$\acute{y}$ {H-L}	{H-L}	{H(-L)}	$-\acute{z}$
'not be' ( <i>wôl</i> )	$\acute{y}$ {L}	$\acute{y}$ {LH}	{LH}	{LH}	$-\acute{z}$
progressive neg ( <i>wôl</i> )	$\acute{y}$ {L}	$\acute{y}$ {LH}	{LH}	{H}	$-\acute{z}$
b. imperfectives and affiliates (1st/2nd pronominal follows verb)					
Impf ( <i>bô</i> )	{H} $\acute{y}$ x̂	{HL} $\acute{y}$ x̂	{HL} x̂	{H}	$x\acute{z}$
Prog ( <i>bô</i> )	{L} $\acute{y}$ x̂	{L} $\acute{y}$ x̂	{L} x̂	{L}	$\acute{x}\acute{z}$
ImpfNeg (-ndí, -l, -lí)	{LH} $-\acute{y}$ -x	{L} $-\acute{y}$ -x̂	{L} -x̂	{L}	$-\acute{x}\acute{z}$

In (xx1a), the major observation is that a H-toned 1Sg/2Sg pronominal (symbol  $\acute{y}$ ) requires a following verb beginning with a L-tone, while a L-toned 1Pl/2Pl pronominal ( $\acute{y}$ ) almost always requires a verb beginning with a H-tone (one case of rising tone). In (xx1b), the same inverse relationship applies to the combination of the 1st/2nd person pronominal ( $\acute{y}$ ) with the following suffix or auxiliary (x). Another observation in both (xx1a) and (xx1b) is that the 3Pl form is generally based tonally on the 3Sg, the glaring exception being the perfective negative with its 3Pl portmanteau.

## 10.4 Derived stative form of verbs

This section covers stative forms derived from active verbs (i.e. from verbs that elsewhere are marked for imperfectivity). For lexically stative (quasi-)verbs that do not have active forms, notably 'be (somewhere)', 'have', 'want', 'know', and 'resemble', see Chapter 11.

### 10.4.1 Stative positive

#### 10.4.1.1 Type with final *a*

Statives are derived from regular verbs to denote a continuing state that has resulted from an event of motion, of taking hold, of perception ('see', 'hear'), or the like. Statives do not distinguish perfective from imperfective. Perception statives have senses like '(can) see/hear', as in 'I can see (i.e. I am not blind)'.

In positive unfocalized main clauses, statives require either an initial *Cv̄* reduplicative proclitic or the existential proclitic *è<sup>n</sup>*, but do not allow both: *nò nóyà-Ø* or *è<sup>n</sup> nóyà-Ø* 'he/she is asleep'. Either proclitic is separated from the following base by an intervening 1st/2nd person subject pronominal.

This type of derived stative is bisyllabic with short +ATR vowels. Medially, it allows only an unclustered *C*, or else a *CC* cluster of nasal plus homorganic voiced stop (such clusters are often treated like unclustered *C*'s elsewhere, e.g. in determining the tone of perfective verbs). Stative verbs also end in *a*, and have a {HL} melody. The only exception to the bisyllabic norm is *dá<sup>n</sup>* 'be sitting', whose input *dá:y<sup>n</sup>* 'sit down' has no obvious way to become bisyllabic without adding an intrusive filler segment or morpheme. Aside from 'be sitting', if the input stem does not satisfy the prosodic and ATR requirements, adjustments must be made. Many of the inputs are mediopassives with suffix *-yv* (3Sg perfective *-yè*), e.g. *sáng-yè* 'become on (i.e. go up on, take position on)'. In spite of syncope from */sángí-yè/*, these are structurally trisyllabic, so the mediopassive suffix must be lopped off to achieve the truly bisyllabic target *sángà* (reduplicated *sà sángà* or existential *è<sup>n</sup> sángà* 'be on'). In the one *Cv-yv* mediopassive (*bí-yé* 'lie down'), the mediopassive suffix is retained to achieve the bisyllabic target (stative *bí-yà*). Examples of inputs and statives are in (xx1). The inputs are active, i.e. they denote changes of state.

(xx1)	gloss	input	stative
a.	from a bisyllabic stem that is not obviously segmentable		
	<i>phonologically regular</i>		
	'hear'	<i>núndé</i>	<i>núndà</i>



shifted from -ATR to +ATR  
 'be tilted' *génjè* *gèngà*  
 adjusted to CvCv by shortening a long vowel  
 'sleep' *nó:yè* *nóyà*  
 adjusted to CvCv by reducing nonhomorganic CC to C  
 'see' *málgè* *málà* (but cf. §9.2.2)  
 irregular  
 'sit' *dá:y<sup>n</sup>ĩ ~ dâ:y<sup>n</sup>* *dâ<sup>n</sup>*  
 'stand' *ínjè* *íngà*

b. from mediopassive

bisyllabic mediopassive after syncope (-yv suffix omitted in stative)

'squat' *sómb-yè* *sómbà*  
 'carry on back' *bámb-yè* *bámbà*  
 'bow' *kúnd-yè* *kúndà*  
 'be on' *sáng-yè* *sángà*  
 'lower head' *túmb-yè* *túmbà*  
 'be on (wall)' *yáb-yè* *yábà*  
 'be hung' *yél-yè* *yélà*

Cv-yv mediopassive (-yv suffix retained)

'lie down' *bí-yé* *bí-yà*

The paradigm is (xx2). Since 'stand' is vowel-initial, it is subject to *y/n*-Epenthesis after a 1st/2nd person pronominal. The verb is {L}-toned after H-toned 1Sg/2Sg pronominals. In other combinations the verb is {HL}, or compatible with {HL} in the case of 3Pl in the light of Rightward H-Spreading.

(xx2) Stative positive paradigm

category	form	'stand'	
		reduplicated	existential
1Sg	<i>ĩ</i> {L}	<i>ĩ ĩ ĩ-íngà</i>	<i>è<sup>n</sup> ĩ ĩ-íngà</i>
1Pl	<i>ĩ</i> {HL}	<i>ĩ ĩ ĩ-íngà</i>	<i>è<sup>n</sup> ĩ ĩ-íngà</i>
2Sg	<i>á</i> {L}	<i>ĩ á ĩ-íngà</i>	<i>è<sup>n</sup> á ĩ-íngà</i>
2Pl	<i>à</i> {HL}	<i>ĩ à ĩ-íngà</i>	<i>è<sup>n</sup> à ĩ-íngà</i>
3Sg	{HL}-Ø	<i>ĩ íngà-Ø</i>	<i>è<sup>n</sup> íngà-Ø</i>
3Pl	{H(L)}-yà	<i>ĩ íngá-yà</i>	<i>è<sup>n</sup> íngá-yà</i>

The proclitic (reduplication or existential) is not allowed under negation, in the presence of a focalized constituent, or in relative clauses.

For the negative form of derived statives, see §10.4.2 below.

For the past stative with clitic =ye, see §10.6.1.3.

#### 10.4.1.2 Resultative passive -é: ~ -é: ~ -í: bō

The resultative passive construction consists of the auxiliary *bō* 'be' plus a form closely related to the perfective (positive) stem of a verb that denotes a change in state ('shut', 'cut', etc.), but with {LH} melody and with lengthened final vowel. The construction denotes the resulting state of the theme, without explicit reference to agency. For example, (xx1a) denotes the state of a door being shut, presumably as the result of an agentive action such as that in (xx1b). The plural-subject counterpart of (xx1a) is (xx1c), with just the auxiliary agreeing with the subject.

- (xx1) a. *[è bōw<sup>n</sup>] bā:y<sup>n</sup>-í: bō-Ø*  
 [Def door] shut-Pass be-3SgS  
 'The door is shut.' (*bōw<sup>n</sup>, è bōw<sup>n</sup>*)
- b. *[è bōw<sup>n</sup>] bā:-nd-yè*  
 [door Def] shut-Tr.Perf-3PlS  
 'They shut-Past the door.'
- c. *[è bō<sup>n</sup>-gé] bā:y<sup>n</sup>-í: b-yà*  
 [Def door-Pl] shut-Pass be-3PlS  
 'The doors are shut.' (*bōw<sup>n</sup>*)

Further examples are in (xx3). The input verb, shown in the left column, can be transitive as in 'cut (meat)' or intransitive as in 'become tired'. The resultative passive glosses are to be interpreted as denoting states, not transitions. In (xx3c), the resultative passive is based on the mediopassive form (suffix *-yè* ~ *-yè*).

(xx3)	Perf 3Sg	gloss	ResPass	gloss
a.	<i>sémé</i>	'cut (meat)'	<i>sèm-é: bō</i>	'(meat) be cut'
	<i>púré</i>	'be cut (rope)'	<i>pùr-é: bō</i>	'(rope) be cut'
	<i>néné</i>	'become tired'	<i>nèn-é: bō</i>	'be tired'
	<i>gílé</i>	'snap (intr)'	<i>gìl-é: bō</i>	'be snapped'
	<i>bángú-lè</i>	'open (door)'	<i>bàngù-lé: bō</i>	'(door) be open'
b.	<i>ɲámí</i>	'malfunction'	<i>ɲàm-í: bō</i>	'be not working'
	<i>bā:y<sup>n</sup>i</i>	'(door) close [intr]'	<i>bā:y<sup>n</sup>-í: bō</i>	'(door) be shut'

c.	<i>púndé</i>	'roll up (mat)'	<i>pùndí-yé: bò</i>	'be rolled up'
	<i>gór-yè</i>	'hang (on hook)'	<i>gòr-yé: bò-</i>	'be hung (over sth)'
	<i>yélé</i>	'drape (sth, over sth)'	<i>yèlí-yé: bò-</i>	'be draped'

For most resultative passive verbs, the subject is always nonhuman and therefore third person. For 'be tired', however, human and therefore also 1st/2nd person subjects are possible. Paradigms are in (xx3).

(xx3)	category	'(meat) be cut'	'be tired'
	1Sg	—	<i>nèn-è: ń bò</i>
	1Pl	—	<i>nèn-é: ń bò</i>
	2Sg	—	<i>nèn-è: á bò</i>
	2Pl	—	<i>nèn-é: à bò</i>
	3Sg	<i>sèm-é: bò-Ø</i>	<i>nèn-é: bò-Ø</i>
	3Pl	<i>sèm-é: b-yà</i>	<i>nèn-é: b-yà</i>

The negative counterpart replaces *bò* 'be' with *wòl* 'not be' (3Sg *wòl-Ø*, 3Pl *wòl-yà*, 1Pl *ń wòl*, etc.).

#### 10.4.2 Stative negative

##### 10.4.2.1 Stative negative (-*ndá*)

Stative negative suffix (or enclitic) *-ndá* (§11.xxx) is added to derived stative verbs (which are almost always bisyllabic and end in *a*). The stem and suffix are {L}-toned in the 1Sg and 2Sg, but {H}-toned in the 3Sg and 3Pl. In the 1Pl and 2Pl, the stem is {H}-toned but the suffix is L-toned.

##### (xx1) Stative negative paradigm

category	form	'not be standing'
1Sg	<i>ń {L} -ndà</i>	<i>ń n-ìngà-ndà</i>
1Pl	<i>ń {H} -ndà</i>	<i>ń n-íngá-ndà</i>
2Sg	<i>á {L} -ndà</i>	<i>á n-ìngà-ndà</i>
2Pl	<i>à {H} -ndà</i>	<i>à n-íngá-ndà</i>
3Sg	<i>{H} -ndá-Ø</i>	<i>íngá-ndá-Ø</i>
3Pl	<i>{H} -ndá-yà</i>	<i>íngá-ndá-yà</i>

From the irregular positive stative *dâ<sup>n</sup>* 'be sitting', the negative is 3Sg *dâ:<sup>n</sup>-ndá-Ø* etc. with lengthened vowel.

*-ndá* with derived statives is one of several allomorphs of the general stative negative suffix. The full set is given in (xx2).

- (xx2) a. *-ndá* derived stative (this section)  
*sá:-ndá* 'not have' (§11.5.1)  
*(m)pímá-ndá* 'not resemble' (§11.2.5.3)
- b. *-là* *kéy-là* 'not want' (§11.2.5.2)  
*X=là* 'it is not X' with NP (§11.2.1.2)
- c. suppletive *índó* 'not know' (§11.2.5.1), arguably *í-ndó*  
*wòl* 'not be (somewhere)' (§11.2.2.3)

Stative negative *-ndá* should be distinguished from 3Pl subject perfective negative portmanteau *-ndá* §10.2.3.1.

For past forms, see §10.6.1.3. For lexicalized negative adjectives (e.g. 'no good'), see §4.5.4. For negative adjectival predicates with *wòl*, see §11.4.2.

## 10.5 Predications of capability

### 10.5.1 Capacitative (*-mâ:*)

Ability to perform an action ('can VP, is able to VP') is expressed by capacitative *-mâ:* or allomorph added to the O/U-stem, specifically the **O-stem** of final-nonhigh-vowel verbs and the (syncopated) **U-stem** of final-high-vowel verbs. The lexical ATR class of the verb is respected. With third person subjects only, *bò* is added as an auxiliary (3Sg *bò-Ø*, 3Pl *b-yà*). The 1Sg/2Sg form ends in *-má* (note the short vowel), while the 1Pl/2Pl form ends in *-mâ:*. The corresponding negation ('cannot VP') is based on *-má-ndà*, including stative negative *-ndá* in L-toned form.

Sample positive and negative paradigms are in (xx1).

- (xx1) Capacitative of *gè:n-yè* 'sweep'

	'can sweep'	'cannot sweep'
1Sg	<i>ń gè:n-yò-mà:</i>	<i>ń gè:n-yò-má-ndà</i>
1Pl	<i>ń gè:n-yò-mâ:</i>	<i>ń gè:n-yò-má-ndà</i>

2Sg	<i>á gè:n-yò-mà:</i>	<i>á gè:n-yò-má-nda</i>
2Pl	<i>à gè:n-yò-mà:</i>	<i>à gè:n-yò-má-nda</i>
3Sg	<i>gè:n-yò-mâ: bò-Ø</i>	<i>gè:n-yò-má-nda</i>
3Pl	<i>gè:n-yò-mâ: b-yà</i>	<i>gè:n-yò-má-nda-yà</i>

A few additional positive 3Sg forms are in (xx2). In (xx2a), 'go in' and 'drink' are homophonous in the capacitative but not perfective.

(xx2) Capacitative verbs

gloss	3Sg perfective	3Sg capacitative
a. monosyllabic final-nonhigh-vowel verbs		
<i>Cv</i>		
'say'	<i>né</i>	<i>nò-mâ: bò-Ø</i>
-ATR		
'pound'	<i>dwé:</i>	<i>dò:-mâ: bò-Ø</i>
'go in'	<i>nwé:</i>	<i>nò:-mâ: bò-Ø</i>
'drink'	<i>né:</i>	<i>nò:-mâ: bò-Ø</i>
'eat (meal)'	<i>je:</i>	<i>je:-mâ: bò-Ø</i>
+ATR		
'go in'	<i>gwé:</i>	<i>gò:-mâ: bò-Ø</i>
b. bisyllabic final-nonhigh-vowel verbs		
-ATR		
'buy'	<i>sógé</i>	<i>sògò-mâ: bò-Ø</i>
'dance'	<i>yébé</i>	<i>yèbò-mâ: bò-Ø</i>
+ATR		
'drape (sth)'	<i>yélé</i>	<i>yèlò-mâ: bò-Ø</i>
'go down'	<i>síge</i>	<i>sìgò-mâ: bò-Ø</i>
c. trisyllabic final-nonhigh-vowel verbs		
'shake'	<i>yígíré</i>	<i>yìgìrò-mâ: bò-Ø</i>
'shatter (sth)'	<i>téba-gè</i>	<i>tèbà-gò-mâ: bò-Ø</i>
d. final-high-vowel verbs		
'do'	<i>kání</i>	<i>kàn-mâ: bò-Ø</i>
'sit'	<i>dá:y<sup>n</sup></i>	<i>dà:y<sup>n</sup>-mâ: bò-Ø</i>
e. 'come' and 'bring'		
'come'	<i>égé</i>	<i>ègò-mâ: bò-Ø</i>

For past-time counterparts ('could, was able to'), see §10.6.1.7.

For a predicative adjective *-mà bó* that may be related to capacitative *-mâ:*, see §4.5.6.

#### 10.5.2 'Can (be in a position to) VP' (*dìnô:*)

This is a two-verb construction but is included here because of its semantic proximity to the capacitative suffixal derivation.

This construction denotes ability in the sense of having the time and the wherewithal (e.g. equipment) to perform a task. Often it involves having the time to perform it. The main clause has a conjugated form of *díné* 'get, obtain'. The semantic connection between 'get' and 'be in a position (to VP)' is fairly common in the region (e.g. Songhay).

For completed events ('I was able/had the time to cook the food'), the regular perfective stem *díné* 'got' is used. The perfective negative and imperfective negative are also the same as in canonical 'get' clauses. In imperfective (positive) contexts, as in 'I will be able/will have the time to cook the food', the form used in this construction is the final-long-vowel imperfective (§10.2.2.2), e.g. 3Sg *dìnô:-Ø* 'is able (in a position) to', rather than the bipartite imperfective *dínò bò-Ø* 'gets, will get'. The full imperfective paradigm is (xx1).

(xx1) 'Be able (in a position) to'

1Sg	<i>ń dìnô:</i>
1Pl	<i>ń dínò:</i>
2Sg	<i>á dìnô:</i>
2Pl	<i>à dínò:</i>
3Sg	<i>dìnô:-Ø</i>
3Pl	<i>dìn-â:</i>

In this construction, the subordinated clause denoting the action to be accomplished has the imperfective subordinator *w<sup>n</sup>* (§15.2.1.3) regardless of the aspect or polarity of the main clause. Examples are in (xx2).

- (xx2) a. *[nă: dòngó w<sup>n</sup> dìnô:-Ø / dìn-â:*  
           [meal cook Impf] get.Impf-3SgS / -3PlS  
           He-or-she/They can (are in a position to) cook a meal.' (nă:)
- b. *[nă: dòngó w<sup>n</sup> dìnò:-ndí-Ø*  
           [meal cook Impf] get-ImpfNeg-3SgS

He/She can't cook a meal (now).'

- c. *[pǎ: dǎŋgǎ-w<sup>n</sup> ɨ́ dínǎ:*  
 [meal cook-Impf] 1PlS get-Impf  
 'We can (=have the time to) cook a meal.'

### 10.5.3 'Be VERB-able' (*kànû:*)

The final-long-vowel imperfective form of *kání* 'do' can be combined with another verb in the sense 'be regularly VERBed', 'be VERB-able'. The 3Sg positive form is *kànû:-Ø*. The corresponding negative form has the regular imperfective negative paradigm. The preceding verb takes the imperfective subordinator *-w<sup>n</sup>* (pronounced [ŋ] before *k*), see §15.2.1.3.

- (xx1) a. *pǎ:-w<sup>n</sup> kànû:-Ø*  
 eat.meal.Impf-Impf do.Impf-3SgS  
 'It is edible (=is regularly eaten).'
- b. *pǎ:-w<sup>n</sup> kàn-ndí-Ø*  
 eat.meal-Impf-Impf do-ImpfNeg-3SgS  
 'It is not edible.'
- c. *[íní nàmà] tèmǎ-w<sup>n</sup> kà-ndí-Ø*  
 [Dem meat] eat.meat.Impf-Impf do-ImpfNeg-3SgS  
 'This meat is not edible'

## 10.6 Nonpast versus past time

### 10.6.1 Past clitic (=ye)

Superimposed on the regular aspectual and state categories is past tense enclitic *=ye* (atonal). It is replaced by *mbè* in focalized and relative clauses (§13.1.1.5, §14.xxx).

The past morpheme shifts the temporal reference point from the moment of speaking to some point in the past, often generalized ('I used to know'). In the absence of imperfectivity, the past tense allows expression of past statives. In the presence of imperfectivity, as with regular (active) verbs, the past tense allows the expression of past imperfectives ('used to run'), past progressives ('was running'), and past perfects ('had run').

Morphologically, it is notable that the *=ye* follows 3Pl suffixes, the only pronominal-subject suffixes in Penange verb morphology. Therefore I take *=ye*

to be a clitic, and by analogy to the 3Pl I transcribe the 3Sg as  $-\emptyset = ye$  rather than as  $=ye-\emptyset$ .

$=ye$  gets its tone by spreading from the preceding tone:  $\acute{v} = y\acute{e}$ ,  $\hat{v} = y\hat{e}$ , and (from  $/\hat{v}/$ )  $\acute{v} = y\hat{e}$ , where  $v$  is a vowel. 3Sg  $b\hat{o}-\emptyset$  in stative paradigms is treated as though  $b\hat{o}-\emptyset$  for this purpose, with the original falling tone restored, hence  $b\acute{o}-\emptyset = y\hat{e}$ . After acquiring a L-tone by spreading,  $=y\hat{e}$  does not condition any further Rightward H-Spreading on the preceding syllable, so we get e.g.  $b\acute{i}-y\hat{a} = y\hat{e}$  'they were' rather than  $\#b\acute{i}-y\acute{a} = y\hat{e}$ .

In 1Sg/2Sg forms like  $\acute{y} k\acute{e}y^n = y\hat{e}$  'I wanted', my assistant often pronounced  $=y\acute{e}$  with high pitch after a {L}-toned verb in elicitation. However, the "H-tone" disappeared when it was put in a larger sentence, or followed by a clause-final particle like 'if'.

#### 10.6.1.1 Past $b\acute{o} = y\hat{e}$ 'was (somewhere)'

Locational-existential  $b\hat{o}$  'be (somewhere)', see §11.2.2.2, has a past form  $b\acute{o} = y\hat{e}$ . The syntax (e.g. regarding existential proclitic  $\acute{e}^n$ ) is the same as for the non-past form. The paradigm is (xx1).

(xx1) Past 'was/were (in a place)' or 'existed'

category	after locational X	with existential
1Sg	X $\acute{y} b\hat{o} = y\hat{e}$	$\acute{e}^n \acute{y} b\hat{o} = y\hat{e}$
1Pl	X $\hat{y} b\acute{o} = y\hat{e}$	$\acute{e}^n \hat{y} b\acute{o} = y\hat{e}$
2Sg	X $\acute{a} b\hat{o} = y\hat{e}$	$\acute{e}^n \acute{a} b\hat{o} = y\hat{e}$
2Pl	X $\hat{a} b\acute{o} = y\hat{e}$	$\acute{e}^n \hat{a} b\acute{o} = y\hat{e}$
3Sg	X $b\acute{o} = y\hat{e}-\emptyset$	$\acute{e}^n b\acute{o} = y\hat{e}-\emptyset$
3Pl	X $b\acute{i}-y\hat{a} = y\hat{e}$	$\acute{e}^n b\acute{i}-y\hat{a} = y\hat{e}$

Examples are in (xx2).

- (xx2) a.  $g\acute{o}:li$   $b\hat{a}m\hat{a}k\hat{o}$   $\acute{y}$   $b\hat{o} = y\hat{e}$   
last.year B 1SgS be=Past  
'Last year I was in Bamako (city).'
- b.  $n\acute{u}w^n$   $b\acute{o} = y\hat{e}-\emptyset \rightarrow ^\circ$   
here be=Past-3SgS.Q  
'Was he/she here?'



- c. *nùw<sup>n</sup>*      *bí-yà=yè*  
 here      be-3PlS=Past  
 'They were here.'

#### 10.6.1.2 Past *wòl=yé* 'was not'

The past form of *wòl-* 'is not (in a place)', see §11.2.2.3, is *wòl=yé*. The existential morpheme is not allowed. The paradigm is (xx1). 3Sg and 3Pl differ only in vowel length.

(xx1) Past 'was/were not (in a place)' or 'did not exist'

category	with or without locational X
1Sg	(X) <i>ń wòl=yè</i>
1Pl	(X) <i>ń wǒl=yé</i>
2Sg	(X) <i>á wòl=yè</i>
2Pl	(X) <i>à wǒl=yé</i>
3Sg	(X) <i>wǒl-Ø=yé</i>
3Pl	(X) <i>wǒl-yà=yè</i> ~ <i>wòlí-yà=yè</i>

Examples are in (xx2). In (xx2a), 2Sg *-w* assimilates to the *l* of the interrogative particle.

- (xx2) a. *á*      *wòl=yè→ʔ*  
 2SgS      not.be=Past.Q  
 'Weren't you-Sg present?'
- b. *gò:lì*      *té:*      *wòl-Ø=yè*  
 last.year      tea      not.be-3SgS=Past  
 'Last year there was no tea.'
- c. *bàmàkò*      *ń*      *wòl=yè*  
 Bamako      1SgS      not.be=Past  
 'I was not in Bamako.'

#### 10.6.1.3 Past forms of other statives

Past forms of 'have' and 'have not' (§11.5.1) are in (xx2).

(xx1)	'had'	'had not'
1Sg	$\epsilon^n \eta \text{ sà}^n = yè$	$\eta \text{ sà}^n\text{-ndà} = yè$
1Pl	$\epsilon^n \eta \text{ sâ}^n = yè$	$\eta \text{ sâ}^n\text{-ndà} = yè$
2Sg	$\epsilon^n a \text{ sà}^n = yè$	$\acute{a} \text{ sà}^n\text{-ndà} = yè$
2Pl	$\epsilon^n \grave{a} \text{ sâ}^n = yè$	$\grave{a} \text{ sâ}^n\text{-ndà} = yè$
3Sg	$\epsilon^n \text{ sâ}^n\text{-}\emptyset = yè$	$\text{sâ}^n\text{-ndâ}\text{-}\emptyset = yé$
3Pl	$\epsilon^n \text{ sâ}^n\text{-yà} = yè$	$\text{sâ}^n\text{-ndâ}\text{-yà} = yè$

Past forms of 'know' (§11.2.5.1) are in (xx2).

(xx2)	category	'knew'	'did not know'
1Sg		$\eta \text{ pèy}^n = yè$	$\eta \text{ p-ìndò} = yè$
1Pl		$\eta \text{ pèy}^n = yè$	$\eta \text{ p-ìndò} = yè$
2Sg		$\acute{a} \text{ pèy}^n = yè$	$\acute{a} \text{ p-ìndò} = yè$
2Pl		$\grave{a} \text{ pèy}^n = yè$	$\grave{a} \text{ p-ìndò} = yè$
3Sg		$\epsilon \text{pò} \text{ bó}\text{-}\emptyset = yè$	$\text{índó}\text{-}\emptyset = yé$
3Pl		$\epsilon \text{pò} \text{ bí}\text{-yà} = yè$	$\text{índó}\text{-yà} = yè$

Past forms of 'want' and 'not want' (§11.2.5.2) are in (xx3).

(xx3)	category	'wanted'	'did not want'
1Sg		$\eta \text{ kèy}^n = yè$	$\eta \text{ kèy-là} = yè$
1Pl		$\eta \text{ kèy}^n = yè$	$\eta \text{ kèy-là} = yè$
2Sg		$\acute{a} \text{ kèy}^n = yè$	$\acute{a} \text{ kèy-là} = yè$
2Pl		$\grave{a} \text{ kèy}^n = yè$	$\grave{a} \text{ kèy-là} = yè$
3Sg		$\text{képù} \text{ bó}\text{-}\emptyset = yè$	$\text{kéy-là}\text{-}\emptyset = yè$
3Pl		$\text{képù} \text{ bí}\text{-yà} = yè$	$\text{kéy-lá}\text{-yà} = yè$

Past forms of 'resemble' and 'not resemble' (§11.2.5.3) are in (xx4).

(xx4)	category	'resembled'	'did not resemble'
1Sg		$\eta \text{ (m)pímà} = yè$	$\eta \text{ (m)pímà}\text{-ndà} = yè$
1Pl		$\eta \text{ (m)pímà} = yè$	$\eta \text{ (m)pímá}\text{-ndà} = yè$
2Sg		$\acute{a} \text{ (m)pímà} = yè$	$\acute{a} \text{ (m)pímà}\text{-ndà} = yè$
2Pl		$\grave{a} \text{ (m)pímà} = yè$	$\grave{a} \text{ (m)pímá}\text{-ndà} = yè$

3Sg	(m)pímà: bó-Ø=yè	(m)pímá-ndá-Ø=yé
3Pl	(m)pímà: bí-yà=yè	(m)pímá-ndá-yà=yè

There is no direct past-tense form of the 'it is' or 'it is not' clitics. Instead, they are replaced by 'was (somewhere)', e.g. 3Sg *bó-Ø=yè*, and 'was not (somewhere)', e.g. 3Sg *wòl-Ø=yè*.

**Derived statives** like *bámbà* 'be carrying (on back)' and their negatives (§10.4.1-2), form the past tense as in (xx5).

(xx5) category	'was carrying on back'	'was not carrying on back'
1Sg	<i>ń bàm̀bà=yè</i>	<i>ń bàm̀bà-ndà-yè</i>
1Pl	<i>ń bám̀bà=yè</i>	<i>ń bám̀bà-ndà-yè</i>
2Sg	<i>á bàm̀bà=yè</i>	<i>á bàm̀bà-ndà-yè</i>
2Pl	<i>à bám̀bà=yè</i>	<i>à bám̀bà-ndà-yè</i>
3Sg	<i>bám̀bà-Ø=yè</i>	<i>bám̀bà-ndá=yé</i>
3Pl	<i>bám̀bà-yà=yè</i>	<i>bám̀bà-ndá-yà=yè</i>

#### 10.6.1.4 Past imperfective and past progressive

Positive past imperfectives with contextual senses like 'used to go in/dance' and 'was about to go in/dance' are in the first two data columns in (xx1). These are quite distinct morphologically from nonpast imperfectives (§10.2.2.1), which put 1st/2nd person pronominals after the verb before auxiliary *bò*. A basic {LHL} melody is seen in the past imperfective, becoming {HL} after 1Pl/2Pl pronominals. The corresponding negative, on the other hand, is directly based on the regular (nonpast) imperfective negative (§10.2.3.3). *-l=yè* in the 1Sg/2Sg forms reflects the L-tone of the suffix allomorph *-l*.

#### (xx1) Past imperfective paradigm

category	'went in'	'danced'	'did not go in'
1Sg	<i>ń n̄: =yè</i>	<i>ń yèb̄: =yè</i>	<i>n̄:-l=yè</i>
1Pl	<i>ń n̄: =yè</i>	<i>ń yèb̄: =yè</i>	<i>n̄:-lí=yé</i>
2Sg	<i>á n̄: =yè</i>	<i>á yèb̄: =yè</i>	<i>nwà-á-l=yè</i>
2Pl	<i>à n̄: =yè</i>	<i>à yèb̄: =yè</i>	<i>nwà-à-lí=yé</i>
3Sg	<i>n̄:-Ø=yè</i>	<i>yèb̄:-Ø=yè</i>	<i>n̄:-nd(i)=yé</i>

3Pl            *nwǎ-à = yè*      *yèbá-à = yè*      *nè:-nd-yà = yé*

The **progressive** with auxiliary *bô-* forms a past progressive by switching the auxiliary to its past-tense form, e.g. 3Sg *bó-Ø = yè*. The form of the verb is the same as in the nonpast progressive (§10.2.2.3).

The alternative progressive with *túlà* likewise simply adds *=ye* to the auxiliary, with regular tonal adjustments. *túlà* becomes *túlà = yè* (3Sg *túlà-Ø = yè*), *tùlà* becomes *túlà = yè* (1Sg/2Sg), and 3Pl *túlá-yà* becomes *túlá-yà = yè*.

#### 10.6.1.5 Past perfect

The morphologically past form of the perfective ('he ran') functions as a past perfect ('he had run'), denoting an event that had been completed prior to the past-time temporal reference point. The phonology is unproblematic, as *=ye* is simply added to the regular perfective forms. Sample paradigm are in (xx1).

(xx5)	category	'had fallen'	'had done'
	1Sg	<i>ń tìbè = yè</i>	<i>ń kàn = yè</i>
	1Pl	<i>ń tìbè = yè</i>	<i>ń kàn = yè</i>
	2Sg	<i>á tìbè = yè</i>	<i>á kàn = yè</i>
	2Pl	<i>à tìbè = yè</i>	<i>à kàn = yè</i>
	3Sg	<i>tíbé-Ø = yé</i>	<i>kán-Ø = yé</i>
	3Pl	<i>tíb-yè = yè</i>	<i>kán-nì: = yè</i>

#### 10.6.1.6 Past experiential perfect (*-tê: = yè*)

Experiential perfect *-tê:* (§10.2.1.3) has past-tense versions illustrated in (xx1).

(xx1)	category	'had (once) seen'	'had never seen'
	1Sg	<i>ń màlgà-tê: = yè</i>	<i>ń màlgà-tê:-ndì = yè</i>
	1Pl	<i>ń màlgá-tê: = yè</i>	<i>ń màlgá-tê:-ndí = yé</i>
	2Sg	<i>á màlgà-tê: = yè</i>	<i>á màlgà-tê:-ndì = yè</i>
	2Pl	<i>à màlgá-tê: = yè</i>	<i>à màlgá-tê:-ndí = yé</i>
	3Sg	<i>màlgà-tê:-Ø = yè</i>	<i>màlgà-tê:-ndí-Ø = yé</i>
	3Pl	<i>màlgà-tê:-yà = yè</i>	<i>màlgà-tê:-ndí-yà = yè</i>

#### 10.6.1.7 Past capacitative (-mâ: bô-Ø = yè, -má: = yé)

The past version of capacitative -mâ: (bô) is -mâ: bô-Ø = yè (3Sg) and so forth, with the past clitic added to the regular capacitative form (§10.5.). Similarly, negative forms add the past clitic to the regular negative form. Sample positive and negative paradigms are in (xx1).

(xx1)	'could sweep'	'could not sweep'
1Sg	ń gè:nyð-má: = yé	ń gè:nyð-má-ndà = yè
1Pl	ń gè:nyð-mà: = yè	ń gè:nyð-má-ndà = yè
2Sg	á gè:nyð-má: = yé	á gè:nyð-má-ndà = yè
2Pl	à gè:nyð-mà: = yè	à gè:nyð-má-ndà = yè
3Sg	gè:nyð-mâ: bô-Ø = yè	gè:nyð-má-ndà = yè
3Pl	gè:nyð-mâ: b-yà = yè	gè:nyð-má-ndà-yà = yè

#### 10.6.2 'Has not yet VPed' (-n sè:-ndì)

In this construction, the main verb ends in -n (pronounced in isolation as vowel, presumably a subordinator, and is followed by sè:-ndì. The latter is invariable in form, except for 3Pl sà:-ndà. The main verb is conjugated (regular 1st/2nd person subject proclitics), but is {L}-toned. The main verb has the vocalism of the E/I-stem as in the perfective, except that the 3Pl subject form shifts to the A-stem. The paradigm of 'has not yet dances' with yébé 'dance' is (xx1).

(xx1)	1Sg	ń yèbè-n sè:-ndì
	1Pl	ń yèbè-n sè:-ndì
	2Sg	á yèbè-n sè:-ndì
	2Pl	à yèbè-n sè:-ndì
	3Sg	yèbè-n sè:-ndì
	3Pl	yèbà-n sà:-ndà

For kán(i) 'do', the 3Sg form is kànì-n sè:-ndì, illustrative the final *i* in the E/I-stem of final-high-vowel verbs. The 3Pl form is kànà-n sà:-ndà.

The *-n* element is difficult to analyse. One doubtful connection is with imperfective subordinator *w<sup>n</sup> ~ ɲ* (§xxx). Also doubtful is a connection with the *-n* in third person comparative *-ń nàgà* (§12.1.2).

## 10.7 Imperatives and hortatives

### 10.7.1 Imperatives and prohibitives

#### 10.7.1.1 Imperative (A/O- or U-stem, plural A-stem plus *-y<sup>n</sup>*)

The singular- and plural-addressee imperatives are distinct vocally and tonally, over and above the fact that the plural-addressee has a suffix *-y<sup>n</sup>*.

The **singular-addressee** imperative consists segmentally of the **A/O-stem** (for some final-high-vowel verbs, the U-stem) with no affix. The tone melody is {H} for prosodically light verbs: *Cv*, *Cv:*, and most *CvNCv* with homorganic nasal/voiced-stop cluster. Prosodically heavy verbs (the remaining *CvCCv* stems plus all *Cv:Cv*, *CvCvCv*, and similar multisyllabic verbs) have {L} melody. The two *Cv-yv* mediopassives ('lie down', 'carry on head/bathe') have an irregular {LH}-toned singular imperative *Cù-yá*. (For other irregularities see 'come' and 'bring' near the end of this section.)

The **plural-addressee** imperative consists segmentally of the **A-stem**. The tone melody is {L}.

For the singular-addressee imperative, my assistant sometimes raises the final-syllable tone in prosodically heavy stems to {LH}, e.g. *nò:yó* 'sleep-2Sg!'. He likewise sometimes raises the final syllable of plural imperatives to {LH} before L-toned suffix *-y<sup>n</sup>*, as in *nò:yá-y<sup>n</sup>* 'sleep-2Pl!'.  
Examples for final-nonhigh-vowel verbs are in (xx1).

#### (xx1) Imperative of final-nonhigh-vowel verbs

gloss	Perf 3Sg	Sg Imprt	Pl Imprt
a. monosyllabic			
<i>Cv</i>			
'say'	<i>né</i>	<i>ná</i>	<i>nà-y<sup>n</sup></i>
-ATR			
'drink'	<i>né:</i>	<i>ná:</i>	<i>nà:-y<sup>n</sup></i>
'eat'	<i>ɲé:</i>	<i>ɲá:</i>	<i>ɲà:-y<sup>n</sup></i>
'go in'	<i>nwé:</i>	<i>nwá:</i>	<i>nwà:-y<sup>n</sup></i>
+ATR			
'go out'	<i>gwé:</i>	<i>gó:</i>	<i>gwà:-y<sup>n</sup></i>
'draw water'	<i>wwé:</i>	<i>wó:</i>	<i>wwà:-y<sup>n</sup></i>

b. bisyllabic, prosodically light

-ATR

'slaughter'	sémé	sémá	sèmà-y <sup>n</sup>
'buy'	sógé	sógá	sògà-y <sup>n</sup>
'build'	símé	símá	sìmà-y <sup>n</sup>
'pull'	gímbé	gímbá	gìmbà-y <sup>n</sup>
'go down'	sígé	sígó	sìgà-y <sup>n</sup>

-ATR

'shave'	káyé	káyá	kàyà-y <sup>n</sup>
'jump'	tómbé	tómbó	tòmbà-y <sup>n</sup>

irregular {LH} toned singular imperative (mediopassives)

'lie down'	bí-yé	bì-yó	bì-yà-y <sup>n</sup>
'carry on head'	dú-yé	dù-yá	dù-yà-y <sup>n</sup>

c. bisyllabic, prosodically heavy

'go'	ándè	àndà	àndà-y <sup>n</sup>
'stand, stop'	ínjè	ìnjà	ìnjà-y <sup>n</sup>
'shut (door)'	ímbó-	bà:ndà	bà:ndà-y <sup>n</sup>
'sleep'	nó:yè	nò:yò	nò:yà-y <sup>n</sup>

d. trisyllabic

'shake'	yígírè	yìgìrò	yìgìrà-y <sup>n</sup>
'shatter'	tébá-gè	tèbà-gà	tèbà-gá-y <sup>n</sup>

Imperatives of verbs with final high vowels are in (xx2). The tone melodies are the same as for final-nonhigh-vowel verbs. Verbs in (xx2a) with an *a*-vowel in the penult have final *a* in the singular-addressee imperative. This is consistent with the **A/O-stem** as in imperatives of the final-nonhigh-vowel class, though it could also be taken as the **A-stem**. Verbs in (xx2b) with a nonlow vowel in the penult have final *u* (**U-stem**) in the singular-addressee imperative. For both subsets in (xx2), the plural-addressee imperative is formed in the same way as with final-nonhigh-vowel verbs.

(xx2) Imperative of final-high-vowel verbs

gloss	Perf 3Sg	Sg Imprt	Pl Imprt
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a. *a*-vowel in penult (A/O-stem)

{H}-toned singular imperative, prosodically light

'do'	kán	káná	kànà-y <sup>n</sup>
'speak'	dám	dámá	dàmà-y <sup>n</sup>

{L}-toned singular imperative, prosodically heavy

'sit'	dá:y <sup>n</sup>	dà:y <sup>n</sup> à	dà:y <sup>n</sup> à-y <sup>n</sup>
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'feed'      *ɲá:-mì*      *ɲà:-mà*      *ɲà:mà-y<sup>n</sup>*

b. nonlow vowel in penult (U-stem)

*{L}-toned singular imperative, prosodically heavy*

'look'      *sé:mì*      *sè:mù*      *sè:mà-y<sup>n</sup>*  
 'take down'      *sígó-mì*      *sìgò-mù*      *sìgò-mà-y<sup>n</sup>*

'Come' and 'bring' are treated like final-high-vowel verbs in the form of the singular-addressee imperative, which ends in *u*. These forms also have irregular tones, {HL} tone in the singular and {LHL} in the plural.

(xx3) Imperative of 'come' and 'bring'

gloss	Perf 3Sg	Sg Imprt	Pl Imprt
'come'	<i>égé</i>	<i>égù</i>	<i>ègá-y<sup>n</sup></i>
'bring'	<i>sóngé</i>	<i>sóngù</i>	<i>sòngá-y<sup>n</sup></i>

Imperatives of 'go' and 'come' may combine with imperatives of another verb. Both verbs are imperative in form (xx4).

- (xx4) a. *àndà*      *ɲá:*  
 go.Imprt      eat.Imprt  
 'Go-Sg eat!'  
 [plural: *àndà-y<sup>n</sup> ɲà:-y<sup>n</sup>*]
- b. *àndá*      *bì-yó*  
 go.Imprt      lie.down-MP.Imprt  
 'Go-Sg (there) and go to bed!'
- c. *égú*      *ɲà:*      *ɲá:*  
 come.Imprt      meal      eat.Imprt  
 'Come-Sg eat!' (*égù*)  
 [plural: *ègá-y<sup>n</sup> ɲá: ɲà:-y<sup>n</sup>*]
- d. *égú*      *bì-yó*  
 come.Imprt      lie.down-MP.Imprt  
 'Come-Sg and go to bed!'  
 [plural: *ègá-y<sup>n</sup> biyà-y<sup>n</sup>*]

*The syntactic treatment of subject and object in imperatives is described in §11.1.1.3.*



### 10.7.1.2 Prohibitive (A-stem plus *-ndà*, plural *-ndé-ỳ<sup>n</sup>*)

For all verbs, the prohibitive ('don't go!') is formed from the **A-stem**, like the plural-addressee imperative. The stem is **{L}-toned**. The prohibitive suffix is *-ndà*, and the suffix combination for plural addressee is *-ndé-ỳ<sup>n</sup>*, ending in the same plural-addressee suffix *-ỳ<sup>n</sup>* seen above in the (positive) imperative. *-ndà* resembles the stative negative suffix *-ndá*, and plural *-ndé-ỳ<sup>n</sup>* resembles the third-person hortative negative *-ndè-y<sup>n</sup> ~ -ndé-y<sup>n</sup> ~ -ndé-ỳ<sup>n</sup>* (§10.7.3.2).

Although there is no difference between verbs with final nonhigh and high vowels, I follow the usual division for purposes of presentation.

#### (xx1) Prohibitive of final-nonhigh-vowel verbs

gloss	Perf 3Sg	Sg Prohib	Pl Prohib
a. monosyllabic			
<i>Cv</i>			
'say'	<i>né</i>	<i>nà-ndà</i>	<i>nà-ndé-ỳ<sup>n</sup></i>
-ATR			
'drink'	<i>né:</i>	<i>nà:-ndà</i>	<i>nà:-ndé-ỳ<sup>n</sup></i>
'eat'	<i>né:</i>	<i>jà:-ndà</i>	<i>jà:-ndé-ỳ<sup>n</sup></i>
'go in'	<i>nwé:</i>	<i>nwà:-ndà</i>	<i>nwà:-ndé-ỳ<sup>n</sup></i>
+ATR			
'go out'	<i>gwé:</i>	<i>gwà:-ndà</i>	<i>gwà:-ndé-ỳ<sup>n</sup></i>
'draw water'	<i>wwé:</i>	<i>wwà:-ndà</i>	<i>wwà:-ndé-ỳ<sup>n</sup></i>
b. bisyllabic			
'build'	<i>símé</i>	<i>sìmà-ndà</i>	<i>sìmà-ndé-ỳ<sup>n</sup></i>
'go down'	<i>sígé</i>	<i>sìgà-ndà</i>	<i>sìgà-ndé-ỳ<sup>n</sup></i>
'shave'	<i>káyé</i>	<i>kàyà-ndà</i>	<i>kàyà-ndé-ỳ<sup>n</sup></i>
'pull'	<i>gímbé</i>	<i>gìmbà-ndà</i>	<i>gìmbà-ndé-ỳ<sup>n</sup></i>
'jump'	<i>tómbé</i>	<i>tòmbà-ndà</i>	<i>tòmbà-ndé-ỳ<sup>n</sup></i>
c. trisyllabic			
'shake'	<i>yígìrè</i>	<i>yìgìrà-ndà</i>	<i>yìgìrà-ndé-ỳ<sup>n</sup></i>
'shatter'	<i>tébá-gè</i>	<i>tèbà-gà-ndà</i>	<i>tèbà-gà-ndé-ỳ<sup>n</sup></i>

Prohibitives of verbs with final high vowels are in (xx2).

(xx2) Prohibitive of final-high-vowel verbs

gloss	Perf 3Sg	Sg Prohib	Pl Prohib
a. <i>a</i> -vowel in penult			
'sit'	<i>dá:y<sup>n</sup></i>	<i>dà:y<sup>n</sup>à-ndà</i>	<i>dà:y<sup>n</sup>à-ndé-y<sup>n</sup></i>
'do'	<i>kán</i>	<i>kànà-ndà</i> (~ <i>kà:-ndà</i> )	<i>kànà-ndé-y<sup>n</sup></i> (~ <i>kà:-ndé-y<sup>n</sup></i> )
'speak'	<i>dám</i>	<i>dàmà-ndà</i>	<i>dàmà-ndé-y<sup>n</sup></i>
'feed'	<i>jà:-mì</i>	<i>jà:-mà-ndà</i>	<i>jà:mà-ndé-y<sup>n</sup></i>
b. nonlow vowel in penult			
'look'	<i>sé:mì</i>	<i>sè:mà-ndà</i>	<i>sè:mà-ndé-y<sup>n</sup></i>
'take down'	<i>sígó-mì</i>	<i>sìgò-mà-ndà</i>	<i>sìgò-mà-ndé-y<sup>n</sup></i>

For 'do' in (xx2a), the optional (but frequent) contracted pronunciation *kà:-ndà* 'don't do!' is homophonous with the (positive) imperative of *ká:-ndè* 'do (sth) for (sb)'.

Prohibitives of 'come' and 'bring' are in (xx3).

(xx3) Prohibitive of 'come' and 'bring'

gloss	Perf 3Sg	Sg Prohib	Pl Prohib
'come'	<i>é gé</i>	<i>ègà-ndà</i>	<i>ègà-ndé-y<sup>n</sup></i>
'bring'	<i>sóngé</i>	<i>sòngà-ndà</i>	<i>sòngà-ndé-y<sup>n</sup></i>

The syntax is the same as that of the positive imperative regarding accusative case-marking and anaphoric objects.

- (xx4) a. *mì-ŋ*      *sè:mà-ndà*  
 1Sg-Acc    look.at-Prohib  
 'Don't look-2Sg at me!'
- b. *[[á*      *kǒ:]*      *w<sup>n</sup>]*      *sè:mà-ndà*  
 [[2SgP    head]    Loc]    look.at.Prohib  
 'Don't look at yourself!'

## 10.7.2 Hortatives

### 10.7.2.1 Hortative (E/I-stem, singular *-yà*, plural *-y<sup>n</sup>-yà*, indefinite *-y<sup>n</sup>*)

Hortatives of the 'let's go!' type, i.e. with proposed first person inclusive agent, require an overt 1Pl subject pronominal *ɛ̃*. In the case of 'go', there is a distinction between singular-addressee (NOT singular-subject) and plural-addressee forms. The singular-addressee hortative ends in *-yà* (xx1a) after a stem-final *i* that is readily syncopated (xx1a). The plural-addressee hortative of 'go' has the E-stem of the verb, a morpheme *-y<sup>n</sup>-* (identical to the plural-addressee suffix in imperatives and prohibitives), and finally *-yà* (xx1b). For 'go', there is also an indefinite-number hortative with {H}-toned E-stem and suffix *-y<sup>n</sup>* (xx1c).

- (xx1) a. *ɛ̃* *ɲ-â:nd(i)-yà*  
 1PlS Epen-go-Hort  
 'Let's (you-Sg and me) go!'
- b. *ɛ̃* *ɲ-â:ndè-y<sup>n</sup>-yà*  
 1PlS Epen-go-ImprtPl-Hort  
 'Let's (you-Pl and me) go!'
- c. *ɛ̃* *ɲ-â:ndé-y<sup>n</sup>*  
 1PlS Epen-go-ImprtPl  
 'Let's go!' (addressee number open)

For verbs other than 'go' I was able to elicit only one hortative, structurally parallel to the plural-addressee 'let's go!' type (xx1b). However, in quoted hortatives the construction in (xx1c) is regular regardless of addressee number (§17.1.2.2).

In these hortatives, the verb is in the **E/I-stem**, i.e. the E-stem for final-nonhigh-vowel verbs and in the I-stem for the final-high-vowel class. The verb has {HL} **melody** before the suffix complex *-y<sup>n</sup>-yà*, and this melody is realized as H.H.L on a trisyllabic stem. Examples for final-nonhigh-vowel verbs, showing the E-stem, are in (xx2).

#### (xx2) Hortative of final-nonhigh-vowel verbs

gloss	Perf 3Sg	Hortative
a. monosyllabic		
-ATR		
'drink'	<i>né:</i>	<i>ɛ̃ né:-y<sup>n</sup>-yà</i>

'eat'	<i>né:</i>	<i>ɛ̃ né:-y<sup>n</sup>-yà</i>
'go in'	<i>nwé:</i>	<i>ɛ̃ nwé:-y<sup>n</sup>-yà</i>
+ATR		
'go out'	<i>gwé:</i>	<i>ɛ̃ gwé:-y<sup>n</sup>-yà</i>
'draw water'	<i>wwé:</i>	<i>ɛ̃ wwé:-y<sup>n</sup>-yà</i>
b. bisyllabic		
'build'	<i>símé</i>	<i>ɛ̃ símè-y<sup>n</sup>-yà</i>
'go down'	<i>sígé</i>	<i>ɛ̃ sígè-y<sup>n</sup>-yà</i>
c. trisyllabic		
'shake'	<i>yígírè</i>	<i>ɛ̃ yígírè-y<sup>n</sup>-yà</i>

Hortatives of verbs with final high vowels, based on the I-stem, are in (xx3).

(xx3) Hortative of final-high-vowel verbs

gloss	Perf 3Sg	Hortative
'sit'	<i>dá:y<sup>n</sup></i>	<i>ɛ̃ dá:y<sup>n</sup>-yà</i>
'do'	<i>kán</i>	<i>ɛ̃ kánì-y<sup>n</sup>-yà</i>
'speak'	<i>dám</i>	<i>ɛ̃ dāmì-y<sup>n</sup>-yà</i>
'feed'	<i>ná:-mì</i>	<i>ɛ̃ ná:-mì-y<sup>n</sup>-yà</i>
'look'	<i>sé:mì</i>	<i>ɛ̃ sé:mì-y<sup>n</sup>-yà</i>
'take down'	<i>sígó-mì</i>	<i>ɛ̃ sígó-mì-y<sup>n</sup>-yà</i>

Hortatives of 'come' and 'bring' are in (xx4). They follow the pattern of final-nonhigh-vowel verbs.

(xx4) Hortative of 'come' and 'bring'

gloss	Perf 3Sg	Hort
'come'	<i>égé</i>	<i>ɛ̃ yégè-y<sup>n</sup>-yà</i>
'bring'	<i>sóngé</i>	<i>ɛ̃ sòngè-y<sup>n</sup>-yà</i>

#### 10.7.2.2 Hortative negative (A-stem plus *-ndé-y<sup>n</sup>-yà*)

A hortative negative can be formed by adding hortative *-yà* to the form otherwise used as the plural-addressee prohibitive, i.e. with *-ndé-y<sup>n</sup>*. This form is used for singular as well as plural addressee. An expected singular-addressee *#-ndà-yà* was rejected by my assistant.

- (xx1) *ɲ ná:ndá-ndé-ý<sup>n</sup>-yà*  
 1PlS go-Hort  
 'Let's (you-Sg/Pl and me) not go!'

### 10.7.2.3 Allative hortative 'let's go VP!' (A-stem, *-máý<sup>n</sup>*)

Suffix *-máý<sup>n</sup>* added to the {H}-toned A-stem produces a hortative that explicitly includes motion. There is no distinction of addressee number.

- (xx1) a. *ɲ ná:-máý<sup>n</sup>*  
 1PlS eat.meal-Allative.Hort  
 'Let's go eat!'
- b. *móbêl ɲ túmbúgá-máý<sup>n</sup>*  
 vehicle 1PlS push-Allative.Hort  
 'Let's go push the car!'

## 10.7.3 Non-first-person hortatives

### 10.7.3.1 Third person hortative (E/I-stem plus *-ý<sup>n</sup>*, I-stem plus *-yè ~ -yè*)

A pair of special verb forms are used for reported imperatives ('your father says for you to sweep', 'they told me to sweep') and in wishes ('may God make you arrive safely!').

For **1st/2nd person subject**, the regular subject proclitics are present, and the verb takes the **E/I-stem** with {L} stem melody before suffix *-y<sup>n</sup>*.

- (xx1) a. *ɲ gwè-y<sup>n</sup> wà*  
 1SgS go.out-3Hort Quot  
 '(Someone) said for me to leave.'
- b. *ɲ gwè-y<sup>n</sup> né-Ø*  
 1SgS go.out-3Hort say.Perf-3SgS  
 'He/She told me to leave.'
- c. *ɲ gwè-ý<sup>n</sup> nè-l-Ø*  
 1SgS go.out-3Hort say-PerfNeg-3SgS  
 'He/She didn't tell me to leave.'
- d. *ɲ gwè-y<sup>n</sup>→<sup>†</sup>*  
 1SgS go.out-3Hort.Q

'(Did you say) for me to leave?'

For **third person subject** (including 'God' in wishes), the verb takes the **I-stem** with {LH} melody. The suffix is *-yè* ~ *-yè* after stem-final *i* (**I-stem**) for final-nonhigh-vowel verbs (xx2bc). The choice of vowel depends on the ATR-harmonic class of the verb. For final-high-vowel verbs, the stem-final *i* is **lengthened** with falling tone (I transcribe ...*Cf-i*) (xx2d). The verb does not agree in number with the subject, and an overt subject NP or third person pronoun is optional. (xx2ab) contrast the 1st/2nd and third person forms for the same verb ('come'). Further examples of third-person forms are (xx2cd). In (xx2bc), *ègí-yè* has phonetic realizations like [èg:jè].

- (xx2) a. *ń* *y-ègè-y<sup>n</sup>* *wà*  
 1SgS Epen-come-3Hort Quot  
 '(Someone) said for me to come.'
- b. *sěydú / Ø* *ègí-yè* *wà*  
 S / Ø come-3Hort Quot  
 '(Someone) said for Seydou / for him to come.'
- c. *[è* *wê:-gè]* *ègí-yè* *wà*  
 [Def child-Pl] come-3Hort Quot  
 '(Someone) said for the children to come.'
- d. *àmànà* *[hè:là ní]* *ó-<sup>n</sup>* *tùbyà-mí-y<sup>n</sup>*  
 God [peace Inst] 2Sg-Acc arrive-Caus-3Hort  
 'May God cause you-Sg to arrive safely!'  
 (said to a departing traveler)

Additional forms for stems with final nonhigh vowels are in (xx3). The phonetic distinction between *ńy<sup>n</sup>-y<sup>n</sup>è* ('say') and *ńy<sup>n</sup>-y<sup>n</sup>è* ('drink') is difficult to hear but my assistant claims they are distinct.

(xx3) Third Person hortative (final-nonhigh-vowel class)

	Perf 3Sg	3Hort		gloss
		1st/2nd	3rd	
a. monosyllabic				
<i>Cv</i>				
<i>né</i>	<i>né-y<sup>n</sup></i>	<i>ńy<sup>n</sup>-y<sup>n</sup>è</i>		'say'
+ATR				
<i>gwé:</i>	<i>gwè:-y<sup>n</sup></i>	<i>gwĩ:-yè</i>		'go out'
-ATR				

<i>dwé:</i>	<i>dwè:-y<sup>n</sup></i>	<i>dwí:-yè</i>	'pound'
<i>né:</i>	<i>nè:-y<sup>n</sup></i>	<i>ní:-y<sup>n</sup>è</i>	'eat (meal)'
<i>né:</i>	<i>nè:-y<sup>n</sup></i>	<i>ní:-y<sup>n</sup>è</i>	'drink'

b. bisyllabic

+ATR

<i>dágé</i>	<i>dàgè-y<sup>n</sup></i>	<i>dàgí-yè</i>	'lay out'
<i>bí-yé</i>	<i>bì-yè-y<sup>n</sup></i>	<i>bì-yí-yè</i>	'lie down'
<i>ná:lè</i>	<i>nà:lè-y<sup>n</sup></i>	<i>nà:l-yè</i>	'think'

-ATR

<i>yébé</i>	<i>yèbè-y<sup>n</sup></i>	<i>yèbí-yè</i>	'dance'
<i>sógé</i>	<i>sògè-y<sup>n</sup></i>	<i>sògí-yè</i>	'buy'
<i>dé:ndè</i>	<i>dè:ndè-y<sup>n</sup></i>	<i>dè:ndí-yè</i>	'leave'

c. trisyllabic

<i>yígí-rè</i>	<i>dè:ndè-y<sup>n</sup></i>	<i>yìgírí-yè</i>	'shake'
<i>tébá-gè</i>	<i>tèbà-gè-y<sup>n</sup></i>	<i>tèbà-bí-yè</i>	'shatter'

Corresponding forms from verbs with final high vowels are in (xx4).

(xx4) Third-Person hortative (final-high-vowel class)

Perf 3Sg	3Hort 1st/2nd	3rd	gloss
<i>dám</i>	<i>dàmí-y<sup>n</sup></i>	<i>dámí-ì</i>	'speak'
<i>kán</i>	<i>kàní-y<sup>n</sup></i>	<i>kàní-ì</i>	'do'
<i>dá:y<sup>n</sup>ì</i>	<i>dà:y<sup>n</sup>ì-y<sup>n</sup></i>	<i>dà:y<sup>n</sup>í-ì</i>	'sit'
<i>sé:mì</i>	<i>sè:mì-y<sup>n</sup></i>	<i>sè:mí-ì</i>	'look'
<i>jà:-mì</i>	<i>jà:-mì-y<sup>n</sup></i>	<i>jà:-mí-ì</i>	'feed'

'Come' and 'bring' are treated as final-nonhigh-vowel verbs for this purpose.

(xx5) Third-Person hortative ('come' and 'bring')

Perf 3Sg	3Hort 1st/2nd	3rd	gloss
<i>égé</i>	<i>(y)ègè-y<sup>n</sup></i>	<i>ègí-yè</i>	'come'
<i>sónge</i>	<i>sònge-y<sup>n</sup></i>	<i>sòngí-yè</i>	'bring'

In certain high-frequency, rather lexicalized wishes with 'God' as (usually unstated) agent, the entire verb including *-yè* becomes {H}-toned. See (xx3) and

(xx4a,c) in §19.5 ('May [God] show (us/you) next year!'), with *tá:r(í)-yé* for the usual *tà:rí-yè* 'may (he/she) show!'

### 10.7.3.2 Third-person hortative negative (*-nde-y<sup>n</sup>*)

The negative of the third-person hortative is *-nde-y<sup>n</sup>* for all subject categories. It consists of third-person hortative *-y<sup>n</sup>* and prohibitive *-ndà*. Except for being conjugated for subject, it is partially identical to the plural-addressee prohibitive form *-ndé-y<sup>n</sup>*. The paradigm for 'come' is (xx1), with quotative *wà* included.

(xx1) '(he) told \_\_\_ not to come'

1Sg	<i>ń y-ègà-ndè-y<sup>n</sup> wà</i>
1Pl	<i>ń y-égá-ndé-y<sup>n</sup> wá</i>
2Sg	<i>á y-ègà-ndè-y<sup>n</sup> wà</i>
2Pl	<i>à y-égá-ndé-y<sup>n</sup> wá</i>
3Sg	<i>ègà-ndé-y<sup>n</sup> wà</i>
3Pl	<i>ègà-ndé-y<sup>n</sup> wa</i>



## 11 Clause, VP, and predicate structure

### 11.1 Clausal constituents

As in most Dogon languages, linear order is SOV, where S and O are nonpronominal NPs. Setting adverbs like 'yesterday' often precede the subject NP. Other adverbials that do not establish settings usually follow the object.

- (xx1) a. *yà:gú wè:-gé gà:<sup>n</sup> sém-yè*  
 yesterday child-Pl cat slaughter.Perf-3PlS  
 'The kids slaughtered a cat yesterday.' (*yà:gú*)
- b. *[è óy<sup>n</sup>] [[wótórò kò] w<sup>n</sup>] tà:mmó dù:ndó*  
 [Def waterjar] [[cart on] Loc] gently lay.Imprt  
 'Lay-2Sg the waterjar gently on the cart.' (*tà:mmó*)

Pronouns gravitate toward the verb. This is obvious in the case of 1st/2nd preverbal proclitic subject pronominals (also 3Pl when proclitic in subordinated clauses). However, pronominal objects and PPs are typically placed as close to the verb as possible. Compare (xx2), where the object is now immediately preverbal, with (xx1b).

- (xx2) *[[wótórò kò] w<sup>n</sup>] tà:mmó mì-ŋ dú:ndè-Ø*  
 [[cart on] Loc] gently 1Sg-Acc lay.Perf-3SgS  
 'He/She laid me gently on the cart.'

#### 11.1.1 Subjects

##### 11.1.1.1 Subjects in indicative main clauses

Nonpronominal subject NPs are clause-initial, except for setting adverbs. Third person subject NPs require agreement in the verb, though 3Sg is the zero category. 1st/2nd person subjects, barring focalization, are expressed by a preverbal proclitics (1Pl, 2Pl).

Subjects are the normal antecedents for reflexive objects. In Penange these are of the type 'my head', see §18.1.1.

#### 11.1.1.2 Subjects in relative and complement clauses

Subjecthood is relevant to some biclausal constructions, which often require coindexation of the subject of one clause with another NP (perhaps also subject) in the other clause. For same-subject perfective chains see §15.2.1.5. For verbal-noun complements of control-type verbs see e.g. §17.4.8 ('begin VPing').

In nonsubject relatives, 3Sg subject is expressed by postverbal enclitic *nà* instead of by zero, and 3Pl subject is expressed by a proclitic (§14.3). Subject relatives lack pronominal-subject agreement.

#### 11.1.1.3 Subjects and addressees of imperative and hortative verbs

Although the second person agent of an imperative (§10.7.1.1) is normally unexpressed, in some ways it functions syntactically as a subject. A direct object has accusative marking under the same conditions as in indicative clauses (xx4a). The second person subject can bind anaphoric reflexives (xx4b), which are of the 'your head' type rather than transpersonal reflexive pronouns of the sort found in Tomo Kan and Togo Kan.

- (xx4) a. *mì-ŋ*      *sè:mù*  
           1Sg-Acc    look.at.Imprt  
           'Look-2Sg at me!'
- b. *[[á*      *kõ:]*      *w<sup>n</sup>]*      *sè:mù*  
           [2SgP    head]    Acc]    look.at.Imprt  
           'Look at yourself!'

Ordinary hortatives ('let's go!') are more obviously main-clause-like. In addition to accusative objects and 'head' reflexives, the 1Pl subject *ŋ* is overt (§10.7.2.1).

Both imperatives and hortatives mark addressee-number agreement. Therefore hortatives have both an overt 1Pl subject and either singular or plural addressee marking. For imperatives, addressee marking converges with subjec.

#### 11.1.1.4 Subjects of lexicalized subject-verb combinations

There are a few subject-verb collocations where either the subject NP or the verb has little independent semantic content beyond that supplied by the verb, or is unattested elsewhere.

(xx1)	collocation	gloss	related foms
a.	<i>dógó dógé</i> <i>yò: yé:</i>	'night fall' 'day break'	<i>dógó</i> 'night' (none)
b.	<i>kùmà:ngà (w)wé:</i>	'rain fall'	<i>kùmà:ngà</i> 'rain' cf. <i>wò: (w)wé:-</i> 'weep'

### 11.1.2 Simple transitives

#### 11.1.2.1 Direct objects of simple transitives

Subjects and objects are clearly distinguished. Subjects normally precede objects if both are nonpronominal. Accusative pronouns are clearly distinguished from the clitics and (3Pl) suffixes that express pronominal-subject agreement in verbs.

On the other hand, there is no sharp difference between direct objects and dative-like indirect objects. This is especially noticeable with ditransitive verbs like 'give'. Pronominal and human (direct or indirect) objects can be marked by postposition-like accusative *-ŋ ~ -w<sup>n</sup>* (§6.7) following the NP.

Perception verbs like *málgè* 'see' and *núndé* 'hear' are ordinary transitives with subjects and objects like those of canonical transitives.

Many activity verbs like 'dance' and 'cough' whose objects are not clearly separable from the activities themselves are marginally transitive, since they often occur with cognate nominals that function as objects ('dance a dance', 'cough a cough'). See §11.1.2.5-6 below.

#### 11.1.2.2 *kán(i)* 'do' with nouns and unconjugatable words

*kán(i)* 'do' can combine with nouns (especially borrowings) or semi-onomatopoeic elements ('hiccup', 'bellow') that cannot otherwise function as predicates. This construction is common in Penange. Examples are given in (xx1). In some cases the noun-like element does not occur except in this collocation.

(xx1)	<i>bàrù</i> <i>bàrù kán</i>	'discussion, meeting' 'hold a discussion or meeting'
	<i>bèlègè</i> <i>bèlègè kán</i>	'noise' 'make noise'

<i>dí:dí</i>	'line (e.g. in sand)'
<i>dí:dí kán</i>	'draw lines'
<i>hó:lá:rê</i>	'trust(n), confidence'
<i>hó:lí kán</i>	'trust (sb)'
<i>kálbà</i>	'act of entrusting'
<i>kálbà kán</i>	'entrust (sb/sth, to sb)'
<i>lâ:m</i>	'command(n), political authority'
<i>lâ:m kán</i>	'govern, be in authority'
<i>mùy<sup>n</sup></i>	'patience'
<i>mùy<sup>n</sup> kán</i>	'be patient, wait patiently'
<i>hár kán</i>	'obstruct, prevent'
<i>jòngù-jòngù kán</i>	'(quadruped) trot'
<i>ká:mnó</i>	'old (person)'
<i>ká:mnó kán</i>	'become old, age(v)'
<i>káy<sup>n</sup></i>	'work(n)'
<i>káy<sup>n</sup> kán</i>	'work(v), do work'
<i>kòndò</i>	'failure, inability'
<i>kòndò kán</i>	'fail'
<i>sábà</i>	'writing(n)'
<i>sábà kán</i>	'write'
<i>séndí</i>	'prayer'
<i>séndí kán</i>	'pray, perform a prayer'

#### 11.1.2.3 *né* 'say' and factitive *ná-m-* with adverbials and onomatopoeias

An opposition of intransitive (mediopassive) *né* 'say' and its causative *ná-m* is observed in (xx1) after an expressive adverbial, and in (xx2) after an onomatopoeic form.

- (xx1) a. *séydù*    *dòn-nà*    *bóngów<sup>n</sup>*    *ná-m-Ø*  
 Seydou    mouth-3SgP    puffed.up    say-Caus-3SgS  
 'Seydou puffed up his mouth (=cheeks, with air).'

- b. *dòn-nà*                      *bóngów<sup>n</sup>*                      *né-Ø*  
mouth-3SgP                      puffed.up                      make.Perf-3SgS  
'His/her mouth (= cheeks) became puffed up.'
- (xx2) a. *bũ→m*                      *né-Ø*  
vroom                      say.Perf-3SgS  
'It (e.g. motor) went vroom (= was revved up).'
- b. *bũ→m*                      *ná-m-Ø*  
vroom                      say-Caus.Perf-3SgS  
'He/She make it (= motor) go vroom (= revved it up).'

#### 11.1.2.4 Collocations with low-referentiality objects

(xx1) presents somewhat lexicalized verb-object collocations.

- (xx1) *mì: dú-yé*                      'bathe'                      *mì: 'water', dú-yé 'carry'*  
*tébé bálé*                      'applaud'                      *bálé 'beat (tomtom)'*  
*sò:njì swé:*                      'spit'                      *sò:njì 'saliva'*  
*bàrù dá:-ndè*                      'organize a debate'                      *bàrù 'meeting', dá:-ndè 'cause to sit'*  
  
*góróló kómé*                      'snore'                      *góróló 'snoring', kómé 'shout'*  
*dábál-yè túlé*                      'tell a story'                      *dábál-yè 'tale', túlé 'put'*  
*píjọ́ kín*                      'get pregnant'                      *píjọ́ 'state of pregnancy', kín(i) 'scoop, take (liquid, grain) by scooping'*

Cognate nominals may also be low in referentiality, see below.

#### 11.1.2.5 Forms of cognate nominals associated with verbs

Examples of collocations involving a verb and a cognate nominal are in (xx1). They include many bodily-function phrases.

The nominals are of two main phonological types. One, which includes all trisyllabics and some bisyllabics, ends in a short high vowel, most often *u* in bimoraic *CvCu* and *i* in heavier stems (*CvCCi*, *Cv:Ci*, *CvCvCi*). The other, which includes all monosyllabics and some short-voweled monosyllabics, ends in a mid-height vowel, which for bisyllabics is rounded {*o ɔ*} and for

monosyllabics is rounded if the perfective has *w*, otherwise it is unrounded (*gèːˢ* 'fart').

(xx1)	combination	gloss	comment
a.	<i>Cvː</i>		
	<i>Cvː</i> with mid-height vowel		
	<i>gèːˢ gèːˢ</i>	'fart'	
	<i>wàː wéː</i>	'weep (loudly)'	
	<i>sóː swéː</i>	'vomit'	
	<i>nòː nwéː</i>	'sing (a song)'	
	<i>dòː dwéː</i>	'pound (grain, in mortar)'	
	<i>Cvː</i> with high vowel		
	<i>kùː kwéː</i>	'sew' (but collocation uncommon)	
b.	<i>CvCv</i>		
	<i>CvCu</i>		
	<i>yèbù yébé</i>	'dance (a dance)'	ATR shift
	<i>nùgù núgé</i>	'count (1, 2, 3, 4, ...)'	
	<i>nùjù nújé</i>	'groan, moan'	
	<i>sùjù sújé</i>	'stutter'	
	<i>sàrù sáré</i>	'ask a question'	
	<i>hégu hégé</i>	'have hiccups'	
	<i>tùmù tímé</i>	'take a measurement'	
	apocopated <i>Cvy</i>		
	<i>jòyˢ jáyˢ</i>	'have a fight'	vowel shift
	<i>tòm tómé</i>	'slash earth (to plant)'	vowel shift
	<i>CvCv</i> with final mid-height vowel		
	<i>íjó íjé</i>	'sneeze'	
	<i>gìyò gíyé</i>	'harvest (with knife)'	
	<i>mèrò méré</i>	'have fun'	
	<i>búgò búgé</i>	'(dog) bark'	
	<i>dùgò dúgé</i>	'insult'	
	<i>kòmò kómé</i>	'give out a shout'	
	<i>kùbò kúbé</i>	'do farm work, work in fields'	
	<i>sùgò súgé</i>	'defecate'	
c.	<i>CvCCv</i>		
	<i>CvCCu</i>		
	<i>jòngù jónge</i>	'practice healing'	ATR shift
	<i>nèllù néllé</i>	'rest, take a break'	ATR shift
	<i>CvCCi</i>		
	<i>mándí mándé</i>	'laugh'	vowel shift
	<i>CvCCv</i> with final mid-height vowel		
	<i>sàmbò sámbe</i>	'do the second round of weeding'	

d. *Cv:Cv and Cv:CCv*

*Cv:Cu*

*nà:lù ná:lè* 'think'

*Cv:CCi*

*mò:ɲì mánjé* 'urinate'

other *Cv:(C)Cv*

[none]

vowel shift

e. trisyllabic

*CvCvCi including CvCvy*

*kòròdì kóródè* 'cough, emit a cough'

apocopated *CvCvC*

*àmbày ámbáyè* 'have a dream'

*nèndìl néndílè* 'breathe'

other *CvCvCv*

[none]

Minor discrepancies between the nonfinal vowels of the noun and verb are *jòy* 'fight', *mò:ɲì mánjé*, and *yèbù yébé* 'dance a dance' (ATR switch).

#### 11.1.2.6 Grammatical status of cognate nominal

Cognate nominal in such collocations include some that denote a typical bounded activity unit (a song, a dance) and others that are more generic and indefinite ('do farm work'). The cognate nominal usually occurs in bare form but can be made definite, quantified over, or adjectivally modified if the semantics permit.

- (xx1) a. *mèrò-gè* *méré-Ø*  
amusement-Pl have.fun.Perf-3SgS  
'He/She engaged in amusements, had lots of fun'
- b. *[ɲjò* *bàgàlà]* *íjé-Ø*  
[sneeze(n) big] sneeze.Perf-3SgS  
'He/She let out a huge sneeze (=sneezed loudly).'

My assistant strongly preferred separate expression of numerical quantification, i.e. 'he sneezed [three times]' (with *sígó-ɲgé* 'times') rather than 'he sneezed [three sneezes]', though he accepted the latter as grammatical.

### 11.1.3 Clauses with additional arguments and adjuncts

#### 11.1.3.1 Syntax of expressive adverbials (EAs)

An expressive adverbial like *bàjé→* 'straight, direct (line or trajectory)' has the same range of predicative forms as in many other Dogon languages. Static quality is expressed by *bò* 'be (somewhere)' or by its negation *wól* 'not be (somewhere)', and transition to the state is expressed by a positive or negative form of the regular verb *bílè* 'become'.

- (xx1) a. *bàjé→*      *bò-Ø*  
           straight      be-3SgS  
           'It (path, stick) is straight.'
- b. *bàjé→*      *wól-Ø*  
           straight      not.be-3SgS  
           'It is not straight.'
- c. *bàjé→*      *bílè-Ø*  
           straight      become.Perf-3SgS  
           'It became straight.'

In (xx1c), the final perfective verb is heard with low pitch, perhaps as an intonational effect (highlighting the final high pitch of the adverbial).

Some EAs and onomatopoeias can be conjugated with *né* 'say' or its causative *ná-m*, see §11.1.2.3.

As a nonpredicative adverbial phrase, my assistant rejected *bàjé→* in the sense '(going) straight, directly (to a place)' in favor of verb chains whose first member is a conjugated form of the verb *bàjé* 'be/go straight' (xx2).

- (xx2) a. [*dùgù*      *bà*]      [*ɲ*      *bàjè*]      *ɲ*      *ɲ-ǎ:ndè*  
           [village      Loc]      [1PIS      be.straight]      go.Perf      Epen-go.Perf  
           'We went straight to the village.'
- b. [*dùgù*      *bá*]      [*bàjè*      *nà*]      *ándè-Ø*  
           [village      Loc]      [be.straight.Perf      3SgS]      go.Perf-3SgS  
           'He/She went straight to the village.'
- c. [*dùgù*      *bá*]      *bàj-jè*      *ánd-yè*  
           [village      Loc]      be.straight.Perf-3PIS      go.Perf-3PIS  
           'They went straight to the village.'



From *jwá*→ 'a lot, much' an inchoative *jwá*→ *né* 'become abundant' is attested, with the 'say' verb as auxiliary.

Motion verbs like 'go' and 'come' are intransitive and may combine with a locational adverb or adverbial phrase (PP or spatial relative clause).

- Place names are usually not overtly marked with a locative postposition in such clauses but are understood to be adverbial phrases.

- 'Put' verbs take a direct object and a locational expression.

- Verbs like *tábé* 'give' and *tá:rè* 'show' take two direct objects morphologically. Specifically, the indirect object (usually human and often pronominal) is regularly marked by accusative *ŋ* ~ *w<sup>n</sup>*. The direct object is often not case-marked, see 'woman' in (xx1a), but a human pronominal direct object is accusative, see 'me' in (xx1b). This permits an opposition (though a phonetically subtle one) between (xx1b) and (xx1c).

- (xx1) a. *[íní yò:] mì-ŋ tábé-Ø / tá:rè-Ø*  
 [Dem woman] 1Sg-Acc give.Perf-3SgS / show.Perf-3SgS  
 'He gave / showed me this woman.'
- b. *[íní wàlà ŋ] mì-ŋ tábé-Ø / tá:rè-Ø*  
 [Dem man Acc] 1Sg-Acc give.Perf-3SgS / show.Perf-3SgS  
 'He gave / showed me to this man.'
- c. *[íní wàlà] mì-ŋ tábé-Ø / tá:rè-Ø*  
 [Dem man] 1Sg-Acc give.Perf-3SgS / show.Perf-3SgS  
 'He gave / showed this man to me.'

#### 11.1.3.4 Valency of causatives

Causatives can have two or even three object NPs, including the agent of the subordinated clause. In 'cause X to give Y to Z', both X and Z are normally human and are marked with accusative *ŋ*. The theme Y is usually inanimate and lacks accusative marking but is presumably also an object.

- (xx1) *[sé:dù ŋ] [á:mádù ŋ] wálé ŋ tàbá-mì*  
 [Seydou Acc] [Amadou Acc] money 1SgS give-Caus.Perf  
 'I had Seydou give (some/the) money to Amadou.'

#### 11.1.4 Verb Phrase

The category VP is useful in connection with verb(-phrase) chains, where the subject is held constant over the two clauses (§15.2.1.5). It is also useful in verbal nouns, which can function as subjectless VP complements.

### 11.2 'Be', 'become', 'have', and other statives and inchoatives

#### 11.2.1 'It is' clitics

##### 11.2.1.1 Positive 'it is' clitic =yo ~ =ye ~ =(w)o

The 'it is' clitic, used in identificational predicates ('it's me', 'it's s bird'), is also used to focalize a nonpredicative constituent, see §13.1.1.4.

The clitic has several variants, all syllabic. After certain WH-interrogative words it is =ye (xx1a). After nouns, pronouns, and demonstratives the most

common variant is *=yo*, but this varies with *=(w)o*, whose *w* is faint and perhaps epenthetic. The clitic is H-toned after {H} and {L}-toned words, L-toned after {HL}, {LH}, and {LHL}-toned words. After the plural or a lexically /L/-toned noun, the H-tone that usually appears on plural *-gè* instead appears on the clitic, see 'they are cows' at the bottom of (xx1b). In (xx1b-d), the *=yo* that is shown is usually interchangeable with *=(w)o*.

(xx1) 'It is' (allomorphs *=ye* and *=yo*).

a. interrogative

<i>á: = yé</i>	'who is it?'
<i>àngà = yé</i>	'it is how many?'
<i>njé: = yè</i>	'what is it?' (< <i>njé</i> )

b. with noun

<i>/H/-toned</i>	
<i>úná = yó</i>	'it's a goat'
<i>/L/-toned</i>	
<i>dèm = yó</i>	'it's a house'
<i>nà: = yó</i>	'it's a cow' (< <i>ná:</i> )
<i>àlà mùnà = yó</i>	'it's a sheep'
<i>yò: = yó</i>	'it's a woman'
<i>/LH/-toned</i>	
<i>nèjjé = yò</i>	'it's a bird'
<i>ṣ̣ b̀̀b̀́ = yò</i>	'it's my father'
<i>/HL/-toned</i>	
<i>kó:tì = yò</i>	'it's a tick' (< <i>kó:tì</i> )
<i>/LHL/-toned</i>	
<i>kìn-wé: = yò</i>	'it's a stone' (< <i>kìn-wé:</i> )
<i>plurals</i>	
<i>nà:-gè = yó</i>	'they are cows' (< <i>nà:-gé</i> )
<i>úná-gé = yó</i>	'they are goats' (< <i>úná-gé</i> )
<i>kó:tí-gè = yò</i>	'they are ticks' (< <i>kó:tí-gè</i> )
<i>nèjjé-gè = yò</i>	'they are birds' (< <i>nèjjé-gè</i> )

c. with pronoun

<i>mí = yó</i>	'it's me'
<i>mbé = (y)ó</i>	'it's us'
<i>ó = yó</i>	'it's you-Sg'
<i>ábé = yó</i>	'it's you-Pl'
<i>ànà = yó</i>	'it's him/her'
<i>ṣ̣ké = yó</i>	'it's them'

d. with personal or place name

*/H/-toned*

<i>sídìbé = yò</i> /L/-toned	'it's Sidibe'
<i>bàmàkò = yó</i> /HL/-toned	'it's Bamako (city)'
<i>á:mádù = yò</i>	'it's Amadou'
<i>sí:dì = yò</i>	'it's Sidi'
<i>há:wà = yò</i>	'it's Hawa'
<i>á:dámà = yò</i>	'it's Adama'
<i>díkò = yò</i>	'it's Dicko'

e. demonstrative  
*ín = yò* 'that's it' (< *ínì*, syncopated)

The topic referent may be expressed a preceding NP or independent pronoun.  
The 'it is' clitic is not conjugated.

(xx2) <i>á:mádù èjjè = yó</i>	'Amadou is a Dogon.'
<i>mí èjjè = yó</i>	'I am a Dogon.'
<i>mbé èjjè-gè = yó</i>	'we are Dogon.'
<i>ó èjjè = yó</i>	'you-Sg are a Dogon.'

#### 11.2.1.2 'It is not' (= *là*)

The negative counterpart of the 'it is' clitic is = *là*. It replaces, rather than being superimposed on, the positive 'it is' clitic.

(xx1) <i>nà: = là</i>	'it's not a cow'
<i>mí èjjè = là</i>	'I am not a Dogon.'
<i>mbé èjjè-gè = là</i>	'we are not Dogon.'
<i>ó èjjè = là</i>	'you-Sg are not a Dogon.'

#### 11.2.2 Existential and locative quasi-verbs and particles

##### 11.2.2.1 Existential proclitic $\varepsilon^n \sim \varepsilon^n$

This proclitic is associated with statives, especially 'be' and 'have' quasi-verbs. It is always immediately preverbal, being separated from verbs only by 1st/2nd person subject pronominals.

The usual form is  $\varepsilon^n$ . Variant  $\varepsilon^n$  occurs in the specific combination  $\varepsilon^n$  *bó-Ø* 'he/she/it is there', where  $\varepsilon$  shifts to +ATR *e* before the +ATR vowel *o*. The nasal element is pronounced as vocalic nasalization in isolation, before the *s* of

the 'have' quasi-verb, and before a vowel-initial verb (which develops an initial glottal stop:  $\text{è}^n$  *ʔíngà* 'he/she/it is standing'). Before the *b* of the 'be (somewhere)' quasi-verb it is heard as homorganic [m], hence  $\text{è}^n$  *b(í)-yá* [èmb(í)já] 'they are (present)'.

The existential particle occurs only in **positive, unfocalized main clauses**. In this context it is obligatory with quasi-verb *bô* 'be (somewhere)' in the absence of an overt locational phrase, i.e. it functions here as a default locational (a generalized 'be there/here', or just 'exist' or 'be present'). It is also required with *sâ<sup>n</sup>* 'have' even when another locational is present.

The particle is not allowed in **negative** clauses, in **relative** clauses, or in positive main clauses that contain a **focalized** constituent (so that the verb is defocalized). Using 'have' as the example, we see the particle in (xx1ab) in positive, unfocalized main clauses. The particle is absent in the negative counterpart (xx1c), in the presence of a focalized WH-interrogative in (xx1d), and in the relative clause (xx1e).

- (xx1) a. *děm*  $\text{è}^n$  *ɲ* *sâ<sup>n</sup>*  
house **Exist** 1SgS have  
'I have a house.' (*děm*)
- b. *děm*  $\text{è}^n$  *ɲ* *sâ<sup>n</sup>*  
house **Exist** 1PlS have  
'We have a house.'
- c. *děm* *ɲ* *sà:-ndà*  
house 1SgS have-StatNeg  
'I do not have a house.'
- d. *à:yé* *děm* *sá:<sup>n</sup>*  
who? house have **Defoc**  
'Who [focus] has a house?'
- e. *ègé:<sup>n</sup>* *děm* *ɲ* *syà:<sup>n</sup>*  
place house 1SgS have **Rel**  
'the place where I have a house'

Examples with *bô* 'be (somewhere), be present, exist' and its suppletive negation are in (xx2). The combination of the existential proclitic and *bô* comes out as  $\text{è}^n$  *bô*. The proclitic is present in (xx2a) as the default locational. It is absent in (xx2b) in the presence of a more specific locational phrase. It is also absent in negatives (xx2c) and in focalized clauses (xx2d-e).

- (xx2) a. *té:*  $\text{è}^n$  *bô-Ø*

tea      **Exist**      be-3SgS  
'There is some tea.'

b. *[[mbé dúgú] bà]*      *bô-Ø*  
[[1PIP village] in]      be-3SgS  
'He/She is in our village.'

c. *té:*      *wòl-Ø*  
tea      not.be-3SgS  
'There is no tea.'

d. *mbá*      *bó-Ø*  
where?      be-3SgS. **Defoc**  
'Where [focus] is he/she?'

e. *à:yè*      *bó-Ø*  
who?      be-3SgS. **Defoc**  
'Who [focus] is there?'

With derived statives (e.g. 'be sitting', §10.xxx),  $\acute{\epsilon}^n$  is an optional alternative to the iteration of the stem. In positive, unfocalized main clauses, exactly one of  $\acute{\epsilon}^n$  or the iteration is required. (xx3c-e) are ungrammatical (symbol #) in such clauses, though (xx3c) can occur with a preceding focalized constituent.

(xx3) a. *dâ<sup>n</sup>*      *ń*      *dâ<sup>n</sup>*  
sit.Stat      1SgS      sit.Stat  
'I am sitting (am in seated position).'

b.  $\acute{\epsilon}^n$       *ń*      *dâ<sup>n</sup>*  
Exist      1SgS      sit.Stat  
[= (a)]

c. #*ń*      *dâ<sup>n</sup>*

d. #*dâ<sup>n</sup>*       $\acute{\epsilon}^n$       *ń*      *dâ<sup>n</sup>*

e. # $\acute{\epsilon}^n$       *dâ<sup>n</sup>*      *ń*      *dâ<sup>n</sup>*

#### 11.2.2.2 'Be (somewhere)' (*bô*)

The locational-existential stative quasi-verb 'be (in a place), be present' and by abstraction 'exist', is *bô*. The tone drops to *bò* after a H-toned 1Sg/2Sg subject

pronominal. In the relevant sense, *bô* requires an overt locational phrase, with existential  $\epsilon^n \sim \epsilon^n$  as the default (see just above). *bô* 'be (somewhere)' is historically related to *bô* ~ *wô* in the imperfective verb (§10.2.2.1), though the synchronic connection is muddled by phonological reductions in the imperfective. *bô* 'be (somewhere)' is more clearly synchronically related to *bô* in one of the progressive constructions (§10.2.2.3).

The paradigm is in (xx1). *bô* is one of the few cases where a *Cv* syllable has falling tone.

(xx1) Nonpast 'be (in a place)' or 'exist'

category	after locational X	with existential
1Sg	X <i>ɲ bô</i>	$\epsilon^n$ <i>ɲ bô</i>
1Pl	X <i>ɲ bô</i>	$\epsilon^n$ <i>ɲ bô</i>
2Sg	X <i>á bô</i>	$\epsilon^n$ <i>á bô</i>
2Pl	X <i>à bô</i>	$\epsilon^n$ <i>à bô</i>
3Sg	X <i>bô-Ø</i>	$\epsilon^n$ <i>bô-Ø</i>
3Pl	X <i>bí-yà</i>	$\epsilon^n$ <i>bí-yà</i>

Examples are in (xx2).

- (xx2) a. *bàmàkò* *bí-yà*  
 Bamako be-3PlS  
 'They are in Bamako (city).'
- b.  $\epsilon^n$  *à* *bó* *bènè*  
 Exist 2PlS be if  
 'if you-Pl are present' (from /*wô-w*/)

For *bó=yè* 'was', see §10.6.1.1.

There is no clear synchronic connection between (stative) *bô* (or its variants) and (inchoative) *bílé* 'become'.

### 11.2.2.3 Negative *wôl* 'is not (in a place)'

The negative counterpart of *bô* 'be (in a place), be present' is the suppletive *wôl* 'not be (present), be absent'. It may follow an overt locational phrase, or it may be used in isolated (existential  $\epsilon^n$  is not allowed in negative clauses, so there is no default locational). The paradigm is (xx1).

(xx1) 'Is/are absent' or 'does/do not exist'

category	form (with or without locational)
1Sg	<i>ŋ wòl</i>
1Pl	<i>ŋ wǒl</i>
2Sg	<i>á wòl</i>
2Pl	<i>à wǒl</i>
3Sg	<i>wǒl-Ø</i>
3Pl	<i>wǒl-yà ~ wòlí-yà</i>

Examples are in (xx2). The polar interrogative form in (xx2b) points to a lexical representation /wòlí/.

- (xx2) a. *(nűw<sup>n</sup>) ŋ wòl*  
 (here) 1SgS not.be  
 'I am not present (here).'
- b. *té: wòlí-Ø →*  
 tea not.be-3SgS.Q  
 'Is there is no tea?'

*wǒl* is also part of the progressive negative construction (§10.2.3.4).

### 11.2.3 'Be in/on X'

'Be in X' and 'be on X' can be expressed with the regular 'be (somewhere)' quasi-verb *bò* and PPs (§8.2).

- (xx1) a. *bòndò [[bí:ŋgò kò] ŋ bò-Ø*  
 shoulderbag [[mat head] Loc] be-3Sgs  
 '(the) shoulderbag is on the mat'
- b. *tògù-tògù [[kérɔ pá] ŋ bò-Ø*  
 gecko [[wall beside] Loc] be-3SgS  
 'The gecko is on the wall.'
- c. *mì: [ʔóy<sup>n</sup> jáŋà] ŋ bò-Ø*  
 water [waterjar belly] Loc] be-3SgS  
 'The water is in the waterjar.'



Specialized stative verb forms are also available: *yábà* 'be against or on (vertical surface, e.g. wall)', *sàngà* 'be on (horizontal surface)' (§10.4.1.1). However, the same spatial postpositions are used, so the verb does not suffice to express the spatial relation.

- (xx2) a. *bòndò*      *[[bí:ngò kó]*      *ŋ]*      *sàngà-Ø*  
 shoulderbag    [[mat      head]      Loc]      be.on-3Sgs  
 '(the) shoulderbag is on the mat'
- b. *tògù-tògù*      *[kéró páʔ]*      *yàbà-Ø*  
 gecko      [wall      on]      be.against.Stat-3SgS  
 'The gecko is on the wall.'

#### 11.2.4 'Become', 'happen', and 'remain' predicates

The focus in this segment is on bipartite 'become X' and 'remain X' predicates with distinct verbs or quasi-verbs. For deadjectival inchoatives ('become red/long'), which are expressed by derivational suffixes, see §9.6.

##### 11.2.4.1 'Remain' (*wánjé*)

'Stay, remain (somewhere)' is *wánjé*. An imperfective example is (xx1).

- (xx1) *dèm*      *wánjó*      *ŋ*      *bò*  
 house      remain.Impf      1SgS      Impf  
 'I will stay home.'

This verb is not also used in the sense 'become' with adverbials.

##### 11.2.4.2 'Become, be transformed into' (*bílé*)

*bílé* 'become' or 'be transformed into' can combine with a noun or NP, which is often focalized, hence the {L}-toned perfective *bílè* in (xx1a). *bílé* can also be used with adverbs and defective adjectives that have no other predicative form (xx1b).

- (xx1) a. *nèjjé*      *bílè-Ø*  
 bird      become.Perf-3SgS

'He became/was turned into a bird [focus].'

- b. *kándá*      *bilé-Ø*  
 new          become.Perf-3SgS  
 'It became (like) new.'

#### 11.2.5 Lexical statives

'Know', 'want', and 'resemble' are lexical statives with various irregularities. The two have similar paradigms, notably with *bò* 'be' (or imperfective) as a kind of auxiliary verb in the positive third person forms only, as in the capacitative paradigm (§10.5). The negative paradigms have various allomorphs of the stative negative suffix/clitic (§xxx).

##### 11.2.5.1 'Know' (*épnò bò, nèy*), 'not know' (*índó*)

This is an irregular lexically stative verb with no aspectual marking. It means 'know (a fact)' or 'know, be acquainted with (a person)', i.e. French *connaître* as well as *savoir*. The object NP takes accusative marking: *mì-<sup>n</sup> épnò bò-Ø* 'he/she knows me'. The paradigms, positive and negative, are in (xx1).

(xx1)	category	'know'	'not know'
	1Sg	<i>ń jnèy<sup>n</sup></i>	<i>ń j-índò</i>
	1Pl	<i>ń jnèy<sup>n</sup></i>	<i>ń j-índò</i>
	2Sg	<i>á jnèy<sup>n</sup></i>	<i>á j-índò</i>
	2Pl	<i>à jnèy<sup>n</sup></i>	<i>à -jíndò</i>
	3Sg	<i>épnò bò-Ø</i>	<i>índó-Ø</i>
	"	<i>~ èy<sup>n</sup> bò-Ø</i>	
	3Pl	<i>épnò b-yà</i>	<i>índó-yà</i>
	"	<i>~ èy<sup>n</sup> b-yà</i>	

In the positive paradigm, the relationship of the third person and the 1st/2nd person forms is problematic. The *j* in the 1st/2nd person stem *jnèy<sup>n</sup>* could be epenthetic. In this case the residual *èy<sup>n</sup>* might be equated with the first rather than second syllable of third person *épnò*. Some support for this comes from the 1st/2nd person form *j-èpnà* in focalized clauses, see (xx6) in §13.1.1.5. However, the morphemic breakdown is opaque. Similarly, the negative form

*índó* is only vaguely segmentable as *ín-dó* or *í-ndó*, ending doubtfully in a variant of the stative negative (cf. *sá:-ndá* 'not have').

For past-tense forms, see (xx2) in §10.6.1.3.

In active (non-stative) contexts the verb is *yáré* 'find out, come to know; recognize'.

#### 11.2.5.2 'Want, like' (*képù bò-*, *kéy<sup>n</sup>*), 'not want' (*kéy-là*)

This lexically stative verb has *képù* (varying with *kéy<sup>n</sup>*) plus *bò* in the positive third person forms. The 1st/2nd person counterpart is strictly *kéy<sup>n</sup>*, with *y<sup>n</sup>* replacing *j* (a consonant that does not occur word-finally). The negative forms have stative negative allomorph *-là* after oral (nonnasal) *y*. There are cognates in Tiranige and Najamba.

(xx1)	category	'want'	'not want'
	1Sg	<i>íj kèy<sup>n</sup></i>	<i>íj kéy-là</i>
	1Pl	<i>ìj kèy<sup>n</sup></i>	<i>ìj kéy-là</i>
	2Sg	<i>á kèy<sup>n</sup></i>	<i>á kéy-là</i>
	2Pl	<i>à kèy<sup>n</sup></i>	<i>à kéy-là</i>
	3Sg	<i>képù bò-Ø</i>	<i>kéy-là-Ø</i>
	"	~ <i>kéy<sup>n</sup> bò-Ø</i>	
	3Pl	<i>képù b-yà</i>	<i>kéy-lá-yà</i>
	"	~ <i>kéy<sup>n</sup> b-yà</i>	

For *kèpà* in focalized clauses, see (xx6) in §13.1.1.5. For past-tense forms see (xx3) in §10.6.1.3. The verbal noun is *képí-l* 'love, desire' competing with a cognate nominal *kèpà* of similar sense.

For clausal complements ('want to VP'), see §17.4.5.

#### 11.2.5.3 'Resemble' (*[m]pímà: bò*), 'not resemble' (*[m]pímá-ndá*)

'(X) resembles Y' is expressed as a transitive verb. The object may take accusative marking. The positive form of the verb is *pímà: bò* for third person, *pímà* for 1st/2nd person. The negative is *(m)pímá-ndá*, with *-ndá* allomorph of the stative negative. My assistant fluctuated between mp and p as the onset of the first syllable. With third person subject and human comparandum, the distinction is moot because of accusative *-n* on the comparandum NP or pronoun. The distinction is also moot after 1Sg or 1Pl pronominals (*íj*, *ìj*). It is likely that

the mp variant reflected resegmentation of the nasal as part of the onset of the verb.

(xx1)	category	'resemble'	'not resemble'
	1Sg	<i>ń (m)pimà</i>	<i>ń (m)pimà-ndà</i>
	1Pl	<i>ń (m)pímà</i>	<i>ń (m)pímá-ndà</i>
	2Sg	<i>á (m)pimà</i>	<i>á (m)pimà-ndà</i>
	2Pl	<i>à (m)pímà</i>	<i>à (m)pímá-ndà</i>
	3Sg	<i>(m)pímà: bò-Ø</i>	<i>(m)pímá-ndá-Ø</i>
	3Pl	<i>(m)pímà: b-yà</i>	<i>(m)pímá-ndá-yà</i>

An example is (xx2).

(xx2)	<i>sěydù</i>	<i>ó-<sup>n</sup></i>	<i>pímà:</i>	<i>bò-Ø</i>
	S	2Sg-Acc	resemble	be-3SgS
	'Seydou resembles you-Sg.'			

For past-tense forms see §10.6.1.3.

### 11.3 Quotative verb (*ně*)

For the paradigm of *ně* 'say' see §10.1.2.1. It is the only regularly conjugated monomoraic *Cv* verb.

For the syntax of quoted clauses, see §17.1.

*ně* can be used as an auxiliary with onomatopoeias, including direct imitations of sounds, cf. English *went* or (modern) *was like* in *It went "poof"* or *He was like "argh!"*.

For *ně* as an inchoative auxiliary, see *yáw-yáw ně* 'become lightweight' in (xx6) in §9.6.

### 11.4 Adjectival predicates

Adjectival predicates described here denote states, rather than processes (transitions). For the latter, see the inchoative verbs in §9.xxx.

### 11.4.1 Positive adjectival predicates

Adjectives (§4.5) can be organized into groups based on their form as predicates. They are followed by conjugated forms of 'be', with variants *bò*, *bó*, and *wò*. Negative predicates replace 'be' by *wól* 'not be'.

#### 11.4.1.1 Predicate adjectives with *-yà bó-Ø* (3Sg)

Several adjectives have a {L}-toned predicative form with suffix *-yà* (after syncopated stem-final vowel), followed by a conjugated form of H-toned *bó* 'be'.

(xx1)      modifying      predicate 3SgS      gloss

##### a. phonologically simple

<i>bámbá</i>	<i>bàmb-yà bó-Ø</i>	'wide, spacious'
<i>jámá</i>	<i>jám-yà bó-Ø</i>	'nearby'
<i>bàgàlà</i>	<i>bàgàl-yà bó-Ø</i>	'big, fat, massive, stout'
<i>gòlò</i>	<i>gòl-yà bó-Ø</i>	'long, tall'
<i>sùmbè</i>	<i>sùmb-yà bó-Ø</i>	'deep'
<i>ànàná</i>	<i>ànàn-yà bó-Ø</i>	'smooth, sleek'
<i>èlò</i>	<i>èl-yà bó-Ø</i>	'thin, delicate'
<i>bòmbe</i>	<i>bòmbyà bó-Ø</i>	'red, brown'
<i>tòmbò</i>	<i>tòmbyà bó-Ø</i>	'white, light-colored'

##### b. diminutive *-yè* absorbed by suffix *-yà*

<i>dùṅgùrí-yè</i>	<i>dùṅgùr-yà bó-Ø</i>	'short'
<i>ṅkà:lí-yè</i>	<i>ṅkà:l-yà bó-Ø</i>	'small'

##### c. resyllabified to avoid CCC cluster

<i>yòrdè</i>	<i>yòràd-yà bó-Ø</i>	'black, dark'
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##### d. /gy/ → (j)j

<i>yágá</i>	<i>yàj-jà bó-Ø</i>	'pretty'
<i>wàgè</i>	<i>wàj-jà bó-Ø</i>	'distant'
<i>dóṅgá</i>	<i>dòn-jà bó-Ø</i>	'heavy'
<i>ṅòṅgò</i>	<i>ṅòn-jà bó-Ø</i>	'thin, slender'

##### e. /y<sup>n</sup>y/ → ṅṅ

<i>bây<sup>n</sup></i>	<i>bàṅ-ṅà bó-Ø</i>	'big (house, tree)'
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The paradigm is (xx2).

(xx2) adjectival predicate

category	'be heavy'
1Sg	<i>dɔ̃ɲjà ɲ bò</i>
1Pl	<i>dɔ̃ɲjà ɲ bó</i>
2Sg	<i>dɔ̃ɲjà = á bò</i>
2Pl	<i>dɔ̃ɲjà = à bó</i>
3Sg	<i>dɔ̃n-jà bó-Ø</i>
3Pl	<i>dɔ̃n-jà bí-yá</i>

11.4.1.2 Other {L}-toned predicate adjectives with H-toned *bó-Ø*

The adjectives in (xx1) form predicates with {L}-toned adjective, with no segmental change or with a change in final vowel quality, plus H-toned *bó*.

(xx1)	modifying	predicate 3SgS	gloss
a. no change in final vowel			
	<i>kùrjù</i>	<i>kùrjù bó-Ø</i>	'coarse (surface)'
b. final <i>a</i> → <i>e</i>			
	<i>nwá:gá</i>	<i>nwà:gè bó-Ø</i>	'hot (water, food)'
	"	<i>nwà:jè bó-Ø</i>	'fast'
	<i>má:gá</i>	<i>mà:gè bó-Ø</i>	'difficult (work)'
	<i>dá:</i>	<i>dà:yè bó-Ø</i>	'nasty, evil'
c. final <i>i:<sup>n</sup></i> → <i>a</i>			
	<i>nsì:<sup>n</sup> [ńsì:<sup>n</sup>]</i>	<i>nsà bó-Ø [ńsàbó]</i>	'sweet, delicious' (also 'sharp')
	<i>nsì:<sup>n</sup></i>	<i>nsà bó-Ø</i>	'sharp' (also 'delicious, sweet')

11.4.1.3 {LH}-toned predicate adjectives with L-toned *bò-Ø*

For the stems in (xx1), the predicate is formed by **lengthening** the final vowel of the adjective and overlaying a {LH} melody, before L-toned *bò-Ø*. {LH} reduces to H-tone for monosyllabic stems.

(xx1)	modifying	predicate 3SgS	gloss
a. monosyllabic			

<i>mè:</i>	<i>mé: bò-Ø</i>	'dry'
<i>jwè:</i>	<i>jwé: bò-Ø</i>	'full (container)'
b. bisyllabic, final {e ε}		
<i>kùrè</i>	<i>kùré: bò-Ø</i>	'undiluted'
<i>sèlè</i>	<i>sèlé: bò-Ø</i>	'diluted'
<i>dèmè</i>	<i>dèmé: bò-Ø</i>	'ripe (grain); cooked, done'
<i>ùlgè</i>	<i>ùlgé: bò-Ø</i>	'ripe (fruit)'
<i>bàrè</i>	<i>bàré: bò-Ø</i>	'cooked, done'
<i>ànjè</i>	<i>ànjé: bò-Ø</i>	'lean (animal)'
<i>kùnè</i>	<i>kùné: bò-Ø</i>	'plump, fatty'
<i>dògè</i>	<i>dògé: bò-Ø</i>	'dead'
<i>gòmè</i>	<i>gòmé: bò-Ø</i>	'rotten'
<i>tàyè</i>	<i>táyé: bò-Ø</i>	'cold, cool; slow-moving'
	<i>tà:mí bò-Ø</i>	'slow'
<i>èmbè</i>	<i>èmbé: bò-Ø</i>	'wet'
c. bisyllabic, final {o ɔ}		
<i>kòlò</i>	<i>kòló: bò-Ø</i>	'fresh, raw'
d. bisyllabic, final high vowel		
<i>nàm</i>	<i>nàmí: bò-Ø</i>	'malfunctioning'
<i>kàmmì</i>	<i>kàmmí: bò-Ø</i>	'hard'

The paradigm is (xx2).

(xx2) adjectival predicate

category	'be cold/slow'
1Sg	<i>tàyè ɲ bò</i>
1Pl	<i>táyé ɲ bò</i>
2Sg	<i>tàyà = á bò</i>
2Pl	<i>táyá = à bò</i>
3Sg	<i>táyé: bò-Ø</i>
3Pl	<i>táyé: b-yà</i>

This construction is related to the **passive** construction with *bò* following a {LH}-toned verb based on the perfective stem (§9.3). The modifying adjectives predominantly end in {e ε i} and can therefore be analysed as perfective participles (§14.xxx).

#### 11.4.1.4 {HL}-toned predicate adjectives plus *bò*

Two adjectives with {H}-toned modifying forms have {HL}-toned predicate forms. In (xx1a), 'good' also shortens its vowel in the predicative form. In (xx1b), 'empty' lengthens its final vowel.

(xx1)	modifying	predicate 3SgS	gloss
a.	<i>pó:ló</i>	<i>pólò bò-Ø</i>	'good'
b.	<i>dóndó</i>	<i>dóndò: bò-Ø</i>	'empty, deserted'

#### 11.4.1.5 Predicative forms of iterated and composite adjectives

Most obligatorily iterated adjectives have a straightforward predicative form with 3Sg *bò-Ø* after H-tone and *bó-Ø* after L-tone (xx1).

(xx1)	modifying	predicate 3SgS	gloss
a. adjective H-toned			
	<i>kára-kára</i>	<i>kára-kára bò-Ø</i>	'bitter'
	<i>sém-sém</i>	<i>sém-sém bò-Ø</i>	'pointed'
	<i>yáw-yáw</i>	<i>yáw-yáw bò-Ø</i>	'lightweight'
	<i>tóm-tóm</i>	<i>tóm-tóm bò-Ø</i>	'sour, acrid (like lemon)'
b. adjective L-toned			
	<i>èb-èb</i>	<i>èb-èb bó-Ø</i>	'supple (e.g. goatskin)'

For a few other iterated adjectives (and adverbials), for "adjectives" in the form of composite exemplars, and for overtly participial negative adjectives, the predicate adds *wò-* (lenited from *bò-*) (xx2).

(xx2)	modifying	predicate 3SgS	gloss
a. iterated adverbials (cf. <i>kání</i> 'do')			
	<i>mǎn-mǎn kân</i>	<i>mǎn-mǎn bò-Ø</i>	'soft (skin)'
	<i>tògúl-tògúl kân</i>	<i>tògúl-tògúl bò-Ø</i>	'spotted'
b. iteration removed in predicate			
	<i>búlá-búlá</i>	<i>búlà wò-Ø</i>	'blue'
c. noun-adjective or compound exemplars			



<i>pòrò púnà</i>	<i>pòrò púnà wò-Ø</i>	'yellow' (néré flour)
<i>kòjì kòlò</i>	<i>kòjì kòlò wò-Ø</i>	'green' (fresh grass)

d. negative participles

<i>nsì:<sup>n</sup>-dì-gà</i>	<i>nsì:<sup>n</sup>-dì-gà wò-Ø</i>	'blunt, not sharp (blade)'
<i>yágá-ndá-gà</i>	<i>yágá-ndá-gà wò-Ø</i>	'ugly, not pretty'
	<i>yàgà-nd-yà bó-Ø</i>	
<i>pó:ló wòl-gà</i>	<i>pó:ló wòl-gà wò-Ø</i>	'bad, no good'

'Old' and 'new' are not really adjectives in Penange. *ká:mnó* 'old' requires the 'do' verb as auxiliary (xx3a). *kándá* 'new' takes the (usually postnominal) 'it is' clitic (xx3b).

(xx3)	modifying	predicate 3SgS	gloss
a.	<i>ká:mnó</i>	<i>ká:mnó kán</i>	'old (person)'
b.	<i>kándá</i>	<i>kándá = yó</i>	'new'

#### 11.4.2 Negative adjectival predicates

Adjectival predicates are negated by using *wǒl* 'not be' instead of *bò ~ bó* 'be' after the predicate adjective, which has the same form in negative as in positive clauses. *kándá* 'new' is again treated as a noun.

(xx1)	a.	<i>bòmb-yà wǒl</i>	'not be red'
		<i>bànpà wǒl</i>	'not be big'
		<i>mà:gè wǒl</i>	'not be difficult'
		<i>bàgàl-yà wǒl</i>	'not be big'
		<i>kùrjù wǒl</i>	'not be coarse'
	b.	<i>kándá = lá</i>	'not be new'

### 11.5 Possessive predicates

#### 11.5.1 'X have Y' (*sâ<sup>n</sup>*, negative *sá:-ndá*)

'Have' is an irregular quasi-verb (or lexical stative) *sâ<sup>n</sup>*. As in English, the subject denotes the possessor. The vowel is lengthened in plural-subject combinations. In unfocalized positive main clauses, existential proclitic *ɛ<sup>n</sup>* is

obligatory. The negative counterpart is *sá:-ndá*, with *-ndá* allomorph of the stative negative.

(xx1)	'have'	'have not'
1Sg	<i>è<sup>n</sup> ḡ sà<sup>n</sup></i>	<i>ḡ sà:-ndà</i>
1Pl	<i>è<sup>n</sup> ḡ sá:<sup>n</sup></i>	<i>ḡ sá:-ndà</i>
2Sg	<i>è<sup>n</sup> á sà<sup>n</sup></i>	<i>á sà:-ndà</i>
2Pl	<i>è<sup>n</sup> à sá:<sup>n</sup></i>	<i>à sá:-ndà</i>
3Sg	<i>è<sup>n</sup> sâ<sup>n</sup>-Ø</i>	<i>sá:-ndá-Ø</i>
3Pl	<i>è<sup>n</sup> sá:<sup>n</sup>-yà</i>	<i>sá:-ndá-yà</i>

'Have' is transitive, but since the object is normally inanimate there is generally no accusative marking. For the syntax of existential *è<sup>n</sup>* see §11.2.2.1. For past-tense 'had' see §10.6.1.3. For *sá:<sup>n</sup>* in subject relative clauses, and *sá:<sup>n</sup>* and *sí:<sup>n</sup>yà* in nonsubject relatives, see §14.4.4.

#### 11.5.2 'Y belong to X' predicates

'Y belongs to X' or 'Y is X's' is expressed as a contracted, not entirely transparent construction 'Y is X's thing'. *yé:* 'thing' is modified to *jé:*, and the 'it is' clitic appears as *=wò*. Compare *ḡ jé=*wò** 'it is mine' with the fully transparent *ḡ yé:=yò ~ ḡ yé:=wò* 'it is my thing'. In spite of the phonological modifications, my assistant clearly recognized the relationship and volunteered that *ḡ jé=*wò** was an "elided" version that could be pronounced more carefully as *ḡ jé:=wò-Ø*, with the vowel length of the original preserved.

The regular 1Sg and 2Sg proclitics are used but they have L-tone instead of the usual H-tone. 1Pl, 2Pl, and 3Pl are preposed but in full independent form, while 3Sg has its usual suffix. Negation is by the 'it is not' clitic, after long-voweled *jé:*. The paradigms in (xx1) are for singular theme ("subject").

(xx1)	'it belongs to (me etc.)'	'it does not belong to (me etc.)'
1Sg	<i>ḡ jé=<i>wò</i></i>	<i>ḡ jé:=<i>là</i></i>
1Pl	<i>mbé jé=<i>wò</i></i>	<i>mbé jé:=<i>là</i></i>
2Sg	<i>á jé=<i>wò</i></i>	<i>á jé:=<i>là</i></i>
2Pl	<i>ábé jé=<i>wò</i></i>	<i>ábé jé:=<i>là</i></i>
3Sg	<i>jé:-ná=<i>wò</i></i>	<i>jé:-ná=<i>là</i></i>
3Pl	<i>ḡké jé=<i>wò</i></i>	<i>ḡké jé:=<i>là</i></i>

NP      NP *ɲé: = wò*                      NP *ɲé: = là*

If the theme is 3Pl, plural *-ɲgè* is added to the original 'thing' noun, and the result is (xx2).

(xx2)                      'they belong to (me etc.)'    'they do not belong to (me etc.)'

1Sg	<i>ɲ ɲé:-ɲgé = wò</i>	<i>ɲ ɲé:-ɲgé = là</i>
1Pl	<i>mbé ɲé:-ɲgé = wò</i>	<i>mbé ɲé:-ɲgé = là</i>
2Sg	<i>à ɲé:-ɲgé = wò</i>	<i>à ɲé:-ɲgé = là</i>
2Pl	<i>ábé ɲé:-ɲgé = wò</i>	<i>ábé ɲé:-ɲgé = là</i>
3Sg	<i>ɲé:-ná-ɲgé = wò</i>	<i>ɲé:-ná-ɲgé = là</i>
3Pl	<i>ɲké ɲé:-ɲgé = wò</i>	<i>ɲké ɲé:-ɲgé = là</i>
NP	NP <i>ɲé:-ɲgè = wò</i>	NP <i>ɲé:-ɲgé = là</i>

Examples are in (xx3). If the theme is overtly expressed as a plural NP, the unmarked "singular" forms in (xx1) are often used, as in (xx3b).

- (xx3) a. *[ín(í) dèm] / [íní ɲkè] [ɲ ɲé] = wò*  
           [Prox house] / Prox dog] [1SgP thing]=it.is  
           'This house/dog belongs to me (is mine).'
- b. *[è óy<sup>n</sup>-gè] [sèydù ɲé] = wò*  
           [Def waterjar-Pl] [Seydou thing]=it.is  
           'The waterjars belong to Seydou.' (*sèydù*)



## 12 Comparatives

### 12.1 Asymmetrical comparatives

*nám* 'more (than)' figures prominently in this chapter. It follows a NP or pronoun, and behaves like a possessed noun. For the nonsingular pronouns, the independent form (e.g. 1Pl *mbé nám* instead of proclitic *ñ*) is usual. The 1Sg and 2Sg pronouns, usually H-toned, are L-toned but remain distinct in this way from the 1Pl and 2Pl forms. The paradigm is (xx1).

(xx1)	1Sg	<i>ñ nám</i>
	1Pl	<i>mbé nám</i>
	2Sg	<i>à nám</i>
	2Pl	<i>ábé nám</i>
	3Sg	<i>nám-nà ñ</i>
	3Pl	<i>ñké nám</i>
	NP	<i>X nám</i>

In sentence contexts, tones are difficult. Variant *nám* is sometimes flattened to *nàm*, but the conditions are difficult to determine.

#### 12.1.1 Predicative adjective with *nám* 'more' and comparandum

In this construction, *nám* is the key comparative word ('more'). Syntactically, *nám* is treated as a possessed noun, with the comparandum as possessor. It has rising tone after 1Sg/2Sg possessor (xx1c). The adjective is clause-final and is conjugated for pronominal subject. Examples are in (xx1). 2Sg *á* and 2Pl *à* are phonetically lengthened after *nám* (xx1b).

- (xx1) a. *[sèydù nám]=ñ / nám]=á:* *gòlò*  
           [Seydou more]=1SgS / more]=2SgS long  
           'I am/you-Sg are taller than Seydou (is).'
- b. *[sèydù nám]=ñ / nám]=à:* *gólò*

[Seydou<sup>L</sup> more]=1PlS / more]=2PlS long  
 'We/you-Pl are taller than Seydou (is).'

- c. *sèydù* [*á / ñ* *ńám*] *gòlò-Ø*  
 Seydou [2SgP / 1SgP more] long-3SgS  
 'Seydou is taller than you-Sg (are) / than I (am).'
- d. *sèydú* [*mbé / à:màdù* *ńám*] *gòlò-Ø*  
 Seydou [1PlP / Amadou<sup>L</sup> more] long-3SgS  
 'Seydou is taller than you-Sg / than us / than Amadou.'
- e. *wè:-gé* [*sèydù* *ńám*] *gòlò-yà*  
 child-Pl [Seydou<sup>L</sup> more] long-3PlS  
 'The children are taller than Seydou.'
- f. *ńám-ńá /* [*ńké* *ńám*] *ñ* *gòlò*  
 more-3SgP / [3PlP more] 1SgS long  
 'I am taller than he-or-she (is)/than they (are).'

Past clitic =ye can be added. For example replacing *gòlò* by *gòlò=yè* in (xx1a) produces 'I was/You were taller than Seydou.'

#### 12.1.2 Verbal predicate plus *ńám* 'more'

In this construction, the asymmetry is again expressed by a "possessed" form of *ńám*. The domain of comparison is expressed by a form of the VP ending in conjugated *-n ńàgà* (3rd person) or *ńàgà* (1st/2nd persons). These latter forms appear to be derived stative verbs, cf. *ńáj-jè* 'surpass'.

- (xx1) a. *sèydú* [*à* *ńám*] [*òrò-ńá:* *ńò:-ń* *ńàgà*]  
 Seydou [2SgP more] [millet.cake eat.meal surpass.Stat]  
 'Seydou eats more than you-PL (do).'
- b. [*sèydù* *ńám*] [*òrò-ńá:* *ńò:* *á* *ńàgà*]  
 [Seydou<sup>L</sup> more] [millet.cake eat.meal 2SgS surpass.Stat]  
 'You-Sg eat more than Seydou (does).'

The paradigm of *(-n) ńàgà* is (xx2). The 1Sg and 3Sg forms are orthographically distinct but are homophonous.

#### (xx2) Paradigm of *(n)ńàgà*

category 'eat meal

1Sg	<i>ɲò: ɲ nàgà</i>
1Pl	<i>ɲò: ɲ nágà</i>
2Sg	<i>ɲò: á nàgà</i>
2Pl	<i>ɲò: à nágà</i>
3Sg	<i>ɲò:-ń nàgà-Ø</i>
3Pl	<i>ɲò:-ń nàgà-yà</i>

3Sg subject examples with longer verb stems: *kànù-ń nàgà-Ø* 'he/she does more', *ùnú àndó-ń nàgà-Ø* 'travels more', *tùmbùgò-ń nàgà-Ø* 'pushes more'. Collectively these also show that the verb is in the **O/U-stem**, i.e. the O-stem (preserving lexical ATR value) for final-nonhigh-vowel verbs and the U-stem for final-high-vowel verbs (§3.3.6).

#### 12.1.3 'Surpass' (*tángé, náj-jè*)

'X surpass (be/do more than) Y', especially denoting a transition that alters the relative position of the two arguments, can be expressed directly with the simple transitive verb *tángé* 'pass, go past; surpass, exceed'. The alternative is a construction with possessed object: [*X nâm*] *náj-jè*, with possessed noun *nâm* (see beginning of chapter) and a verb *náj-jè* that can be analysed as a mediopassive /*nág-yè*/ related to (stative) (*-ń*) *nàgà* (§12.xxx). In both the *tángé* and *náj-jè* constructions, a constituent specifying the basis for comparison (e.g. running speed) can be added.

- (xx1) a. *dúgú mí-ɲ tángé-Ø*  
 running 1Sg-Acc surpass.Perf-3SgS  
 'He/She (has) surpassed me in running.'
- b. *dúgú [ɲ năm] náj-jè*  
 running [1Sg more] surpass  
 'He/She (has) surpassed me in running.'

#### 12.1.4 'Be better/bigger/more'

No distinct construction for 'X be better than Y' or 'X be bigger than Y' has been found. The same adjectival predicate type seen in §12.1.1 above is used, with 'good' and 'big' as the adjectives.

- (xx1) a. *má:ngórò* [*lé:mbúrí* *nám*] *pó:ló-Ø*  
 mango [citrus more] good-3SgS  
 'Mangoes are better than lemons'
- b. *móptí* [*pènà* *nám*] *bày<sup>n</sup>-Ø*  
 Mopti [Pinia<sup>L</sup> more] big-3SgS  
 'Mopti is bigger than Pinia.'

For 'be more (numerous)', the construction in (xx2) was obtained.

- (xx2) *nìgé* [*nà:mbàlà-gè* *nám*] *jwá:* *nàgà-Ø*  
 elephant [lion-Pl more] many surpass.Stat-3SgS  
 'Elephants are more abundant than lions (are).'

#### 12.1.5 'Best' (*nàgà*)

There is no special superlative construction. If no specific comparandum is mentioned, an asymmetrical comparative may be interpreted as a superlative, i.e. as being valid for any comparandum in the relevant universe.

- (xx1) *ɔ́nɔ́* *yèbù* *nàgà-Ø*  
 3Sg dance(n) surpass.Stat-3SgS  
 'He/She is the best dancer.'

## 12.2 Symmetrical comparatives

### 12.2.1 'Equal; be as good as' (*pé:-pé:*)

*pé:-pé:* 'equal, at the same level' can be used by itself as a predicate. It can also take the 'it is' clitic.

- (xx1) a. [*mì* *ní*] [*sè:dú* *nì*] *pé:-pé:*  
 [1Sg and] [Sydou and] equal  
 'Sydou and I are the same (equal, equivalent).'
- b. *mbé* *pé:-pé: = yó*  
 1Pl equal=it.is  
 'We are equal.'

[*X pâ<sup>n</sup>*] *mílé* 'reach the same level as X' can be used to express a transition resulting in equality.



### 12.3 'A fortiori' (*ságú*)

Clause-initial *ságú* 'a fortiori' (local French *à plus forte raison* or *ne parlons pas de*) is used in contexts like 'I can't even walk, never mind run'. It is the Penange variant of a regionally widespread form.



## 13 Focalization and interrogation

### 13.1 Focalization

#### 13.1.1 Basic syntax of focalization

The focalized constituent is typically followed by the 'it is' clitic =yo ~ =ye ~ =(w)o (§11.2.1), which in this function is labeled Foc[us] in interlinears (§13.1.1.2). The focalized constituent is not moved from the position it normally occupies as subject, object, or whatever (§13.1.1.3). If the focalized constituent is not the subject, a pronominal subject proclitic (or 3Sg enclitic) is required (§13.1.1.4).

##### 13.1.1.1 Which constituents can and cannot be focalized?

The focalized constituent is usually a NP, either a nonpronominal NP, an independent pronoun, or a WH-interrogative. The focalized NP may be in subject (xx1a-c) or other (xx1d) function.

- (xx1) a. *sèydú=yò*      *ándò*      *bò*  
Seydou=Foc      go      Impf  
'It's Seydou [focus] who will go.'
- b. *ó=yó*      *ándò*      *bò*  
2Sg=Foc      go      Impf  
'It's you [focus] who will go.'
- c. *à:-yè*      *ándò*      *bò*  
who?=Foc      go      Impf  
'Who will go?'
- d. *àlà̀m̀ùǹò=yò*      *sógó*      *ń*      *biyà*  
sheep=Foc      buy      1SgS      Impf  
'It's a sheep [focus] that I will buy.'

The focalized constituent may also be an adverbial phrase. Most likely to be overtly focalized are noun-like lexical adverbs like 'yesterday' (xx2a) or 'here' (xx2b). PPs that are contextually focal are not usually overtly marked by the

focus clitic, but such marking is optional (xx2c). Even when the focus clitic is absent in (xx2c), the form of the verb (including subject clitic) can mark the clause as focalized.

- (xx2) a. *yà:gù = yò*      *ɲké*      *égé*  
 yesterday=Foc      3PLS      come.Perf  
 'It was yesterday [focus] that they came.'
- b. *nù<sup>n</sup> = yò*      *ɲké*      *nó:yé*  
 here=Foc      3PLS      sleep.Perf  
 'It was here [focus] that they slept.'
- e. *[[dèm      jàngà      n](=yò)      ɲké      nó:yé*  
 [[house      interior]      Loc](=Foc)      3PLS      sleep.Perf  
 'It's in the house [focus] that they slept.'

However, spatiotemporal adverbials are often not treated as focal. Even 'where?' and 'when?' interrogatives do not usually trigger the changes in verb forms that object focalization requires. In practice, overt focalization is normally limited to subject and object NPs.

#### 13.1.1.2 Focus clitic identical to 'it is' =yo ~ =ye ~ =(w)o

The 'it is' clitic in its various allomorphs is used in identificational predicates of the type 'it's me' or 'Seydou is a farmer' (§11.2.1). The same clitic marks a focalized constituent, more or less as in cleft sentences in English (*it was me who[m] you saw*). In this function it is labeled Foc[us] in interlinears.

As clause-final 'it is' clitic, =yo or variant becomes H-toned after a {H}-toned or {L}-toned word. As focus clitic, it again appears with H-tone after a {H}-toned word. However, after a {L}-toned word, the tone-raising on the clitic fails to occur before a H-toned syllable, such as a H-toned pronominal subject clitic. The examples in (xx2) in the preceding section exemplify this, compare identificational *nù<sup>n</sup> = yó* 'it's here' and *yà:gù = yó* 'it was yesterday'.

The focus clitic is used after focalized subjects (xx1a,c) and nonsubjects such as objects (xx1b). It is used after nonpronominal NPs (xx1a), after pronouns (xx1b). The clitic, in the variant =yè, is regularly in focal function only in *à: = (y)è* 'who?' (xx1c), which is probably well along the road to fusion as an unsegmentable morpheme (§13.xxx). Other WH-interrogatives (e.g. 'what?', 'where?') generally do not take an overt focus clitic, which would be redundant since such words are intrinsically focal. (They do, however, take the 'it is' clitic in identificational predicates.)

- (xx1) a. *[è wé:-gè]=yò mí=<sup>n</sup> málgé [èbà bà]*  
 [Def child-Pl]=Foc 1Sg-Acc see.Perf [market Loc]  
 'It was the children [focus] who saw me in the market.'
- b. *[è wé:-gè] mí=yó ñké màlgé [éba bà]*  
 [Def child-Pl] 1Sg=foc 3PlS see [market Loc]  
 'It was me [focus] that the children saw in the market.'
- c. *á: =yé [è móbêl] sògù-lè*  
 who?=Foc [Def vehicle] buy-RevPerf  
 'Who sold the vehicle?'
- d. *sèydú =yò gámbyé ná*  
 Seydou=Foc encounter.Perf 3SgS  
 'It was Seydou [focus] that he/she encountered.'

Accusative <sup>n</sup> is not allowed in combination with the focus clitic (xx1b,d).

The forms of focalized pronouns are in (xx2). They are the same as the predicative 'it is' forms (611.2.1.1).

(xx2)	focalized	independent
1Sg	<i>mí=yó</i>	<i>mí</i>
1Pl	<i>mbé=yó</i>	<i>mbé</i>
2Sg	<i>ó=yó</i>	<i>ó</i>
2Pl	<i>ábé=yó</i>	<i>ábé</i>
3Sg	<i>ànò=yó</i>	<i>ànò</i>
3Pl	<i>ñké=yó</i>	<i>ñké</i>

### 13.1.1.3 No systematic movement of focalized constituent

There is no systematic linear repositioning of focalized constituents, either to clause-initial or to immediately preverbal position. Intrinsically focal 'who?' is therefore in the regular object position (following the subject) in (xx1a) but in the regular clause-initial subject position in (xx1b).

- (xx1) a. *móbêl á: =yé dñjè ná*  
 vehicle who?=Foc bump.Perf 3SgS  
 'Who(m) did (the) vehicle bump?'  
 (or: 'The vehicle, who(m) did it bump?')

- b. *á: = yé*      [*è*      *móbêl*]      *sógú-lé*  
 who?=Foc      [Def      vehicle]      buy-Rev.Perf  
 'Who sold the vehicle?'
- c. *à:màdú = yò*      [*è*      *móbêl*]      *sógú-lé*  
 Amadou=Foc      [Def      vehicle]      buy-Rev.Perf  
 'It was Amadou [focus] who sold the vehicle.'
- d. *á: = yé*      *ábé-<sup>n</sup>*      *búndé*  
 who?=Foc      2Pl-Acc      hit.Perf.3SgS  
 'Who hit you-Pl?'

#### 13.1.1.4 Subject pronouns in nonsubject focalizations

In unfocalized main clauses, only 1st/2nd person pronominal subjects are expressed as proclitics. In nonsubject focalized clauses, the same 1st/2nd person proclitics are joined by the 3Pl proclitic *ɲké*. In addition, 3Sg subject is expressed by an enclitic *ná*, evidently the same morpheme as 3Sg possessor suffix *-ná* on nouns (§6.2.1.2). The 3Sg and 3Pl clitics are used even when the subject is also expressed by a nonpronominal NP (xx1fg).

- (xx1) a. *ɲé*      *ɲ / á*      *sògè*  
 what?      1SgS / 2SgS      buy.Perf  
 'What did I/you-Sg buy?'
- b. *ɲé / ɲé: = yè*      *ɲ / à / ɲké*      *sógé*  
 what?      1PlS / 2PlS      buy.Perf  
 'What did we/you-Pl buy?'
- c. *ɲé / ɲé: = yè*      *sógé*      *ná*  
 what? / what?=Foc      buy.Perf      3SgS  
 'What did he/she buy?'
- d. *àlà mùnò = yó*      *ɲ*      *sògè*  
 sheep=Foc      1SgS      buy.Perf  
 'It's a sheep [focus] that I bought.'
- e. *àlà mùnò = yò*      *sógé*      *ná*  
 sheep=Foc      buy.Perf      3SgS  
 'It's a sheep [focus] that he/she bought.'
- f. *sěydù*      *àlà mùnò = yò*      *sógé*      *ná*  
 Seydou      sheep=Foc      buy.Perf      3SgS

'It's a sheep [focus] that Seydou bought.'

- g. *wè:-gé*      *àlà̀mù̀nò = yò*      *ɲké*      *sógé*  
 child-Pl      sheep=Foc      3PlS      buy.Perf  
 'It's a sheep [focus] that the children bought.'

Since the 1st/2nd person subject proclitics are the same as those in unfocalized main clauses, the focus clitic on the focalized NP, or the presence of a WH-interrogative, may be the only overt sign of focalization.

The same array of proclitics and 3Sg enclitic are used in relative clauses (§14.xxx).

#### 13.1.1.5 Form of defocalized verb

The forms of the defocalized verb for subject focalization are illustrated with the verb 'push' in (xx1). The verb has invariant form for each aspect-negation category under subject focalization. The perfective subject-focus form is identical to the 3Sg main-clause form except that it is {H}-toned throughout, even for a prosodically heavy stem like 'push'. The identity with the main-clause 3Sg form is complete in the imperfective. In the corresponding negative categories, a participial ending *-gà* appears in the subject-focus forms, following the aspect-negation suffix. The verb is raised to {H}-tone. Perfective negative *-lì* is included in the domain of {H}, though this is usually disguised by syncope/apocope of the short high vowel. Imperfective negative *-ndí* is not included in the domain of {H} and appears with L-tone before *-gà*.

(xx1) Subject-focus forms of 'push'

main clause 3Sg	subject focus	category
<i>tùmbùgè-Ø</i>	<i>tùmbúgè</i>	perfective
<i>tùmbùgò bò-Ø</i>	<i>tùmbúgò bò</i>	imperfective
<i>tùmbùgè-l(i)-Ø</i>	<i>tùmbúgè-l(i)-gà</i>	perfective negative
<i>tùmbùgò:-ndí-Ø</i>	<i>tùmbúgò:-ndí-gà</i>	imperfective negative

For nonsubject focus, the tone melody of the verb depends on the pronominal category. In (xx2-4), the forms are grouped differently in the respective aspect-negation categories to put similar forms (morphological and/or tonal) together. Beginning with (xx2), we see that the perfective, positive as well as negative, has a {H}-toned stem in the nonsubject focus paradigm for 1Pl, 2Pl, 3Sg, and 3Pl, versus {L}-toned stem for 1Sg and 2Sg (i.e. after H-toned proclitic). The

form for the perfective is simply the E/I-stem with this tonal change (xx2a). For the perfective negative (xx2b), there is an additional participial suffix *-yà* (raised to *-yá* before L-toned 3Sg enclitic *nà*).

(xx2) Nonsubject-focus forms of 'push' (perfective)

main-clause	nonsubject focus	category
a. perfective		
<i>{L}-toned for nonsubject focus</i>		
<i>ń tùmbugè</i>	<i>ń tùmbugè</i>	1Sg
<i>á tùmbugè</i>	<i>á tùmbugè</i>	2Sg
<i>{H}-toned for nonsubject focus</i>		
<i>ń túmbúgè</i>	<i>ń túmbúgè</i>	1Pl
<i>à túmbúgè</i>	<i>à túmbúgè</i>	2Pl
<i>tumbúgè-Ø</i>	<i>tumbúgè ná</i>	3Sg
<i>tumbúg-yè</i>	<i>ńké túmbúgè</i>	3Pl
b. perfective negative		
<i>{L}-toned for nonsubject focus</i>		
<i>ń tùmbugè-l(i)</i>	<i>ń tùmbugè-lí-yà</i>	1Sg
<i>á tùmbugè-l(i)</i>	<i>á tùmbugè-lí-yà</i>	2Sg
<i>{H}-toned for nonsubject focus</i>		
<i>ń túmbúgè-l(i)</i>	<i>ń túmbúgè-lí-yà</i>	1Pl
<i>à túmbúgè-l(i)</i>	<i>à túmbúgè-lí-yà</i>	2Pl
<i>tumbúgè-l(i)-Ø</i>	<i>tumbúgè-lí-yà ná</i>	3Sg
<i>tumbúgá-ndá</i>	<i>ńké túmbúgè-lí-yà</i>	3Pl

For imperfective nonsubject focus (xx3a), the usual auxiliary *bò ~ wò* (3Pl *b-yà*) is dropped in the 2nd person and 3Sg forms. Elsewhere it takes the form *bí-yà* after L-toned proclitic (1Pl) and *b(i)-yà* after H-toned proclitic (1Sg, 3Pl). 2Pl is distinguished from 2Sg mainly by adding a suffix *-yà* whose relationship to the ending in *bí-yà* is unclear (one might also compare plural-addressee suffix *-y<sup>n</sup>* in imperatives). In the imperfective negative (xx3b), we see the same participial suffix *-yà* as in the perfective negative. The singular-subject forms preserve the suffixal allomorphy of the main-clause counterparts, but the plural-subject forms end in *wòlí-yà*, which is based on *wól* 'not be'.

(xx3) Nonsubject-focus forms of 'push' (imperfective)

main-clause	nonsubject focus	category
a. imperfective		
<i>with aux for nonsubject focus</i>		



<i>túmbúgó ñ bò</i>	<i>túmbúgó ñ b(i)-yà</i>	1Sg
<i>túmbúgó ñ bó</i>	<i>túmbúgó ñ bí-yà</i>	1Pl
<i>túmbúgó b-yà</i>	<i>túmbúgó ñké b(i)-yà</i>	3Pl
<i>without aux for nonsubject focus</i>		
<i>túmbúgá-á wò</i>	<i>túmbúgà-à</i>	2Sg
<i>túmbúgá-à wó</i>	<i>túmbúgà-à-yà</i>	2Pl
<i>túmbúgò bò-Ø</i>	<i>túmbúgó nà</i>	3Sg

b. imperfective negative

<i>1Sg/2Sg</i>		
<i>tùmbùgò-ò-l</i>	<i>túmbúgó-ó-lí-yà</i>	1Sg
<i>tùmbùgà-à-l</i>	<i>túmbúgá-á-lí-yà</i>	2Sg
<i>3Sg</i>		
<i>tùmbùgò:-ndí-Ø</i>	<i>túmbúgó:-ndí-yá nà</i>	3Sg
<i>plurals</i>		
<i>tùmbùgò-ò-lí</i>	<i>túmbúgó ñ wòlí-yà</i>	1Pl
<i>tùmbùgà-à-lí</i>	<i>túmbúgá-à wòlí-yà</i>	2Pl
<i>tùmbùgò:-nd(i)-yá</i>	<i>túmbúgó ñké wòlí-yà</i>	3Pl

In main clauses, progressive is distinguishable from imperfective. In nonsubject focus clauses, my assistant indicated that the imperfective forms given above can also be used in progressive sense. An explicitly progressive nonsubject-focus clause can be constructed from the alternative progressive with *túlà* (§10.2.2.4), which becomes *túl-yà* (3Pl, 1Pl, 2Pl), *tùl-yà* (1Sg, 2Sg), or *túl-yá* in 3Sg *túl-yá ná* (xx4a). A subject-focus example is (xx4b), showing the invariant form *túlá*.

- (xx4) a. *ñjé*      *tùmbùgò-ñ*      *túl-yá*      *ná*  
 what?      push-xxx      Prog-Ppl      3SgS  
 'What is he/she pushing?'  
 b. *á: = yé*      *tùmbùgò-n*      *túlá*  
 who?=Foc      push-xxx      Prog  
 'Who is pushing?'

Subject-focus forms of statives are {H}-toned, like those of perfective verbs. This applies to derived statives ('be squatting') and to the various lexicalized stative (quasi-)verbs (xx5). The extra *bò-* in 3rd person forms of some positive statives ('know', 'want', 'resemble') is dropped, as is the preposed reduplication in derived statives. Participial *-gà* is added to the negative forms.

(xx5) Subject-focus forms of statives

main clause 3Sg	subject focus	gloss
-----------------	---------------	-------

a. positive

<i>sò sómbà-Ø</i>	<i>sómbá</i>	'be squatting' (§10.4.1.1)
<i>sâ-Ø</i>	<i>sá:<sup>n</sup></i>	'have'
<i>bô-Ø</i>	<i>bó</i>	'be'
<i>éjâ bò-Ø</i>	<i>éy<sup>n</sup></i>	'know'
<i>képù bò-Ø</i>	<i>kéy<sup>n</sup></i>	'want'
<i>(m)pímà: bò-Ø</i>	<i>mpímá</i>	'resemble'

b. negative

<i>sómbá-ndá-Ø</i>	<i>sómbá-ndá-gà</i>	'not be squatting'
<i>sá:-ndá-Ø</i>	<i>sá:ndá-gà</i>	'have'
<i>wól-Ø</i>	<i>wól-gà</i>	'not be'
<i>índó-Ø</i>	<i>índó-gà</i>	'not know'
<i>kéy-là-Ø</i>	<i>kéy-lá-gà</i>	'not want'
<i>(m)pímá-ndá-Ø</i>	<i>mpímá-ndá-gà</i>	'not resemble'

Nonsubject-focus forms of statives are summarized in (xx6). X marks the position of the subject proclitic or 3Sg enclitic. For 'know' and 'not know', the initial *j* occurs after 1st/2nd person proclitics. In the 3Sg negative forms, the L-toned *-yà* shown is raised to *-yá* before L-toned 3Sg *nà* (e.g. *wól-yá ná*).

(xx6) Nonsubject focus (positive statives)

1Sg/2Sg	1Pl/2Pl/3Pl	3Sg	gloss
a. positive			
<i>X sòmb-yà</i>	<i>X sómb-yà</i>	<i>sómb-yá X</i>	'be squatting'
<i>X bì:-yà</i>	<i>X bí:-yà</i>	<i>bí:-yá X</i>	'be (somewhere)'
<i>X sì:<sup>n</sup>-yà</i>	<i>X sí:<sup>n</sup>-yà</i>	<i>sí:<sup>n</sup>-yá X</i>	'have'
(also contracted <i>s-yà<sup>n</sup></i> etc.)			
<i>X j-èjâ</i>	<i>X (j-)éjâ</i>	<i>éjâ X</i>	'know'
<i>X kèjâ</i>	<i>X kéjâ</i>	<i>kéjâ X</i>	'want'
<i>X pìm-yà</i>	<i>X pím-yà</i>	<i>mpím-yá X</i>	'resemble'
b. negative			
<i>X sòmbá-nd-yà</i>	<i>X sómbá-nd-yà</i>	<i>sómbá-ndí-yà X</i>	'not be squatting'
<i>X wól-yà</i>	<i>X wól-yà</i>	<i>wól-yà X</i>	'not be'
<i>X sà:-ndí-yà</i>	<i>X sá:-nd-yà</i>	<i>sá:-nd-yà X</i>	'not have'
<i>X jìndí-yà</i>	<i>X (j)índ-yà</i>	<i>índ-yà X</i>	'not know'
<i>X kèlí-yà</i>	<i>X kél-yà</i>	<i>kél-yà X</i>	'not want'
<i>X pìmà-ndí-yà</i>	<i>X pímá-nd-yà</i>	<i>pímá-nd-yà X</i>	'not resemble'

The past clitic =*ye* (§10.6.1) is replaced in focalized clauses by *mbè*. My assistant did not distinguish between past imperfective and past progressive in focalized clauses. (xx7ab) are subject relatives, (xx7c) is a nonsubject relative.

- (xx7) a. *à:* *yébò* *bò* *mbè*  
 who? dance Impf Past  
 'Who [focus] was dancing?'
- b. *à:* *yébò:-ndi-gá* *mbè*  
 who? dance-PerfNeg-Ppl Past  
 'Who [focus] was not dancing?'
- c. *nù<sup>n</sup>=yò* *yébò* *nà* *mbè*  
 here=Foc dance.Impf 3SgS Past  
 'It's here [focus] that he/she was dancing'

#### 13.1.1.6 Existential *è<sup>n</sup>* absent

Existential particle *è<sup>n</sup>* is not allowed in clauses with a focalized nonpredicative constituent. In 'X have Y' possessive predicates, *è<sup>n</sup>* is obligatory in unfocalized main clauses (xx1a), but it is absent in the presence of a focalized constituent such as a WH-interrogative (xx1bc).

- (xx1) a. *dèm* *è<sup>n</sup>* *á* *sâ:<sup>n</sup>*  
 house Exist 2SgS have.Q  
 'Do you-Sg have a house?' (<*è<sup>n</sup> ñ sâ:<sup>n</sup>*)
- b. *njá=á* *sì:<sup>n</sup>-yà*  
 what?=2SgS have-Ppl  
 'What do you-Sg have?'
- c. *á:=yé* *nà:* *sá:<sup>n</sup>*  
 who?=Foc cow have  
 'Who has a cow?'

#### 13.1.2 Subject focalization

Drawing together points made earlier, in subject focalization a) the subject (including independent pronouns) occurs in the regular clause-initial subject position and (except for several WH words) has the focus clitic; b) there is no additional overt pronominal-subject marking (proclitics, 3Pl suffix) in the verb;

c) the verb is segmentally identical to the main-clause 3Sg form in the positive (perfective/imperfective) but is raised to {H}-tone in the perfective positive; d) a negative verb adds participial *-gà*.

Further examples are in (xx1), and in the subsections of §13.2.2 on the various WH-interrogative words.

- (xx1) a. *ó=yó / sèydú=yò / wè:-gè=yò*      *mì-ŋ*      *málgé*  
 2Sg=Foc / S=Foc / child-Pl=Foc      1Sg-Acc      see.Perf  
 'It was you-Sg / Seydou / the children [focus] who saw me.'
- b. *[è wé:-gè]=yò*      *wálé*      *mì-ŋ*      *tábé*  
 [Def child-Pl]=Foc      money      1Sg-Acc      give.Perf  
 'It was the children [focus] who gave me money.'
- c. *ábé=yó*      *káy<sup>n</sup>*      *kán-lí-gà*  
 2Pl=Foc      work(n)      do-PerfNeg-Ppl  
 'It's you-Pl [focus] who didn't work.'
- d. *á:mádú=yò*      *gé:nyó:-ndi-gà*  
 Amadou=Foc      sweep-ImpfNeg-Ppl  
 'It's Amadou [focus] who doesn't sweep.'

### 13.1.3 Object focalization

To summarize points made earlier: in object focalizations, a) the focalized NP occurs in the usual post-subject position in the clause and (except for several WH words) has the focus clitic; b) overt accusative marking is absent; c) pronominal-subject category is marked on the verb (proclitics including 3Pl, or 3Sg enclitic *ná*); d) perfective verbs are {L}-toned for 1Sg/2Sg, {H}-toned for other pronominal subjects; e) imperfective verbs drop *bò* for 2nd person and 3Sg, and replace it by *bí-yà ~ b(i)-yà* for 1st person and 3Pl; f) negative verbs (perfective and imperfective) add participial suffix *-yà* after the aspect-negation suffix.

Further examples are in (xx1), and in the subsections on WH-interrogative words in §13.2.2.

- (xx1) a. *mí=yó*      *á màlgè*      / *à málgé*  
 1Sg=Foc      2SgS see.Perf / 2PlS see.Perf  
 'It was me that you-Sg / you-Pl saw.'
- b. *mí=yó*      *málgé ná*      / *ŋké málgé*  
 1Sg=Foc      see.Perf 3SgS / 3PlS see.Perf

'It was me that he-or-she/they saw.

- c. *sěydù mí=yó málgé ná*  
 Seydou 1Sg=Foc see.Perf 3SgS  
 'It was me that Seydou saw.
- d. *sěydù mí=yó málgé-lí-yá ná*  
 Seydou 1Sg=Foc see-PerfNeg-Ppl 3SgS  
 'It was me that Seydou did not see.

#### 13.1.4 Focalization of PP or other adverb

A PP like 'in the fields' (xx1) can be focalized. The unfocalized (xx1a) is converted into the adverbial-focus construction (xx1b) by adding the focus clitic to the initial PP and by slightly changing the tone of the verb from LH.L to L.L.

- (xx1) a. *[yàlà bá] [è wógótórò] ń dě:ndè*  
 [field Loc] [Def cart] 1SgS leave.Perf  
 'I left the cart in the field(s).'
- b. *[yàlà bà]=yó [è wógótórò] ń dè:ndè*  
 [field Loc]=Foc [Def cart] 1SgS leave.Perf  
 'It's in the field(s) [focus] that I left the cart.'

## 13.2 Interrogatives

For quoted interrogatives with *-lè*, see §xxx.

### 13.2.1 Polar (yes/no) interrogatives (final pitch rise)

Polar interrogation can be expressed intonationally by prolonging the final syllable with rising pitch. In (xx1a), the predicate that is elsewhere *wòl-yé* is heard as *[wòljèé]*. In (xx1b), *bó-yè-Ø* is modified to *[bójèé]*. The rising pitch, suggested by a final *ˈ* diacritic after the prolongation symbol *→*, masks the phonological H- or L-tone on the final syllable. However, I transcribe the regular (noninterrogative) phonological tone to clarify the structure. In (xx1c), the verb is already {H}-toned, but the speaker lowers the pitch except for the coda of the prolonged final syllable.

- (xx1) a. *á wòl=yé→ˈ*

2SgS not.be=Past.Q  
'Weren't you-Sg present?'

b. *nùw<sup>n</sup>* *bó=yè-Ø→<sup>†</sup>*  
here be=Past-3SgS.Q  
'Was he/she here?'

c. *égé-Ø→<sup>†</sup>*  
come.Perf-3SgS.Q  
'Did he/she come?'

### 13.2.2 'So-and-so' (*filá:nà*)

'So-and-so', i.e. a pro-form replacing specific personal names, is *ntá nì filá:nà*, or just *filá:nà*. This is ultimately from Arabic *fulaan-*.

### 13.2.3 'Who?' (*à:*)

*à:* 'who?' is exemplified in (xx1). It is normally marked by the focus clitic, in the form *à:=(y)é*, whose segmentability is now synchronically questionable. The simple form *à:* occurs in possessor function (xx1f).

- (xx1) a. *à:=(y)é*  
who?=Foc  
'Who is it?'
- b. *à:=(y)è* *égé-Ø*  
who?=Foc come.Perf-3SgS  
'Who came?'
- c. *à:=(y)è* *ándò* *bò-Ø*  
who?=Foc go Impf.3SgS  
'Who will go?'
- d. *à:=(y)è* *búndé* *ná*  
who? hit.Perf 3SgS  
'Who(m) did he/she hit?'
- e. *à:=(y)è=à* *búndé*  
who?=Foc=2PlS hit.Perf  
'Who(m) did you-Pl hit?'

- f.  $[à: \quad dém] = yè$   
 [who? house]=it.is  
 'Whose house is it?'

There is an optional, explicitly plural form  $à:-yà = (y)è$ , though if number is indefinite the singular is used.

#### 13.2.4 'What?' (*njé*), 'with what?', 'why?'

'What?' is *njé* in isolation or before a verb phrase. It is lengthened to *njé:* before plural *-gè* or the 'it is' clitic allomorph  $=yè$ , and to *njê:* before a postposition. This clitic is regular for identificational predication (xx1e) but it is usually omitted as focus marker.

- (xx1) a.  $njá \quad á \quad kèpà$   
 what? 2SgS want  
 'What do you-Sg want?'
- b.  $njé \quad díné \quad ná$   
 what? get.Perf 3SgS  
 'What did he/she get?'
- c.  $njá = á \quad sògè$   
 what?=2SgS buy.Perf  
 'What did you-Sg buy?'
- d.  $njé \quad ò-^n \quad tíyò \quad bò-Ø$   
 what? 2Sg-Acc hurt Impf-3SgS  
 'What (e.g. which body part) hurts you-Sg?'
- e.  $ínì \quad njé: = (y)è$   
 Dem what?=it.is  
 'What is this/that?'

An optional explicit plural is *njé:-gè*. 'With what?' is *njê: nì*. 'Why?' ('for what?') is *njé námù ~ njé nâm:*.

#### 13.2.5 'Where?' (*mbá*)

'Where?' is *mbá*. Like all locational expressions, it can occur without change in static locative, allative, and ablative contexts, with direction (if any) specified

by verbs. In 'where are you going?' the preferred verb is *tégé* 'head for' rather than *ándè* 'go' in progressive contexts (xx1b). The verb may be defocalized (xx1b) but often it is not (xx1c).

- (xx1) a. *mbá* *bó-Ø*  
 where? be-3SgS  
 'Where [focus] is he/she-Sg?'
- b. *mbá* *á* *tègà*  
 where? 2SgS head.for.Impf  
 'Where are you-Sg going?'
- c. *mbá* *à* *gwê:*  
 where? 2PlS go.out.Perf  
 'Where are you-Pl from?'
- d. *mbá = yé*  
 where?=it.is  
 'It's where?'

#### 13.2.6 'When?' (*wèn wàgâr*)

'When?' is *wèn wàgâr*, which includes *wàgâr* 'time, moment'. Often the verb is not defocalized (xx1a).

- (xx1) a. [*wèn* *wàgâr*] *ègá-á* *wò*  
 [which? moment] come-2SgS Impf  
 'When are you-Sg coming?'
- b. *wèn* *wàgâr*  
 which? time  
 'When is it?'

#### 13.2.7 'How?' (*wènè*)

Manner adverbial interrogative 'how?' is *wènè*. Often the verb is not defocalized (xx1a).

- (xx1) a. *wènè* *dígá-á* *wò*  
 how? go.up-2SgS Impf  
 'How will you-Sg go up?'



- b. *wènè = yé*  
how?-it.is  
'How is it?'

### 13.2.8 'How much/many?' (*àngà*)

The usual sense of *àngà* is 'how many?' with countable nouns. *àngà* follows the noun, after plural *-gè*, and the construction can be treated tonally as a possessive, in which case the form ends up as {HL}-toned *àngà* after {L}-toned noun (xx1a). In distributive sense, *àngà* is optionally iterated (xx1c), see §4.7.1.6. The ordinal is *àngù-lò* (xx1d), cf. §4.7.2.1.

- (xx1) a. *[ùnà-gè àngà] sógú-lé ná*  
[goat-Pl<sup>L</sup> <sup>HL</sup>how.many?] buy-Rev.Perf 3SgS  
'How many goats [focus] did you-Sg sell?' (< *úná-gé*)
- b. *[wè:-gè àngà] á màlgè*  
[child-Pl<sup>L</sup> <sup>HL</sup>how.many?] 2SgS see.Perf  
'How many children [focus] did you-Sg see?' (*wè:-gé*)
- c. *àngà / àngà-àngà sógú-lá-á wò*  
how.many? buy-Rev-2SgS Impf  
'For how much (each) do you-Sg sell (them)?'
- d. *dèm àngù-lò*  
house<sup>L</sup> how.many?-Ord  
'how-many-eth house?' (reply: first, second, third, etc.)
- e. *[[dùgù-gè àngà] jángà] wwé: ná*  
[[village-Pl<sup>L</sup> <sup>HL</sup>how.many] inside] rain.fall.Perf 3SgS  
'In how many villages [focus] did it rain?'

### 13.2.9 'Which?' (*wèn*)

*wèn* 'which?' precedes the noun. The construction is treated tonally as possessive, with {HL} overlay on the noun.

- (xx1) a. *[wèn álámúnò] sógà-à*  
[which? <sup>HL</sup>sheep] buy.Impf-2SgS  
'Which sheep-Sg [focus] will you-Sg buy?'
- b. *[[[wèn dém] jángà] n] nǒ:yà-à wò*

[[[which? <sup>HL</sup>house] inside] in] lie.down-2SgS Impf  
 'In which house will you-Pl sleep?'

- c. *[[wèn ná:-ngè] sógú-là-à*  
 [which? <sup>HL</sup>cow-Pl] buy-Rev.Impf-2SgS  
 'Which cows [focus] will you-Sg sell?'

## 14 Relativization

### 14.1 Basics of relative clauses

The following is a brief summary of the major features of relative clauses.

- There is an internal head NP inside the relative clauses;
- This internal head NP is maximally Poss/Det-N-Adj-Num;
- The internal head NP does not undergo tonosyntactic modification, i.e. tone-dropping;
- There is a default head *è* 'that which' denoting a thing, when no more specific head NP is present;
- The universal quantifier *sèlè* 'all' with scope over the head NP follows the verbal participle;
- The verbal participle is marked for an indicative category (aspect, negation, past time, stative), more or less as in main clauses, but with some morphological (suffixal) and/or tonal changes;
- The verbal participle has participial suffixes (or enclitics) in some inflectional categories (especially negative inflections and statives);
- Plural suffix *-gè* quantifying over the head NP is variably expressed on the internal head NP and/or on the verbal participle;
- Subject relatives have no overt pronominal-subject inflection on the verb;
- Nonsubject relatives have regular 1st/2nd person subject proclitics, but 3Sg subject enclitic *nà* and in some inflectional categories 3Pl subject proclitic *ɲké*.

### 14.2 Head NP

#### 14.2.1 Medial position in relative clause

The head NP is internal to the relative clause. This is shown by an object relative that also has a nonpronominal subject like 'Seydou', such as (xx1).

- (xx1) *sěydù*      [*è*      *ná:*]      *sògù-lè*      *nà*  
Seydou      [Def      cow]      buy-Rev.Perf1      3SgS  
'the cow that Seydou sold'

Even subject relatives allow pre-subject spatiotemporal setting adverbs like *yà:gù* 'yesterday' to precede the subject head NP.

- (xx2) *yà:gù*      [*è*      *ntá*]      *ègè-gè*  
yesterday    [Def    person]    come.Perf-Pl  
'the people who came yesterday'

In (xx1-2) above the head NP happens to be immediately preverbal, but this is accidental. (xx3) shows a subject head NP separated from the verb by a non-head object NP.

- (xx3) [*è*      *ntá*]      *àlámùnò*      *sògù-lè*  
[Def      person]    sheep      buy-Rev.Perf  
'the person who sold (the) sheep'

#### 14.2.2 Form of internal head NP (Poss-N-Adj-Num)

In (xx1), the components of the internal head are bolded in the interlinear. The internal head NP is maximally Poss/Det-N-Adj-Num. The prenominal as well as postnominal elements in this sequence must be adjacent; in particular, a possessor or determiner is part of the internal NP head and cannot be separated from the noun by e.g. an adverb. Among NP components, only the 'all' quantifier regularly follows the verb rather than being part of the internal head (xx1g).

- (xx1) a. *yà:gù*      *è*      *dém*      *tibè(-gé)*  
yesterday    **Def**      **house**      fall.Perf(-Pl)  
'the house(s) that fell (collapsed) yesterday'
- b. *è*      *dém*      *bày<sup>n</sup>*      *tibè(-gé)*  
**Def**    **house**    **big**      fall.Perf(-Pl)  
'the big house(s) that fell'
- c. *è*      *dém-gè*    *nègà*      *tibè*  
**Def**    **house-Pl**    **two**      fall.Perf  
'the two houses that fell'
- d. *è*      *dém*      *bày<sup>n</sup>-ngè*    *nègà*      *tibè*  
**Def**    **house**    **big-Pl**    **two**      fall.Perf  
'the two big houses that collapsed'

- e. *è dém báy<sup>n</sup> yòrdè-gè nègà tìbè-gè*  
**Def house big black-Pl two** fall.Perf  
 'the two big black houses that collapsed'
- f. *sèydù [dém báy<sup>n</sup>-ngé négá tìbè-gè]*  
**Seydou<sup>L</sup> HL[house big-Pl two** fall.Perf-Pl]  
 'Seydou's two big houses that collapsed'
- g. *è dém tìbè-gé sèlè*  
**Def house** fall.Perf-Pl **all**  
 'all the houses that fell'

Aside from the position of 'all', the only difference in form between relative head NPs and main-clause NPs is that plural *-gè* is often added to the verb rather than to the internal head NP. However, under some conditions plural *-gè* can appear within the internal head, instead of or as well as on the verb. See §14.4.1 below.

#### 14.2.3 Restrictions on the head of a relative clause

There are no important restrictions on what can be the head NP. It can be a pronoun (xx1ab), a personal name (xx1c), or a demonstrative (xx1d).

- (xx1) a. *mbé nùw<sup>n</sup> bò-gè*  
 1PlS here be-Pl  
 'we who are here'
- b. *ó / ònó / mí nùw<sup>n</sup> bò*  
 2SgS / 3SgS / 1SgS here be  
 'you-Sg who are here / he-or-she who is here / I who am here'
- c. *sěydú nùw<sup>n</sup> bò*  
 Seydou here be  
 'Seydou who is here'
- d. *ínì = á màl-yà*  
 Dem=2SgS see.Stat-Ppl  
 'this which you-Sg see'

#### 14.2.4 Default nonhuman head *è* 'that which'

*è* 'that which' is a default nonhuman head when no more precise head NP is indicated. Free translations can use 'what', as in 'what you don't know won't hurt you.' Subject-relative examples are in (xx1).

- (xx1)
- |          |                    |                      |
|----------|--------------------|----------------------|
| <i>é</i> | <i>ègè</i>         | 'what came'          |
| <i>è</i> | <i>ègě-l-gà</i>    | 'what didn't come'   |
| <i>è</i> | <i>ègò bó</i>      | 'what will come'     |
| <i>è</i> | <i>ègò:-ndí-gà</i> | 'what will not come' |

#### 14.2.5 Conjoined NP as head

There is no syntactic objection to a conjoined NP as the head of a relative. The main clause in (xx1a) is easily converted into the subject relative in (xx1b).

- (xx1)
- a. [*yò:-gè nì*] [*wálá-gé ní*] *jáy<sup>n</sup>-y<sup>n</sup>ì*  
 [woman-Pl and] [man-Pl and] fight.Perf-3PlS  
 'women and men fought (with each other)'
- b. [*è yó:-gè nì*] [*è wálá-gé ní*] *bòw<sup>n</sup> jáy<sup>n</sup>-gé*  
 [Def woman-Pl and] [Def man-Pl and] together fight.Perf-Pl  
 'the women and men who fought'

#### 14.2.6 Headless relative clause

Based on present data, completely headless relatives do not appear to be regular in Penange. Headless adverbial relatives, where e.g. 'time', 'place', or 'manner' is omitted, are nonsubject relatives, whose verb-participles are not always distinct in form from main-clause verbs. Even in relatives with overt participial marking (mostly negative relatives), my assistant rejected headless adverbial relatives.

In relatives like 'what I like' and 'one who doesn't work', the head is overt in all examples in my data: *è* (nonhuman) or *ntá* 'person'.

#### 14.2.7 Head noun not doubled after relative clause

Doubling (echoing) of the internal head noun following the verb has not been observed.

### 14.3 Preverbal subject pronoun in nonsubject relative

If a nonsubject relative, such as an object relative, has a pronominal subject, it is expressed as a proclitic on the verb for 1st/2nd persons and for 3Pl, and as an enclitic to the verb for 3Sg.

- (xx1) a. *è ná: á / ñ / ñké sògù-lè*  
 Def cow 2SgS / 1SgS / 3PlS sell.Perf  
 'the cow that you-Sg / I / they sold'
- b. *è ná: à / ñ sógú-lé*  
 Def cow 2PlS / 1PlS sell.Perf  
 'the cow that you-Pl / we sold'
- c. *è ná: sògù-lè nà*  
 Def cow sell.Perf 3SgS  
 'the cow that he or she sold'

### 14.4 Verbal participle in relative clause

Verbs in relative clauses function as nouns, and can therefore take plural suffix *-gè* (§14.4.1 below). These verbs can therefore reasonably be called participles. Some but not all relative-clause verbs take suffixes (preceding plural *-gè* if the latter is present) that I take to be participial suffixes. The main participial suffixes are *-gà*, *-yà*, and *-bè*. A brief summary of their contexts is in (xx1), distinguishing subject from nonsubject relatives. Nonsubject relatives also include pronominal-subject conjugation. Details are given in sections below.

- (xx1) *-gà* subject relatives (strictly negative):  
 perfective negative *-l-gà* (§14.4.5)  
 experiential perfect negative: *-té:-ndí-gà* (§14.4.5)  
 imperfective negative *-ndí-gà* (§14.4.6)  
 progressive negative *wól-gà* (§14.4.6)  
 stative negative *-ndá-gà* (§14.4.7)
- yà* nonsubject relatives (negative, also some positive):  
 positive:  
 experiential perfect *-téy-yà* (§14.4.2)  
 positive imperfective *b-yà* (1Sg, 1Pl, 3Pl) (§14.4.3)  
 positive imperfective *-yà* (2Sg, 2Pl) (§14.4.3)

stative *-yà* (§14.4.4)  
 negative:  
 perfective negative *-lí-yà* (§14.4.5)  
 stative negative *-nd-yá* (§14.4.7)

*-bê* subject and nonsubject relatives:  
 past (replacing *=ye*) (§14.4.8)

(none) subject relatives:  
 perfective positive, stem {H}-toned (§14.4.2)  
 experiential perfect *-tè* (§11.4.2)  
 nonsubject relatives:  
 perfective positive (§14.4.2)

#### 14.4.1 Position of plural *-gè*

The best evidence for participial status of the relative-clause verb is when plural *-gè* is added to the verb rather than to the internal head NP. However, in some contexts *-gè* is in indeed added to the internal head, and in this case it may or may not be doubled on the verb. So the overall evidence is mixed as to whether the verb is syntactically participial (noun- and adjective-like).

Consider the data in (xx1). (xx1) is a main clause with plural subject. (xx1b) is the corresponding subject relative. The only sign that 'dog(s)' is plural is the plural suffix *-gè* on the verb, which therefore functions as a participle. However, in nonsubject relatives like the object relative in (xx1c), the internal head is often directly pluralized, with only optional doubling of *-gè* on the verb.

- (xx1) a. *[è nké-gè]* *yà:-gè* *núng-yè*  
 [Def dog-Pl] woman-Pl bite.Perf-3PlS  
 'The dogs bit the women.'
- b. *[è nké]* *mì-η* *núngé-gé*  
 [Def dog] 1Sg-Acc bite.Perf.Ppl-Pl  
 'the dogs that bit me'
- c. *[è nké:]* *[è yó:]* *nùngè* *ná-gè*  
 [Def dog] [Def woman-Pl] bite.Perf 3SgS-Pl  
 'the women who(m) the dog bit'
- d. *[è nké-gè]* *tá:ndì]* *mì-η* *núngé(-gé)*  
 [Def dog three] 1Sg-Acc bite.Perf.Ppl-Pl  
 'the three dog(s) that bit me'



- e. *[è nkê:] [è yó:-gè tá:ndì] nùngè ná / ná-gè*  
 [Def dog] [Def woman-Pl three] bite.Perf 3SgS(-Pl)  
 'the three women who(m) the dog bit'

#### 14.4.2 Participles of positive perfective-system verbs

(xx1ab) are perfective positive main clauses with 3Sg and 3Pl subject, respectively. **Subject** relatives based on them are in (xx1cd), showing the {H}-toned E/I-stem. For prosodically light stems, this form is identical to the 3Sg subject main clause version. However, in (xx1c) *núngé* is a participle, and plural *-gè* is added to it, not to the head noun 'dog(s)'. For prosodically heavy stems, the 3Sg main-clause form has {HL} contour (*yígíré-Ø* 'he/she shook') but the subject-relative participle is fully {H}-toned (xx1d).

- (xx1) a. *nkè mî-ŋ núngé-Ø*  
 dog 1Sg-Acc bite.Perf-3SgS  
 '(The) dog bit me.'
- b. *nkè-gè mî-ŋ núng-yè*  
 dog-Pl 1Sg-Acc bite.Perf-3PlS  
 '(The) dogs bit me.'
- c. *[è nké] mî-ŋ núngé(-gè)*  
 [Def dog] 1Sg-Acc bite.Perf(-Pl)  
 'the dog(s) that bit me'
- d. *wálá mî-ŋ yígíré*  
 man 1Sg-Acc shake.Perf  
 'the man who shook me'

**Nonsubject** relatives are in (xx2). They are based on a pronominally conjugated form of the perfective verb, with appropriate tone melodies. In (xx2d), plurality of the head NP ('children') is expressed by adding plural *-gè* either to the head NP or to the verb, or by adding *-gè* to both of them (double plural marking).

- (xx2) a. *[è déní] nkè mî-ŋ núngé ná*  
 [Def day] dog 1Sg-Acc bite.Perf 3SgS  
 'the day the dog bit me'
- b. *[è déní] nkè-gè mî-ŋ nké núngé*  
 [Def day] dog 1Sg-Acc 3PlS bite.Perf  
 'the day the dogs bit me'

- c. [è wê:] nkè núngé ná  
[Def child] dog bite.Perf 3SgS  
'the child who(m) the dog bit'
- d. [è wê: / wê:-gè] nkè-gè nké núngé(-gé)  
[Def child / child-Pl] dog-Pl 3PlS bite.Perf  
'the children that the dogs bit'

The paradigms of 'bite' and 'shake' in nonsubject perfective relatives are in (xx3). The 3Sg form sometimes sounds low-pitched in long relative clauses, but it behaves as structurally {H}-toned.

(xx3)	'(the one that) __ bit'	'(the one that) __ shook'
1Sg	ń nùngé	ń yìgìré
1Pl	ń núngé	ń yígíré
2Sg	á nùngé	á yìgìré
2Pl	à núngé	à yígíré
3Sg	núngé ná	yígíré ná
3Pl	nké núngé	nké yígíré

The **experiential perfect** is illustrated in a **subject** relative (xx4a) and a **nonsubject** relative (xx4b). The latter shows participial *-yà* as with statives (and negatives).

- (xx4) a. ntà nìgè màlgà-tè(-gé)  
person elephant see-ExpPf(-Pl)  
'a person/people who has/have (once) seen an elephant'
- b. yè: ń màlgà-téy-yà  
thing 1SgS see-ExpPf-Ppl  
'a thing/things that I have (once) seen'

The paradigm for experiential perfective **nonsubject** relatives is (xx5).

(xx5)	'(a thing that) __ has (once/ever) seen'
1Sg	ń màlgà-téy-yà
1Pl	ń màlgà-téy-yà
2Sg	á màlgà- téy-yà
2Pl	à màlgà-téy-yà

3Sg *màlgà-téy-yá nà*  
 3Pl *ɲké málgá-téy-yà*

#### 14.4.3 Participles of positive imperfective-system verbs

Imperfective (or progressive) **subject** relatives are in (xx1). The main verb is {HL} toned and is followed by the usual imperfective auxiliary *bò*.

- (xx1) a. *[è yô:] nùw<sup>n</sup> káy<sup>n</sup> kân bò*  
 [Def woman] here work(n) do.Impf Impf  
 'the woman who works here'
- b. *ntà kònjè nô: bò-gè*  
 person beer drink.Impf Impf-Pl  
 'people who drink beer'
- c. *ntà nàmà sògù-lò bò-gè*  
 person meat buy-Rev.Impf Impf-Pl  
 'people who sell meat'

**Nonsubject** relatives are in (xx2).

- (xx2) a. *[yô:-gé géɲ ándò ɲké b-yà [wàjjà bó-Ø]*  
 [woman-Pl place go-IMP 3PlS Impf-Ppl] [far be-3SgS]  
 'The place where (the) women go is far away.'
- b. *kònjè nà-á-yà*  
 beer drink-2SgS-Ppl  
 'the beer that you-Sg drink'

The rather messy paradigm for nonsubject relatives of 'go' is (xx3). Participial *-yà* (also used in statives and negatives) is present except in the 3Sg form, but in the 1Sg, 1Pl, and 3Pl it is added to *bò* (resulting in *b-yà*), whereas in the 2Sg and 2Pl it is added directly to the second person proclitic. (In the main-clause paradigm, the second person proclitics induce lenition of *bò* to *wò* but do not delete it.)

(xx3) '(a place where) \_\_ go(es)/will go'

1Sg *ándò ɲ b-yà*  
 1Pl *ándò ɲ bí-yà*

2Sg	<i>àndà-á-yà</i> (!)
2Pl	<i>ándà-à-yà</i> (!)
3Sg	<i>àndò nà</i> (!)
3Pl	<i>ándò ñké b-yà</i>

Further paradigms are in (xx4).

(xx4)	subj	'go in'	'do'	'dance'	'shatter'
	1Sg	<i>nò: ñ b-yà</i>	<i>kànù ñ b-yà</i>	<i>yèbò ñ b-yà</i>	<i>tèbà-gò ñ b-yà</i>
	1Pl	<i>nô: ñ bí-yà</i>	<i>kánù ñ bí-yà</i>	<i>yébò ñ bí-yà</i>	<i>téba-gò ñ bí-yà</i>
	2Sg	<i>nò-á yà</i>	<i>kànà-á yà</i>	<i>yèbà-á yà</i>	<i>tèbà-gà-á yà</i>
	2Pl	<i>nó-à yà</i>	<i>kànà-à yà</i>	<i>yébà-à yà</i>	<i>téba-gà-à yà</i>
	3Sg	<i>nò: nà</i>	<i>kàn nà</i>	<i>yèbò nà</i>	<i>tèbà-gò nà</i>
	3Pl	<i>nô: ñké b-yà</i>	<i>kánù ñké b-yà</i>	<i>yébò ñké b-yà</i>	<i>téba-gò ñké b-yà</i>

There is **no difference between imperfective and progressive** relatives. The subject relatives in (xx5) were elicited as progressives (e.g. *des gens qui sont en train de travailler*) but have the same form as imperfectives.

(xx5)	a.	<i>ntà</i> person 'people who are working'	<i>káy<sup>n</sup></i> work(n)	<i>kân</i> do.Prog	<i>bò-gè</i> Prog-Pl
	b.	<i>ntà</i> person 'people who are selling meat'	<i>nàmà</i> meat	<i>sógù-lò</i> buy-Rev.Impf	<i>bò-gè</i> Impf-Pl

Similarly, the imperfective nonsubject relatives in (xx2) above can also be used as progressive nonsubject relatives.

#### 14.4.4 Participles of positive stative verbs

Derived stative verbs are in the **subject** relatives (xx1).

(xx1)	<i>[è</i> [Def	<i>wálà]</i> man]	<i>èmbà</i> there	<i>sòmbà / dà:<sup>n</sup></i> squat.Stat / sit.Stat
	'the man who is squatting/sitting over there'			

A **nonsubject** stative relative is (xx2). Participial *-yà* is typical of nonsubject stative relatives.

- (xx2) *gɛŋ*      *dà:<sup>n</sup>-yà / sòmɓ-yà*      *nà*  
 place      sit.Stat-Ppl / squat-Ppl      3SgS  
 'where he/she is sitting/squatting'

The paradigm for 'be squatting' in nonsubject stative relatives is (xx7).

- (xx3)      '(where) \_\_ is squatting'

1Sg	<i>ŋ sòmɓ-yà</i>
1Pl	<i>ŋ sómɓ-yà</i>
2Sg	<i>á sòmɓ-yà</i>
2Pl	<i>à sómɓ-yà</i>
3Sg	<i>sòmɓ-yà ná</i>
3Pl	<i>ŋké sómɓ-yà</i>

The forms used in **subject** relatives of **defective stative** (quasi-)verbs are in (xx4). The participles are {H}-toned. Forms for 'know' and 'want' are based on the morphologically simple form of the stem used (in main clauses) in 1st/2nd person subject contexts (1Sg *ŋ nɛy<sup>n</sup>* 'I know', *ŋ kɛy<sup>n</sup>* 'I want'), see §11.2.5.1-2.

(xx4)    stative (3Sg)	subject relative	gloss
<i>bô:-Ø</i>	<i>bó</i>	'be (somewhere)'
<i>sâ<sup>n</sup>-Ø</i>	<i>sá:<sup>n</sup></i>	'have'
<i>ɛɲð bô-Ø</i>	<i>ɛy<sup>n</sup></i>	'know'
<i>kɛɲù bô-Ø</i>	<i>kɛy<sup>n</sup></i>	'want'
<i>(m)pímà: bô-Ø</i>	<i>(m)pímá</i>	'resemble'

Participial forms of the defective statives in **nonsubject** relatives are in (xx5). There are significant irregularities except for 'resemble'. 'Be' and 'resemble' have transparent participial *-yà*, as in derived statives. The other three statives in (xx5) are less transparent but probably have a phonologically disguised *\*-yà*. The forms for 'know' and 'want' are similar to the forms (*ɛɲð* 'know', *kɛɲù* 'want') that are used in main clauses with third person subjects, before the 'be' auxiliary. 'Have' which fluctuates between *sâ:<sup>n</sup>* and *sí:ɲà* in several combinations.

- (xx5)    Nonsubject relatives of defective statives

	'be'	'have'	'know'	'want'	'resemble'
1Sg	<i>ń bì-yà</i>	<i>ń sà:<sup>n</sup> ~ ń sì:<sup>n</sup>yà</i>	<i>ń n-èná</i>	<i>ń kèná</i>	<i>ń (m)pím-yà</i>
1Pl	<i>ń bí-yà</i>	<i>ń sí:<sup>n</sup>yà</i>	<i>ń n-éná</i>	<i>ń kéná</i>	<i>ń (m)pím-yà</i>
2Sg	<i>á bì-yà</i>	<i>á sà:<sup>n</sup> ~ á sì:<sup>n</sup>yà</i>	<i>á n-èná</i>	<i>á kèná</i>	<i>á (m)pím-yà</i>
2Pl	<i>à bí-yà</i>	<i>à sí:<sup>n</sup>yà</i>	<i>à n-éná</i>	<i>à kéná</i>	<i>à (m)pím-yà</i>
3Sg	<i>bì-yà nà</i>	<i>sá:<sup>n</sup> ná ~ sí:<sup>n</sup>yá ná</i>	<i>èná nà</i>	<i>kèná nà</i>	<i>(m)pím-yà nà</i>
3Pl	<i>ńké bí-yà</i>	<i>ńké sà:<sup>n</sup> ~ ńké sí:<sup>n</sup>yà</i>	<i>ńké éná</i>	<i>ńké kéná</i>	<i>ńké (m)pím-yà</i>

#### 14.4.5 Participles of negative perfective-system verbs

Perfective negative **subject** relatives have *-l-gà*, consisting of perfective negative suffix *-l(i)* and subject-relative negative participial *-gà*. The verb stem is the E/I-stem, with {H} tones. The plural is *-l-gá-gè*.

- (xx1) a. *[è ńké] m̀-ń núnégé-l-gà / núnégé-l-gá-gè*  
 [Def dog] 1Sg-Acc bite-PerfNeg-Ppl.Neg / ...-Pl  
 'the dog(s) that didn't bite me'
- b. *[è wê:] kùbò kúbé-l-gà*  
 [Def child] farming(n) do.farming-PerfNeg-Ppl.Neg  
 'the child who didn't do farm work'

**Nonsubject** relatives have a conjugated form of *-lí-yà*, which ends in the nonsubject-relative version of the negative participial suffix (xx2).

- (xx2) a. *[è dên] á y-ègè-lí-yà*  
 [Def day] 2SgS Epen-come-PerfNeg-Ppl.Neg  
 'the day you-Sg didn't come'
- b. *[è álamùnò] ń sógé-lí-yà*  
 [Def sheep] 1PlS buy-PerfNeg-Ppl.Neg  
 'the sheep-Sg that we didn't buy'

The paradigm for nonsubject 'didn't come' is (xx3).

(xx3) '(the day) \_\_\_ didn't come'

1Sg	<i>ɲ y-ègè-lí-yà</i>
1Pl	<i>ɲ y-égé-lí-yà</i>
2Sg	<i>á y-ègè-lí-yà</i>
2Pl	<i>à y-égé-lí-yà</i>
3Sg	<i>ègè-l-yá nà</i>
3Pl	<i>ɲké égé-lí-yà</i>

The **experiential perfect** has *-ndi* as negative suffix, rather than *-li*, in main clauses. Its relative clause forms keep this *-ndi*, followed by the regular negative participial suffixes, *-gà* for subject relative and *-yà* for nonsubject relatives.

- (xx4) a. [*è wálà*] *nìgè málgá-té:-ndí-gà*  
 [Def man] elephant see-ExpPf-Neg-Ppl.Neg  
 'the man who has never seen an elephant'
- b. *è nùndò-tè:-ndí-yá nà*  
 what hear-ExcPf-Neg-Ppl.Neg 3SgS  
 'something that he/she has never heard'
- c. *è ɲké nùndò-tè:-ndí-yà*  
 what 3PlS hear-ExcPf-Neg-Ppl.Neg  
 'something that they have never heard'

#### 14.4.6 Participles of negative imperfective-system verbs

Imperfective negative **subject** relatives are in (xx1). Imperfective negative *-ndí-* (identical to the third person subject form in the regular main-clause paradigm) is followed by negative participial *-gà*.

- (xx1) a. *ɲké nùngò:-ndí-gà*  
 dog bite-ImpfNeg-Ppl.Neg  
 'a dog that doesn't bite'
- b. [*è wê:*] *àndò:-ndí-gà(-gè)*  
 [Def child] go-ImpfNeg-Ppl.Neg(-Pl)  
 'the child(ren) who won't go'

**Nonsubject** relatives are in (xx2). Except for the 3Pl subject form, they are based on the regular main-clause conjugated forms, plus negative participial *-yà*.

- (xx2) a. *nàmà* *tèmò-ò-lí-yà*  
 meat eat.meat-1SgS-ImpfNeg-Ppl.Neg  
 'meat that I/you-Sg do not eat'
- b. *nàmà* *tèmò:-nd-yá-gà*  
 meat eat.meat-ImpfNeg-3PlS-Ppl.Neg  
 'meat that they don't eat'

The paradigm for nonsubject relatives with 'eat meat' is (xx3). The 3Pl subject form is notable for not involving 3Pl subject proclitic *ŋké*. Rather, it is based directly on the main-clause 3Pl imperfective negative (*tèmò:-nd-yá* 'they do not eat meat'). Instead of adding the usual nonsubject-relative negative participle *-yà*, resulting in a #-*ya-ya* suffix sequence, it adds the other (i.e. usually subject-relative) negative participial suffix *-gà*.

(xx3) '(the meat) \_\_\_ don't eat'

1Sg	<i>tèmò-ò-lí-yà</i>
1Pl	<i>tèmò-ò-lí-yà</i>
2Sg	<i>tèmà-à-lí-yà</i>
2Pl	<i>tèmà-à-lí-yà</i>
3Sg	<i>tèmò:-nd-yá nà</i>
3Pl	<i>tèmò:-nd-yá-gà</i> (!)

For the **progressive negative** with 'be' auxiliary, (xx4a) is a subject relative, and (xx4b) is a nonsubject relative.

- (xx4) a. *yò:* *ŋò:* *wòl-gà*  
 woman eat not.be-Ppl.Neg  
 'a woman who is not eating'
- b. [*è* *wágàr*] *ŋò:* *ŋ* *wòlí-yà*  
 [Def time] eat 1SgS not.be-Ppl.Neg  
 'the time when I am not eating'
- c. [*è* *wágàr*] *ŋò:* *ŋké* *wòlí-yà*  
 [Def time] eat 3PlS not.be-Ppl.Neg  
 'the time when they are not eating'



#### 14.4.7 Participles of negative stative verbs

A subject relative with a negative form of a derived stative is (xx1).

- (xx1) *[è wálà] èmbà sòmbá-ndá-gà*  
 [Def man] there squat-StatNeg-Ppl.Neg  
 'the man who is not squatting/sitting over there'

A nonsubject relative is (xx2)

- (xx2) *gēj sòmbà-nd-yá nà*  
 place squat-StatNeg-Ppl.Neg 3SgS  
 'where he/she is sitting/squatting'

The paradigm for 'not be squatting' in nonsubject stative relatives is (xx7).

- (xx3) '(where) \_\_ is not squatting'

1Sg	<i>ŋ sòmbá-nd-yà</i>
1Pl	<i>ŋ sòmbá-nd-yà</i>
2Sg	<i>á sòmbá-nd-yà</i>
2Pl	<i>à sòmbá-nd-yà</i>
3Sg	<i>sòmbà-nd-yá na</i>
3Pl	<i>ŋké sòmbá-nd-yà</i>

Subject-relative participles of defective statives are in (xx4).

- | (xx4) | stative (3Sg)        | subject relative      | gloss                |
|-------|----------------------|-----------------------|----------------------|
|       | <i>wól-Ø</i>         | <i>wól-gà</i>         | 'not be (somewhere)' |
|       | <i>sá:-ndá-Ø</i>     | <i>sá:-ndá-gà</i>     | 'not have'           |
|       | <i>índó-Ø</i>        | <i>índó-gà</i>        | 'not know'           |
|       | <i>kéy-là-Ø</i>      | <i>kéy-lá-gà</i>      | 'not want'           |
|       | <i>(m)pímá-ndá-Ø</i> | <i>(m)pímá-ndá-gà</i> | 'not resemble'       |

Nonsubject participles for negative counterparts are in (xx5).

- (xx5) Nonsubject relatives of positive defective statives

	'not ... ... be'	... have'	... know'	... want'
1Sg	<i>ń wòl-yà</i>	<i>ń sǎ:-nd-yà</i>	<i>ń n-índ-yà</i>	<i>ń kěy-l-yà</i>
1Pl	<i>ń wǒl-yà</i>	<i>ń sǎ:-nd-yà</i>	<i>ń n-índ-yà</i>	<i>ń kěy-l-yà</i>
2Sg	<i>á wòl-yà</i>	<i>á sǎ:-nd-yà</i>	<i>á n-índ-yà</i>	<i>á kěy-l-yà</i>
2Pl	<i>à wǒl-yà</i>	<i>à sǎ:-nd-yà</i>	<i>à n-índ-yà</i>	<i>à kěy-l-yà</i>
3Sg	<i>wòl-yá nà</i>	<i>sà:-nd-yá nà</i>	<i>índ-yá nà</i>	<i>kèy-l-yá nà</i>
3Pl	<i>ńké wǒl-yà</i>	<i>ńké sǎ:-ndy-à</i>	<i>ńké índ-yà</i>	<i>ńké kěy-l-yà</i>

#### 14.4.8 Participle of past-time forms

The participial suffix corresponding to past clitic =*ye* in main clauses is *-bè*, sometimes extended as *-mbè*. It occurs in subject relatives (xx1ab) and, with conjugated verb, in nonsubject relatives (xx1c).

- (xx1) a. *yô:*            *nùŋ*            *bó-mbè*  
           woman        here            be-Ppl.Past  
           'the woman who was there (not far away)'
- b. *ntá*            *dèm*            *sǎ:<sup>n</sup>-bè*  
           person        house        have.Rel-Ppl.Past  
           'the person who had a house' (plural *sǎ:<sup>n</sup>-bé-gè*)
- c. *gέŋ*            *dèm*            *ń*            *sǎ:<sup>n</sup>-bè*  
           place        house        1SgS        have-Ppl.Past  
           'the place where I had a house'

#### 14.5 Relative clause involving verb- or VP-chain

When a relative clause is based on a complex construction (tight or loose) containing a final verb and one or more nonfinal verbs, only the final verb is participialized, and only it can be morphologically pluralized (suffix *-gè*). The nonfinal verb has the same form as in non-relative main clauses.

- (xx1) a. [*è*    *yô:*]        *yèbù*        *yèbà→*        *nàyè-gè*,  
           [Def woman] dance(n) dance-Impf spend.night-Perf,  
           *mbá*            *bí-yà*  
           where?        be-3PIS  
           'Where are [the women who spent the night dancing]?'

(cf. §15.2.1.2)

- b. *mbá* *[[è ntá]* *[nǎ: sòngè nà]* *né:-gé]*  
where? [[Def person] [meal bring.Perf 3SgS] eat.Perf-Pl]  
'Where are the people who brought meals and ate?'  
[cf. §15.2.2.1]

## 14.6 Late-NP elements that follow the verb (or verbal participle)

### 14.6.1 Plural (-gè)

When the head NP is plural, plural *-gè* is suffixed to the verb-participle and/or to the internal head. See §14.4.1 for examples.

### 14.6.2 Position of 'all' quantifier

*sèlè* 'all' follows the verbal participle. If the referent is countable, the participle is normally pluralized (*-gè*) for universal quantification (xx1a), but not for distributive quantification (xx1b).

- (xx1) a. *[nà: á sògè-gé sèlè]* *mì-ŋ tà:rà*  
[cow 2SgS buy.Perf-Pl all] 1Sg-Acc show.Imprt  
'Show me all the cows that you-Sg bought.' (*sògè-gè*)
- b. *[yò: ègé sèlè]* *[tè:mdéré-gè nègà]* *tàbà*  
[woman come.Perf all [hundred-Pl two] give.Imprt  
'Give-2Sg two hundred (i.e. 1000 francs CFA) to each woman who comes here!'

## 14.7 Grammatical relation of relativized-on NP

### 14.7.1 Subject relative clause

Further examples of subject relatives are in (xx1). If the head NP is plural, suffix *-gè* is added to the verb.

- (xx1) a. *[è wé:]* *ó-<sup>n</sup>* *núngé(-gé)*  
[Def child] 2Sg-Acc bite.Perf(-Pl)  
'the child(ren) who bit you-Sg'

- b. *ògà* [Def *wé:]* *dùgù-rò* *bó / bò-gé*  
 tomorrow [Def child] run.Impf Ppl.Impf / Ppl.Impf-Pl  
 'the child(ren) who will run tomorrow'
- c. [Def *wé:]* *ɲkìndè(-gé)*  
 [Def child] die.Perf  
 'the child(ren) who died'

#### 14.7.2 Object relative clause

Further examples of object relatives are in (xx1). Forms for singular and plural head NP are distinguished by the final plural *-gè* on the verb.

- (xx1) a. *á:mádù* [Def *ná:]* *sògù-lè* *nà / ná-gè*  
 Amadou [Def cow] sell.Perf 3SgS / 3SgS-Pl  
 'the cow/cows that Amadou sold'
- b. [Def *ná:]* *ná:] = á* *sògù-lè / sògù-lé-gè*  
 [Def cow]=2SgS sell.Perf / sell-Perf-Pl  
 'the cow/cows that you-Sg sold'
- c. [Def *ná:]* *ò-<sup>n</sup> = ɲ* *sógú-lé / sógú-lé-gè*  
 [Def cow] 2Sg-Acc=1PlS sell.Perf  
 'the cow/cows that we sold you-Sg'
- d. *á:mádù* [Def *wé:]* *sòɲè* *nà / ná-gè*  
 Amadou [Def child] bring.Perf 3SgS / 3SgS-Pl  
 'the child/children whom Amadou brought'
- e. [Def *?álámúnò*] *sògù-lé-l* *ɲ* *dùndè / dùndé-gè*  
 [Def sheep] buy-Rev-VblN 1SgS look.for.Perf / ...-Pl  
 'the sheep that I sought to sell'
- f. [Def *?álámúnò*] *ògà* *sògù-lé-l* *ɲ* *kèná / kèná-gè*  
 [Def sheep] tomorrow buy-Rev-VblN 1SgS want / want-Pl  
 'the sheep-Pl that I want to sell tomorrow'

#### 14.7.3 Possessor relative clause

Examples of possessor relatives are in (xx1). The possessive relationship is expressed directly by 3Sg possessor suffix *-ná* on the possessed noun. 3Sg *-ná* is used even for plural possessors, since plurality of the referent (coindexed with

the clause-internal possessor) is expressed by plural *-gè* on the verbal participle (xx1b). If the possessed entity is plural, *-gè* may be added to it, but there is some messiness in the data (especially where possessor number is expected to correlate one-to-one with possessed-entity number).

- (xx1) a. *[[è ntá] dèm-ná tibè] mbá bó-Ø*  
 [[Def person] house-3SgP fall.Perf] where? be-3SgS  
 'Where is the person whose house fell?'  
 b. *[[è ntá] dèm-nà tibè-gé] mbá bí-yà*  
 [[Def person] house-3SgP fall.Perf-Pl] where? be-3PlS  
 'Where are the people whose house(s) fell?'  
 c. *[è ntá] wè:-nà-gè dògè] mbá bó-Ø*  
 [Def person] child-3SgP-Pl die.Perf] where? be-3SgS  
 'Where is the person whose children died'

#### 14.7.4 Relativization on the complement of a postposition

(xx1) is a simple main clause with a purposive PP. The corresponding relative in (xx1b) has a literal structure roughly "[[the honey<sub>x</sub>] they came-Ppl [for it<sub>x</sub>] yesterday] ...", with 3Sg possessor *-nà* resuming 'the honey'.

- (xx1) a. *[ìgè nâm] é-g-yè*  
 [honey for] come.Perf-3PlS  
 'They have come for (the) honey.' (*námù*)  
 b. *[[è ígè] yà:gù nâm-nà ñké égé]*  
 [[Def honey] yesterday Purp-3SgP 3PlS come.Perf]  
*mbá bó-Ø*  
 where? be-3SgS  
 'Where is the honey that they came for yesterday?'

The pattern of separating the relativized-on NP from a resumptive PP is also found with instrumental postposition *nì*. (xx2a) shows the relevant main clause, with *nì* directly following the complement NP. When the complement NP is relativized on, it is separated from the postposition, which therefore requires a resumptive discourse-definite demonstrative *ê*: (xx2b).

- (xx2) a. *[[ín tàlà] nì] nàmá ñ sèmè*  
 [[Dem knife] Inst] [meat 1SgS cut.Perf]  
 'I cut the meat with that knife [focus].' (*nàmà*)

- b. *[[è tálà] [é: nì] nàmá ń sèmè]*  
 [[Dem knife] [Dem.Def Inst] meat 1SgS cut.Perf]  
*mbá bó-Ø*  
 where? be-3SgS  
 'Where is the knife with which I cut-Past (the) meat.' (*é:*, §4.4.1.2)

## 15 Verb (VP) chaining and adverbial clauses

### 15.1 Direct chains with bare nonfinal verb stems are absent

In grammars of other (mostly eastern) Dogon languages I have used the expression "direct chain" to denote sequences of one or more bare verb stems leading up to a final, regularly inflected verb. Direct chains in this sense are not attested in Penange.

### 15.2 Temporal adverbial clauses

#### 15.2.1 Adverbial clauses expressing temporal overlap

##### 15.2.1.1 Noun-headed temporal relative clause ('[at] the time when ...')

Noun-headed temporal relative clauses are of the type '(at/on) the time/year/month/day (when) ...'. The temporal noun is the head of a nonsubject relative.

- (xx1) *wàya*                      *númgé*                      *ń*                      *tòmè,*  
 year                      cowpeas                      1SgS                      sow.Perf,  
*kùmà:ngá*                      *wè:-l-Ø*  
 rain(n)                      rain.fall-PerfNeg-3Sgs  
 '(In) the year when I planted cow-peas, the rain didn't fall.' (*kùmà:ngà*)

It is also possible to express the temporal noun as a "possessed" noun (with {HL} melody) following the clause denoting the relevant eventuality, which is therefore structurally the "possessor."

- (xx2) *ń*                      *y-ègè*                      *wâ:r ~ wá:rù / wáyà*  
 1SgS                      Epen-come.Perf                      <sup>HL</sup>time / <sup>HL</sup>year  
 '(at/in) the time/year when I came, ...'

### 15.2.1.2 Imperfective subordinate clause with prolonged {L}-toned A/O-stem

In (xx1), the clause with prolonged final *a→* or *o→* on the {L}-toned verb denotes a continuous activity that overlapped with the main-clause eventuality. The verb forms differs only tonally from the final-long-vowel imperfective (§10.2.2.2). The final long vowel is L-toned, but is tone-raised before L-toned 3Sg subject forms (xx1e). The final long vowel may be intonationally protracted to express extended duration (xx1f), and it is possible that even in other cases the lengthening is a special case of "intonational" prolongation.

- (xx1) a. *[yèbù yèbà→]* *ŋ* *nàyè*  
[dance(n) dance-Impf] 1SgS spend.night.Perf  
'I spent the night dancing.' ('I danced all night.')
- b. *[yèbù yèbà→]* *náy-yè*  
[dance(n) dance-Impf] spend.night.Perf-3PlS  
'They spent the night dancing.' ('They danced all night.')
- c. *[té: jà:ndà→]* *dénò* *bò-Ø*  
[tea put.up.on-Impf] spend.midday-Impf be-3SgS  
'He will spend the mid-day making tea (on a burner).'
- d. *dùgù-r-ò→* *núy<sup>n</sup>-y<sup>n</sup>è*  
run-while go.in.Perf-3PlS  
'They ran in.' (lit. "They went in running.")
- e. *dùgù-r-ó→* *nwè:-l-Ø*  
run-while go.in-PerfNeg-3SgS  
'He/She didn't run in.'
- f. *ùnù→* *hâl* *wáj-jí-yè*  
walk-Impf until distant-Inch.Perf-3PlS  
'They walked (and walked) until they had gone far away.'

### 15.2.1.3 Imperfective subordinate clause with *w<sup>n</sup> ~ ŋ*

If the subjects are disjoint, the 'while' clause is a nonsubject relative clause. It has a imperfective participle, plus imperfective subordinator *w<sup>n</sup> ~ ŋ*.

- (xx2) *yà:gù [mbé káy<sup>n</sup> kánà w<sup>n</sup>] nò nóyà=yè*  
yesterday [1PIP work(n) do.Impf Impf] Rdp sleep.Impf=Past  
'Yesterday he was sleeping while we worked.'



tone (1Sg, 2Sg)

ń y-ègá ń ‘as I was coming’

For 3Sg subject, replace *mbé káy<sup>n</sup> kánà w<sup>n</sup>* with *káy<sup>n</sup> káná nà w<sup>n</sup>* (note the enclitic 3Sg subject *nà*). For 2Sg subject, replace it with *káy<sup>n</sup> á kànà w<sup>n</sup>*. For 3Pl subject, the form is *káy<sup>n</sup> kàná:-yà w<sup>n</sup>*. A textual example of the 3Sg form is égá nà ń ‘as he was coming’ in (xx11) in Text 4.

For *-w<sup>n</sup>* in the ‘be VERB-able’ construction with *kànû:-* ‘does’, see §10.5.3. For *-w<sup>n</sup>* in the ‘be able (=be in a position to) VP’ construction, see §10.5.2.

#### 15.2.1.4 ‘Since ...’ clauses (*mbà-là*)

With an adverb X, ‘since X’ is [*X bà dígí*], as in *yà:gù bà dígí* ‘since yesterday’. The latter consists of *yà:gù* ‘yesterday’, locative *bà*, and (emphatic) *dígí* ‘since, from’.

A ‘since’ clause has *mbà-là* after a perfective verb, whose H-tone migrates to the final syllable before *mbà-là*. *mbà-* is likely a nasal variant of *bà*.

- (xx1) [*ń y-ègé mbà-là*], *nàmà ń tèmè-l*  
[1SgS Epen-come.Perf since], meat 1SgS eat.meat-PerfNeg  
‘Since I came here I haven’t eaten any meat.’ (*ń y-égè*)

For 3Sg pronominal subject, replace *ń y-ègé mbà-là* with *ègè-ná mbà-là*. The 3Pl form is *èg-yé mbà-là*, and the 1Pl form is *ń y-égè mbà-là*.

#### 15.2.1.5 Tightly chained perfectives (past same-subject co-events)

In this construction, both the nonfinal verb and the final verb are pronominally conjugated, but they are phrased prosodically as a single unit. The nonfinal verb is perfective (E/I-stem). For the 3Sg and 3Pl, the nonfinal verb is **{L}-toned**. The tone pattern distinguishes this construction from the loose perfective chains described in (§15.2.2.1) below, which denote chronologically sequenced events. Both the tight and loose perfective chains express 3Sg subject in the nonfinal clause by postverbal enclitic *nà* rather than by zero affix as in main clauses.

The tight perfective chain construction denotes a complex event that is decomposed into two co-events with the same subject. The complex event as a whole is perfective, i.e. it has already taken place. Therefore the final verb is also normally perfective. Where logically possible, adjuncts such as direct objects and adverbs precede both verbs (xx1e). However, if the adjunct is relevant only to the final verb it follows the nonfinal verb (xx1f).

- (xx1) a. *[tìbè nà]* *sígé-Ø*  
 [fall.Perf 3SgS] go.down.Perf-3SgS  
 'He/She fell down.'
- b. *tìb-yè* *síg-yè*  
 fall.Perf-3PlS go.down.Perf-3PlS  
 'They fell down.'
- c. *[ɪ̃]* *tìbè]* *[ɪ̃]* *sìgè]*  
 [1SgS fall.Perf] [1SgS go.down.Perf]  
 'I fell down.'
- d. *[ɪ̃]* *tíbè]* *[ɪ̃]* *sígè]*  
 [1PlS fall.Perf] [1PlS go.down.Perf]  
 'We fell down.'
- e. *[è sátállà]* *[ɪ̃ tyè:ˀ]* *[ɪ̃ dǝ:ndè]*  
 [Def kettle] [1SgS set.down.Perf] [1SgS leave.Perf]  
 'I put the water kettle down and left it.' (*sátállà*)
- f. *[á .n-ɪnjè]* *[[è ɲké]* *[á bündè]]*  
 [2SgS Epen-stand.Perf] [[Def dog] [2SgS hit.Perf]]  
 'You-Sg stood up and (you) hit the dog.'
- g. *[nǎ: sòngè nà]* *né:-Ø*  
 [meal bring.Perf 3SgS] eat.meal.Perf-3SgS  
 'He/She<sub>x</sub> brought a meal and (he/she<sub>x</sub>) ate.'
- h. *[nǎ: ɪ̃ sòngè]* *[ɪ̃ nǎ:]*  
 [meal 1PlS bring.Perf] [1PlS eat.meal.Perf]  
 'We brought a meal and we ate.'

This tightly chained perfective construction is used in the 'finish VPing' construction (§17.3.1). It also occurs in direct-perception 'see' complements of the type 'we saw Seydou fall' (§17.2.2.1). For 'go out' or 'take out' with a reversive verb, see §9.1. An initial perfective verb can also be chained to an unconjugated verbal intensifier like *péw* 'entirely used up', see §8.4.5.1.

As noted above, the tight perfective chain construction can only be used when the entire complex event is completed. For similar constructions involving imperfective (e.g. future) contexts, the nonfinal clause occurs in the nonpast anterior subordinated form with *né~ nè* (§15.2.2.2 below).

## 15.2.2 Adverbial clauses expressing chronological sequences

Constructions studied under this rubric involve sequences of events. One construction with two loosely chained perfectives (§15.2.2.1 below) is of this type. It is similar in form to another construction with two more tightly chained perfectives that denote simultaneous co-events (§15.2.1.5 above).

### 15.2.2.1 Loosely chained perfectives (same or different subject, anterior)

In this construction, the final clause is an ordinary perfective main clause. The nonfinal clause has a perfective verb, with regular 1st/2nd (proclitic) or 3Pl (suffixal) pronominal-subject conjugation. 3Sg subject, on the other hand, is marked by postverbal *nà*. In this 3Sg form, and the verb takes {HL} tones for all but Cv stems (*né nà* ‘he/she said, and...’). In particular, CvCv stems that have {H}-tones in the regular 3Sg perfective (*tábé* ‘he/she gave’) have {HL} before *nà* in the present construction (*tábè nà*), as in (xx1a).

When the subject is 3Sg or 3Pl, the presence of a H-tone in the verb stem distinguishes this construction from the tightly chained perfective construction described in §15.2.1.5 above. The two also differ in that the tightly chained construction requires coindexation of subjects. The loosely chained construction, by contrast, allows sequences with different subjects (xx1a-c)

- (xx1) a. *sěydù*      *bòw<sup>n</sup>-wê:*      *mì-ŋ*      <sup>HL</sup>*tábè*      *nà,*  
          Seydou      door-child      1Sg-Acc      <sup>HL</sup>give.Perf      3SgS,  
          *ŋ*      *ŋ-ă:ndè*  
          1SgS      Epen-go.Perf  
          'Seydou gave me the key and I left.'
- b. [*ŋă:*      *sóng-yè*]      [*ŋ*      *ŋê:*]  
          [meal      bring.Perf-3PlS]      [1PlS      eat.meal.Perf]  
          'They brought a meal and we ate.'
- c. [*ŋă:*      *ŋ*      *sóngè*]      [*wé:-gè*      *ŋíy<sup>n</sup>-y<sup>n</sup>è*]  
          [meal      1SgS      bring.Perf]      [child-Pl      eat.Perf-3PlS]  
          'I brought a meal and the children ate.'

The subjects can also be coindexed, as long as the two clauses are not tightly connected prosodically and conceptually. Many examples can be found in Text 4, where this construction functions as the basic perfective clause type in an extended third-person narrative. For example, (xx13) in Text 4 contains a sequence ‘he arrived at the doorway, he opened the door, he took a step, ...’ where all three clauses are loosely chained, with clause-final 3Sg subject *nà*.

### 15.2.2.2 Nonfinal verb with *né* ~ *nè* (nonpast anterior)

This construction is used in contexts similar to those of either tight or loose perfective chains (§15.2.1.5, §15.2.1.1), where the entire event is imperfective (e.g. future or habitual present) or deontic. The nonfinal verb is in the E/I-stem (i.e. the perfective) and is pronominally conjugated. This verb is followed by the nonpast anterior subordinating particle *né* ~ *nè*, here glossed 'and then'. This is identical to the conditional antecedent ('if') clause type (§16.1). The non-conditional use of *né* ~ *nè* is directly reminiscent of "pseudo-conditional" constructions in some other Dogon languages such as Togo Kan.

The final clause contains an imperfective or deontic modal (e.g. imperative) verb.

- (xx1) a. *[ɲ p-à:ndé nè] [ègó ɲ bò]*  
 [1SgS Epen-go.Perf and.then] [come.Impf 1SgS Impf]  
 'I will go and come (back).'
- b. *[nà: píy<sup>n</sup>-y<sup>n</sup>é nè]*  
 [meal eat.meal.Perf-3PlS and.then]  
*[bàmàkò ándò b-yà]*  
 [Bamako go.Impf Impf-3PlS]  
 'They will eat (a meal) and then go to Bamako.' (*nà:*)
- c. *[[nàmà á tèmé-Ø nè] àndà]*  
 [[meat Def] eat.meat.Perf-3SgS and.then] go.Imprt  
 'Eat some meat and then go!' (*nàmà*)
- d. *[ándé-Ø né] [nà:ngòl égò bò-Ø]*  
 [go.Perf-3SgS and.then] [next.year come.Impf Impf-3SgS]  
 'He/she will go and come back next year.'
- e. *[nà: sóngé-Ø né]*  
 [meal bring.Perf-3SgS and.then]  
*[ɲ pɔ:] [ɲ bò]*  
 [1PlS eat.Impf] [1PlS Impf]  
 'He/She will bring the meal and we will eat.'
- f. *[ɲ tibé nè] [sígò ɲ bò]*  
 [1PlS fall.Perf and.then] [go.down.Impf 1PlS Impf]  
 'We will fall down.'

Sample paradigms for verbs with *né* ~ *nè* are in (xx2). *kání* represents the final-high-vowel class; note the long *i*: in the 3Pl form *kán-ní: nè* (likewise *dám-mí: nè* 'they will speak and ...').

(xx2)	<i>nê</i> : 'drink'	<i>témé</i> 'eat meat'	<i>túmbúgè</i> 'push'	<i>kání</i> 'do'
1Sg	<i>ń né: nè</i>	<i>ń témé nè</i>	<i>ń túmbúgé nè</i>	<i>ń kání nè</i>
1Pl	<i>ń né: nè</i>	<i>ń témé nè</i>	<i>ń túmbúgé nè</i>	<i>ń kání nè</i>
2Sg	<i>á né: nè</i>	<i>á témé nè</i>	<i>á túmbúgé nè</i>	<i>á kání nè</i>
2Pl	<i>à né: nè</i>	<i>à témé nè</i>	<i>à túmbúgé nè</i>	<i>à kání nè</i>
3Sg	<i>né:-Ø né</i>	<i>témé-Ø né</i>	<i>túmbúgé-Ø né</i>	<i>kání né</i>
3Pl	<i>ńíy<sup>n</sup>-y<sup>n</sup>é nè</i>	<i>tém-yé nè</i>	<i>túmbúg-yé nè</i>	<i>kán-ní: nè</i>

The sequence /ni n/ in the forms of *kání* (rightmost column) is usually syncope to *nn*, favored by the identical flanking nasals. In this case, it is realized as a long nasal consonant, e.g. 3Sg subject [*kán:é*].

For this clause type in the complement of 'want' with different subjects, see §17.4.5.2. For 'go out' or 'take out' with a reversive verb, see §9.1.

It is not presently clear whether *né* ~ *nè* is related to *né* 'say'. There are many other examples in Dogon languages (e.g. Jamsay) where a 'say' verb has acquired functions as a temporal subordinator. On the other hand, several Dogon languages also have temporal subordinators of similar shapes (e.g. *na*, *-n*) that are not obviously derived from a 'say' verb.

#### 15.2.2.3 'Worked until got tired' = 'worked for a very long time'

In this construction, the first clause has regular main-clause form, except that 3Sg and 3Pl subject perfective verbs are {L}-toned, and 3Sg subject is expressed by postverbal pronoun *nà*. This clause denotes a prolonged activity, usually but not always physically strenuous. It is followed by an 'until' clause with initial *hál* and a regular perfective verb, except that a 3Sg subject perfective is {L}-toned here. Both clauses are perfective positive and have the same subject in all attested examples.

- (xx1) a. [*káy<sup>n</sup> ń kání*] [*hál ń nènè*]  
 [work(n) 1SgS do.Perf] [until 1SgS get.tired.Perf]  
 'I worked until I got tired.' (= 'I worked to the point of exhaustion.')
- b. [*káy<sup>n</sup> kání nà*] [*hál nènè-Ø*]  
 [work(n) do.Perf 3SgS] [until get.tired.Perf-3SgS]

'He/She worked until he/she got tired.'

- c. *[káy<sup>n</sup> kàn-nì]* *[hál nèní-yè]*  
 [work(n) do.Perf-3PIS] [until get.tired.Perf-3PIS]  
 'They worked until they got tired.'

Physical fatigue is not always focal, as the construction is often used in narrative mainly to indicate that an activity lasted an unusually long time. However, there has to be some element of fatigue for the construction to be felicitous. Verbs other than 'be tired' are required when the activity (e.g. sleeping or eating) induces no physical fatigue (xx2ab).

- (xx2) a. *[nòyè nà]* *[hál sìlè-Ø]*  
 [sleep.Perf 3SgS] [until be.fed.up.Perf-3SgS]  
 'He/She slept until he/she had had enough (sleep).'
- b. *[pè: nà]* *[hál sìn(i)-Ø]*  
 [eat.meal.Perf 3SgS] [until be.sated.Perf-3SgS]  
 'He/She ate until he/she was full.'

### 15.2.3 'Before ...' clauses (*kégù*)

'Before ...' clauses end in *kégù*. If the subject of the clause is pronominal, it is expressed as a proclitic subject pronoun immediately before *kégù*.

The substantive verb appears in the A-stem (imperfective) with {L}-tones (xx1). The 3Sg subject form has 3Sg pronoun *nà* following the verb. The 3Pl subject form has suffix *-yà* (*tìbà-yà kégù* 'before they fall'). 1st/2nd person forms have the usual proclitics

- (xx1) a. *[[è dèm] tìbà nà kégù]* *[ɲ gú:ndè-y<sup>n</sup>-yà]*  
 [[Def house] fall.Impf 3SgS before] [1PIS go.out.Hort]  
 'Let's go out, before the house falls!'
- b. *[ɲ tùbyà kégù]*  
 [1SgS arrive.Impf before]  
*[[ɲ nòlò] ándé-Ø]*  
 [[1SgP friend] go.Perf-3SgS]  
 'Before I arrived, my friend (had) left.'
- c. *[pǎ: ɲ pǎ: kégù]*  
 [meal 1PIS eat.meal.Impf before]  
*[káy<sup>n</sup> ɲ kànì-y<sup>n</sup>-yà]*  
 [work(n) 1PIS do-Hort-Pl]

'Let's-Pl do the work before we eat.'

If the subject of the 'before ...' clause is nonpronominal, the substantive verb takes third person subject marking, either 3Sg enclitic *nà* (xx2a) or 3Pl suffix *-yà* (xx2b).

- (xx2) a. *[kùmà:ngá wà: ná kégù]*  
 [rain(n) rain.fall.Impf 3SgS before]  
*[ɲ nwê-y<sup>n</sup>-yà]*  
 [1PlS go.in-Hort-Pl]  
 'Let's go in before the rain comes (down).'
- b. *[wè:-gé ègà-yà kégù]*  
 [child-Pl come.Impf-3PlS before]  
 'before the children come'

### 15.3 Spatial and manner adverbials

#### 15.3.1 Spatial adverbial relative clause ('where ...')

A transparent spatial adverbial relative clause 'at [the place where ...]' features *gégɛ* 'place' as head NP. The relative clause proper may be followed by a locative postposition.

- (xx1) *[è gégɛ ná: ɲ nɔ: ɲ bì-yà] bà*  
 [Def place meal 1PlS eat.meal-Implf 1PlS Implf-Ppl] Loc  
 'at the place where we eat'

This construction is similar to temporal adverbial relative clauses (§15.2.1.2), but the temporal clauses normally do not take a locative (or other) postposition.

#### 15.3.2 Manner adverbial clause

##### 15.3.2.1 'how ...' clause (*bànà*)

The noun *bànà* 'way, manner' is the head of simple nonsubject relatives in (xx1a-b).

- (xx1) a. *[è bánà] àlàmunò sémà = à*  
*[Def manner] 2SgS slaughter.Impf-2SgS*  
 'the way you-Sg slaughter a sheep'

- b. *[bàná dígò b-yá]* *ń j-ìndò*  
 [manner go.up.Impf Impf-Ppl] 1SgS Epen-not.know  
 'I don't know how to go up there.'

For the use of this manner adverbial clause as a subject-conjugated purposive clause, see §17.5.3.

#### 15.3.2.2 'like/as though' clause (*píni*)

*píni* 'like' (§8.4.1) can be used with an imperfective relative-clause (participial) complement. The clause can be translated 'as though', or the larger construction including 'do' or other action verb can be translated 'pretend to'.

- (xx1) a. *[wò: wá:-Ø-yà píni] kán-Ø*  
 [weeping weep.Impf-3SgS-Ppl like] do.Perf-3SgS  
 'He did like (=pretended to) weep.'
- b. *[wò: wó: ńké b-yà píni] kán-nì*  
 [weeping weep.Impf-3SgS-Ppl like] do.Perf-3SgS  
 'they did like (=pretended to) weep.'

#### 15.3.3 'From ... until ...'

This construction is illustrated in (xx1). The first clause is a simple perfective indicative clause 'they<sub>x</sub> were born', phrased as 'they<sub>y</sub> (=mothers or parents) gave birth to them<sub>x</sub> (=children)'. The second clause begins with *hâl* 'until, all the way to'

- (xx1) *ńké-ń nál-yè, hâl ńké dógá,*  
 3Pl-Acc give.birth.Perf-3PlS, until 3PlS die.Impf,  
*dà:yè b-yá*  
 evil(pred.) be-3PlS  
 'From (the time) when they were born, until they (will) die, they are wicked.'



## 16 Conditional constructions

### 16.1 Hypothetical conditional with *ně ~ nè* or *bě-ně* 'if'

This is the usual conditional. The antecedent denotes an uncertain eventuality. If, as usual, this eventuality is an uncertain time-bounded event in the future, it is usually expressed by a perfective verb followed by *ně ~ nè* 'if' (positive) or *bě-ně* 'if' (negative or counterfactual). The positive forms with *ně ~ nè* are identical to those used as nonpast anterior subordinators, which are presented (with full paradigms) in §15.2.2.2.

If the consequent denotes a resulting eventuality, it is expressed by an imperfective main clause. The consequent may also be a modal such as an imperative or hortative. The subjects of the two clauses may be the same or different but there is no morphological marking of sameness.

- (xx1) a. *á* *tibě* *ně,* *bàrmì* *káná=á* *wò*  
 2SgS fall.Perf if, injury do.Impf=2SgS Impf  
 'If you-Sg fall, you'll hurt yourself.'
- b. *wè:-gé* *nùw<sup>n</sup>* *èg-yé* *ně,* *ándó* *ŋ* *bò*  
 child-Pl here come-Impl-3PlS if, go.Impf 1SgS Impf  
 'If children come here, I'll go.'
- c. *té:* *á* *ně:* *ně,* *úrí-yá=á* *wò*  
 tea 2SgS drink-Impl if, be.sick-MP-Impl-2SgS  
 'If you-Sg drink (the) tea, you'll get sick.'
- d. *kùmà:ŋgà* *wwé:* *ně,*  
 rain(n) rain.fall.Perf-3SgS if,  
*ógà* *kòy<sup>n</sup>* *ŋ* *tégà*  
 tomorrow field 1PlS head.for.Impf  
 'If it rains, tomorrow we'll go to the field(s).'
- e. *kùmà:ŋgá* *wwè:-l* *bě-ně,*  
 rain(n) rain.fall.Perf-3SgS if,  
*àndò-ò-lí*  
 go-1PlS-ImplNeg  
 'If it doesn't rain, we won't go.'

Paradigms showing perfective positive forms before *nè* are in (xx2). *nè* always co-occurs with a H-tone on the final syllable (final mora for monosyllabics). Aside from this final H-tone, the 1Sg and 2Sg. The 1Pl, 2Pl, and 3Sg have {H}-toned verbs. The 3Pl is {HL}-toned.

(xx2)	category	'push'	'think'	'drink'
	1Sg	<i>ɛ́ tùm̀bùgè nè</i>	<i>ɛ́ nà:lé nè</i>	<i>ɛ́ nè: nè</i>
	1Pl	<i>ɛ́ tùm̀bùgè nè</i>	<i>ɛ́ ná:lé nè</i>	<i>ɛ́ nè: nè</i>
	2Sg	<i>á tùm̀bùgè nè</i>	<i>á nà:lé nè</i>	<i>á nè: nè</i>
	2Pl	<i>à tùm̀bùgè nè</i>	<i>à ná:lé nè</i>	<i>à nè: nè</i>
	3Sg	<i>tùm̀bùgè-Ø né</i>	<i>ná:lé-Ø né</i>	<i>nè:-Ø né</i>
	3Pl	<i>tùm̀bùgí-yè nè</i>	<i>ná:lí-yè nè</i>	<i>níy<sup>n</sup>-y<sup>n</sup>é nè</i>

For the phonology of *ɛ́ nè nè* 'if I said' with ultra-short *Cv* verb, see §3.6.3.3.

The perfective negative has its regular main-clause form (§10.2.3.1) before *bé-né*. The verb is {L}-toned for the three singular-subject forms, {H}-toned for the three plural-subject forms.

(xx2)	category	'push'	'think'	'drink'
	1Sg	<i>ɛ́ tùm̀bùgè-l bé-né</i>	<i>ɛ́ nà:lè-l bé-né</i>	<i>ɛ́ nè:-l bé-né</i>
	1Pl	<i>ɛ́ tùm̀bùgè-l bé-né</i>	<i>ɛ́ ná:lè-l bé-né</i>	<i>ɛ́ nè:-l bé-né</i>
	2Sg	<i>á tùm̀bùgè-l bé-né</i>	<i>á nà:lè-l bé-né</i>	<i>á nè:-l bé-né</i>
	2Pl	<i>à tùm̀bùgè-l bé-né</i>	<i>à ná:lè-l bé-né</i>	<i>à nè:-l bé-né</i>
	3Sg	<i>tùm̀bùgè-l-Ø bé-né</i>	<i>nà:lè-l-Ø bé-né</i>	<i>nè:-l-Ø bé-né</i>
	3Pl	<i>tùm̀bùgá-ndá bé-né</i>	<i>ná:lá-ndá bé-né</i>	<i>ná:-ndá bé-né</i>

## 16.2 Alternative 'if' particles

### 16.2.1 'Even if ...' (*né pé*, *bé-né pé*)

Adding *pé* 'also, even' to the 'if' particle emphasizes that the realization of the antecedent condition will not affect that of the consequent condition.

(xx1) [*sěydù égé-Ø*      *né pé*]    [*ɲă: ɲò:-ndí-Ø*]

[Seydou come.Perf-3SgS if even] [meal eat.meal-ImpfNeg-3SgS]  
 'Even if Seydou comes, he won't eat (here).'

### 16.3 Counterfactual conditional

In counterfactual conditionals, the antecedent ends in *bé-né* 'if', and both the antecedent and the consequent verbs are marked by the clitic *=ye* for past time. The antecedent is **past perfect** (morphologically, the past of the perfective, §10.6.1.5). The consequent is normally in the past imperfective in a sense like 'was going to VP' (§10.6.1.4). The presupposition is that the antecedent condition was not realized.

- (xx1) [*séwá:rè*     *ɲ*     *wánjè=yè*     *bé-né*],  
          [Sevare     1PlS     remain.Perf=Past     if]  
          [*mbé-ɲ*     *gíy-yè=yè*]  
          [1Pl-Acc     kill.Perf-3PlS=Past]  
          'If we had stayed in Sevare, they would have killed us.'

An example with two negative clauses is (xx2).

- (xx1) *nè:-l-Ø=yè*     *bé-né*,  
          drink-PerfNeg-3SgS=Past     if,  
          [*è*     *yô:-ʔ*]     *dɔ́njɔ́:-ndí-Ø=yé*  
          [Def     woman-Acc]     bump-ImpfNeg-3SgS=Past  
          'If he hadn't drunk (=been drinking), he would not have collided with  
          the woman.'



## 17 Complement and purposive clauses

### 17.1 Quotative complements

#### 17.1.1 Quoted indicative clauses

Quoted indicative clauses are marked as such by one or more of the following features:

- the conjugatable **'say' verb** *né* (perfective form), which (if present) follows the quotation, §17.1.1.1;
- invariable **quotative particle** *wa* (§17.1.1.2) can be used instead of the conjugated 'say' verb, following a quotation;
- logophoric subject pronouns, are used when the quoted speaker (author) is not a current speech-event participant and is coindexed with the subject of a quoted clause; the logophoric singular subject pronoun *à* is identical to 2Pl, and the logophoric plural subject pronoun *ɲké* is identical to the marked 3Pl pronoun used in nonsubject focalized and nonsubject relative clauses (§18.3);
- original addressees (2Sg or 2Pl) are normally converted to corresponding third person forms in quotations, so 'Seydou said "you-Pl will not go"' is expressed as 'Seydou said, they will not go.'

Several of these features are illustrated in (xx1).

- (xx1) *[à y-égò-mà-ndà]* *né-Ø*  
[LogoSgS come-can-StatNeg] say.Perf-3SgS  
'He<sub>x</sub> said that he<sub>x</sub> can't come.'

For the shift from original addressee to quoted third person, see e.g. (xx2) in text 1 ('The merchant said: "I will kill you."').

In a self-quotation ('I said that ...'), the quotation has the same form as in an unquoted main clause. The final 'I said' may function merely as an emphatic, as in repeating a statement for insistence.

- (xx2) *[ɪ y-ègò-má-ndá]* *ɪ nè*  
[1SgS Epen-come-can-StatNeg] 1SgS say.Perf  
'I said that I can't (or: couldn't) come.'

This type of quotative complement, with no distinctive quotative (i.e. hearsay) marking, is also sometimes used with second person quoted speaker in contexts where hearsay evidentiality is not relevant.

- (xx3) *[nǽ nâm:] ègá-á-lì á nê*  
 [what? Purp] come-2SgS-ImpfNeg 2SgS say.Perf  
 'Why did you-Sg (just) say that you won't come?'

TAMN inflections are not reset when a clause is quoted.

Additional features occur in jussives (quoted imperatives and hortatives), see §17.1.2.1.

#### 17.1.1.1 'Say' verb (*nê*)

The overt 'say' verb is perfective *nê*. This is the only monomoraic *Cv* verb, but it does have regular aspect-negation and pronominal-subject inflections (§10.1.2.1). The 3Sg perfective form *nê-Ø* is often heard with low pitch as a kind of phonological enclitic to the final word in the quotation, but I transcribe it in its full form.

- (xx1) a. *[ðnð éjjè=yò] nê-Ø*  
 [3Sg Dogon=it.is] say.Perf-3SgS  
 'He<sub>x</sub> said that he<sub>x</sub>'s a Dogon.'
- b. *[ŋké éjjè-gè=yò] níy<sup>n</sup>-y<sup>n</sup>ê*  
 [3PlS Dogon-Pl=it.is] say.Perf-3PlS  
 'They<sub>x</sub> said that they<sub>x</sub> are Dogon-Pl.'
- c. *[égó ŋ bò] ŋ nê*  
 [come.Impf 1SgS Impf] 1SgS say  
 'I said that I will/would come.'

The 'say' verb is often omitted from quotations, since the quotative particle and other details identify a clause as quoted.

For *nê* and its causative *ná-m* as auxiliary verbs with adverbials and onomatopoeias, see §11.1.2.3.

### 17.1.1.2 Clause-final quotative particle *wà*

This particle follows the quoted clause, and may be repeated after each clause in a long quotation. It is not also inserted after the subject as it is in some other Dogon languages. It gets its tone by spreading from the preceding syllable.

- (xx1) a. *[á y-ègè-y<sup>n</sup>]* *wà*  
 [2SgS Epen-come-3Hort] Quot  
 '(He/She/They) said for you to come.'
- b. *[â wǒl-Ø]* *wá*  
 [LogoPl not.be-3SgS] Quot  
 '(He<sub>x</sub>) says he<sub>x</sub> isn't there.'
- c. *[sěydù [è wé:-gè-w<sup>n</sup>] búndé-Ø]* *wá*  
 [Seydou [Def child-Pl-Acc] hit.Perf-3SgS] Quot  
 '(He) said that Seydou hit the children.'

### 17.1.2 Jussive complement (reported imperative or hortative)

#### 17.1.2.1 Quoted imperative (-y<sup>n</sup>, third person -yè ~ -yè)

Quoted imperatives use the third-person (i.e. displaced) hortative, which for 1st/2nd person subject of the imperative is the E/I-stem plus -y<sup>n</sup>, and for third person subject of the imperative is -yè ~ -yè after stem-final *i* (I-stem). For the morphology see §10.7.3.1. There is no overt 3Sg or 3Pl subject pronoun.

- (xx1) a. *nàmà ñ / á pùrgè-y<sup>n</sup> wà*  
 meat 1SgS / 2SgS cut-3Hort Quot  
 '(He) said for me/you-Sg to cut the meat'
- b. *nàmà ñ / à pùrgè-y<sup>n</sup> wà*  
 meat 1PlS / 2PlS cut-3Hort Quot  
 '(He) said for us/you-Pl to cut the meat'
- c. *nàmà pùrgí-yè wà*  
 meat cut-3Hort Quot  
 '(He) said for him/her/them to cut the meat'

An original prohibitive (negative imperative) retains its prohibitive morphology (§10.7.1.2) and tones in a quotation.

- (xx2) *sěydù* *ègà-ndé-ỳ<sup>n</sup>* *wà*  
 Seydou come-Prohib Quot  
 'He says for Seydou not to come.'

#### 17.1.2.2 Quoted hortative

A hortative ('let's VP') may also be quoted. In this construction, the hortative suffix is *-y<sup>n</sup>* after the E/I-stem of the verb, see §10.7.2.1. There is no distinction between singular and plural addressee situations. Either quotative particle *wà* or a conjugated form of 'say' may be used.

- (xx1) *sé:dù* [*sìrgà ñ sǒgé-y<sup>n</sup>*] *nè-Ø*  
 Seydou [chicken 1PlS buy-Hort] say.Perf-3SgS.LH  
 'Seydou said, let's buy a chicken!'

#### 17.1.3 Quoted interrogatives with *lè*

Quoted interrogative clauses are marked with a particle *lè* following the predicate, compare English *whether*.

- (xx1) a. *děm* *è<sup>n</sup>* *ĩ* *sá:<sup>n</sup>* *lè* *wà*  
 house Exist 1SgS have QuotQ Quot  
 '(Someone) says/said (asks/asked), do I have a house?' (*děm, è ñ sà:<sup>n</sup>*)
- c. *ínì* *sònjòm = yó* *lè* *sálé-Ø*  
 Dem horse=it.is QuotQ ask.Perf-3SgS  
 'He/She asked, is that a horse?'
- d. *mbà* *ĩ* *tègà* *lè* *sálé-Ø*  
 where 1SgS head.for.Impf QuotQ ask.Perf-3SgS  
 'He/She asked, where am/was I going'

### 17.2 Factive complements

#### 17.2.1 'Know that ...' complement (headless relative)

Factive complements of 'know (that)' take the form of regular main clauses (e.g. with 3Sg subject *-Ø* in several inflectional categories). With 'know', the factive clause occasionally ends in *gěŋ* 'place' (by extension 'situation, state of affairs')



in {HL}-toned form *gêŋ* (xx1c), suggesting that it is "possessed" by the factive clause. cf. *the fact of* ... in English. A nonpronominal subject of 'know' may precede the factive clause (xx1e) but may alternatively immediately precede 'know'.

- (xx1) a. *ègá-á-li* *ŋ* *nêy<sup>n</sup>*  
 come-2SgS-ImpfNeg 1PIS know  
 'We know that you are not coming.'
- b. [*wè:-gè* *égá-ndá*] *ŋ* *nêy<sup>n</sup>*  
 [child-Pl come-PerfNeg] 1PIS know  
 'We know that (the) children didn't come.'
- c. [*[[àlámùnó* *ŋ* *sèmè]* *gêŋ*]  
 [[sheep 1SgS slaughter.Perf] <sup>HL</sup>place]  
 [*wè:-gè* *êy<sup>n</sup>* *b-yâ*]  
 [child-Pl know be-3PIS]  
 'They know that I (have) slaughtered a sheep.'
- d. [*égá-á* *wò*] *ŋ* *nêy<sup>n</sup>*  
 come.Impf-2SgS Impf] 1SgS know  
 'I know that you-Sg are coming.'
- e. *séydù* *ègá-à-li* *?énò* *bò-Ø*  
 Seydou come-2SgS-ImpfNeg know be-3SgS  
 'Seydou knows that you are not coming.'

The same construction is used with *núndé* 'hear' (in the sense 'hear that', i.e. 'be told that') and *témé* 'find (a situation)'. My assistant rejects *gêŋ* with factive complements of *témé* but allows it with *núndé* (as with 'know').

## 17.2.2 'See that ...'

### 17.2.2.1 Direct-perception construction

When the complement of 'see' denotes an event or process directly observed (not just inferred) by the subject, two constructions are possible, depending on aspect (bounded event versus imperfective). For a **bounded event**, the complement has a perfective verb, with 3Sg subject expressed by postverbal *nà* (xx1a) and with 3Sg and 3Pl subject verb forms {L}-toned. This is the tight perfective chain construction described in §15.2.1.5.

- (xx1) a. *[sè:dú tìbè nà]* *ɲ* *málgè*  
 [Seydou fall 3SgS] 1PIS see.Perf  
 'We saw Seydou fall.'
- b. *[wè:-gé tìb-yè]* *ɲ* *málgè*  
 [Seydou fall-3PIS] 1PIS see.Perf  
 'We saw the children fall.'

An **imperfective** complement, denoting a continuing activity or a recurrent event type, takes the usual clause-final imperfective subordinator *w<sup>n</sup>* ~ *ɲ* (§15.2.1.3). The *w<sup>n</sup>* is weakly articulated and may be inaudible. For example, in (xx2b) the sequence *ná w<sup>n</sup> á* is usually contracted to [*ná:*]. *w<sup>n</sup>* is also difficult to detect before a nasal (that of *málgé* 'see' or that of a first person subject proclitic).

- (xx2) a. *[á yèbâ w<sup>n</sup>]* *ɲ* *màlgè*  
 [2SgS dance.Impf Impf] 1SgS see.Perf  
 'I saw you-Sg dancing.'
- b. *[[è wê:] yèbâ ná w<sup>n</sup> á]* *màlgè*  
 [[Def child] dance.Impf 3SgS Impf] 2SgS see.Perf  
 'You-Sg saw the child dancing.' (*yèbâ nà*)
- c. *[wè:-gé yèbâ-yá w<sup>n</sup> á]* *màlgè*  
 [child-Pl dance.Impf-3PIS Impf] 2SgS see.Perf  
 'You-Sg saw the children dancing.' (*yèbâ-yà-w<sup>n</sup>*)
- d. *[ɲ yèbâ w<sup>n</sup>]* *màlíg-yè*  
 [1SgS dance Impf] see.Perf-3PIS  
 'They saw me dance.'

#### 17.2.2.2 Recognition construction

'Hear that' (hearsay) and 'see that' (involving an inference made with use of visual data) take main-clause complements. The 3Sg subject perfective form has its usual main-clause form, without postverbal *nà*. Since the complement of 'hear' is more clearly an embedded proposition than is the case with 'see', 'hear' complements often end with the possessed {HL}-toned form of *gɛɲ* 'place' (by extension 'situation, state of affairs') (xx1b).

- (xx1) a. *[nàfòrò-gà á bìlè]* *[ɲ màlà]*  
 [wealth-Char 2SgS become.Perf] [1SgS see.Stat]  
 'I see that you have become a rich person.'

- b. *[[nàfòrò-gà bɪlé-Ø] gɛŋ] [ɲ nùndè]*  
 [[wealth-Char become.Perf-3SgS] place] [1SgS hear.Perf]  
 'I have heard that he/she has become a rich person.'

### 17.2.3 *tájjàrà* 'certainly, definitely'

*tájjàrà* (< Fulfulde) can be added, either by itself as a kind of adverb ('certainly, definitely') as in (xx1a-b) or as part of a phrase with *kàní→* (xx1c-d). The latter is related to the verb *kání* 'do', but it behaves syntactically as an expressive adverbial (§8.4.5), and is made predicative by *bò* 'be' or its negation *wól* (negative) (§11.1.3.1). The sense is '(someone) be certain (that ...)'. The complement is a regular main clause, which may denote either a completed or a future eventuality.

- (xx1) a. *tájjàrà égò bò-Ø*  
 certainly come.Impf Impf-3SgS  
 'He/She will certainly come.'
- b. *tájjàrà [è wálè] gúyé-Ø*  
 certainly [Def money] steal.Perf-3SgS  
 'He/She certainly stole the money.'
- c. *[tájjàrà kàní→ ɲ bò] égò bò-Ø*  
 [certainly do 1SgS Impf] come.Impf impf-3SgS  
 'I'm sure that he/she will come.'
- d. *tájjàrà kàní→ wól-Ø*  
 certainly do not.be-3SgS  
 'He/She is not sure (about sth).'

## 17.3 Chain-like complements (perfective or anterior)

### 17.3.1 'Finish' (*déngé*) with perfective or (nonpast) anterior complement

*déngé* 'finish' is treated as a separate subevent in a complex predication, as though immediately subsequent to the activity itself. Therefore 'finish VPing' is treated like a chain of the type 'VP and then finish'.

When the entire bounded event is completed, *déngé* is perfective in form and is preceded by a complement with a conjugated perfective verb. The construction is that of tightly-chained perfectives (§15.2.1.5). For 3Sg and 3Pl

subject, the verb of the complement of *déngé* is **{L}-toned**, versus {H} or {HL} in main clauses. A preceding otherwise {L}-toned noun can then undergo Final Tone-Raising of its final syllable (or mora) before the L-toned verb (§3.6.3.1), as in (xx1a-b). 3Sg subject is expressed by *nà* following the verb, as in (nonsubject) relative clauses. 1st/2nd person subjects have the same verb forms as in perfective main clauses.

- (xx1) a. *[nǎ: nɛ: nà]] déngé-Ø*  
 [meal eat.Perf 3SgS] finish.Perf-3Sgs  
 'He/She has finished eating (a meal).' (*nǎ:*)
- b. *[àlāmùnɔ tɔl-yɛ] déng-yɛ*  
 [sheep butcher.Perf-3PIS] finish.Perf-3PIS  
 'They have finished skinning and butchering the sheep-Sg.'  
 (*àlāmùnɔ*)
- c. *[káy<sup>n</sup> à kání] à déngè*  
 [work(n) 2PIS do.Perf] 2SgS finish.Perf  
 'You-Pl have finished doing (the) work.'

When the entire event including its completion are imperfective (future or recurrent), the complement has same-subject anterior subordinator *né* ~ *nè* following the perfective (E/I-stem) (§15.2.2.2). This clause type also occurs as the antecedent clause in conditionals (§16.1).

- (xx1) a. *[nǎ: nɛ:-Ø né] déngò bò-Ø*  
 [meal eat.Perf-3SgS and.then] finish.Impf Impf-3SgS  
 'He/She will finish eating (a meal).'
- b. *[àlāmùnɔ tɔl-yɛ nè] déngò b(i)-yà*  
 [sheep butcher.Perf-3PIS and.then] finish.Impf Impf-3PIS  
 'They will finish skinning and butchering the sheep-Sg.'
- c. *[káy<sup>n</sup> à kání nè] déngà-à wò*  
 [work(n) 2PIS do.Perf and.then] finish.Impf-2PIS Impf  
 'You-Pl will finish doing (the) work.' (pronounced [...àkán:è...])

#### 17.4 Verbal noun (and other nominal) complements

The productive verbal noun has suffix *-l* (§4.2.4). Complements in the form of VPs ending in the verbal noun suffix, or some other noun (such as a cognate nominal) denoting an eventuality type, are required by some matrix-clause

verbs. Compare English control verbs with infinitival (*to VP*) complements. The logical subject of the complement VP is coindexed with the matrix subject, but is not overtly expressed.

#### 17.4.1 Argument structure of verbal-noun complement

The verbal noun complement may contain **nonsubject constituents** that belong to the embedded clause. For example, accusative 'me' in (xx1a) is the object of 'kill', and 'Mopti' in (xx1b) functions as a locational complement of 'go'.

- (xx1) a. *[è ntá-gé] [mì-ŋ gíyê-l]*  
 [Def person-Pl] [1Sg-Acc kill-VbIN]  
*dúndó nké b-yà*  
 seek 3PlS Prog-3PlS  
 'The people are seeking (trying) to kill me [focus].'
- b. *[mótti ándê-l] ŋ dündê=yê*  
 [Mopti go-VbIN] 1SgS seek.Perf=Past  
 'I had wanted to go to Mopti.'

#### 17.4.2 'Prevent' (*hár káni*) with verbal-noun complement

This matrix-clause verb takes a verbal noun complement. The logical agent of the verbal noun appears as object of *hár káni* in the matrix clause.

- (xx1) a. *kùmà:ŋgà égé-l mì-ŋ hár kàni-Ø*  
 rain(n) come-VbIN 1Sg-Acc prevent do.Perf-3SgS  
 'The rain prevented me from coming here.'
- b. *bèlègè nó:yê-l mì-ŋ hár kán-li-Ø*  
 noise 1Sg-Acc sleep-VbIN prevent do-PerfNeg-3SgS  
 '(The) noise did not prevent me from sleeping.'
- c. *[ŋ bóbó] [bàmàkò ándê-l]*  
 [1SgP father] [Bamako go-VbIN]  
*mì-ŋ hár kàni-Ø*  
 1Sg-Acc prevent do.Perf-3SgS  
 'My father prevented me from going to Bamako.'

### 17.4.3 'Dare' (*nǎ:lè*) with verbal-noun complement

*nǎ:lè* 'think' can be used in the sense 'dare to VP, have the nerve/effrontery to VP'. The complement is in verbal noun form.

- (xx1) *[nùw<sup>n</sup> égê-l]* *á* *nǎ:lè*  
 [here come-VbIN] 2SgS think.Perf  
 'You-Sg have dared to come here?'

### 17.4.4 'Consent' (*ábé*) with verbal-noun complement

*ábé* 'accept, receive' can be used with a verbal-noun complement in the sense 'agree, consent (to do something)', when the subject of the embedded clause is coindexed with the matrix subject.

- (xx1) *[ŋ kó:-gè]* *égê-l* *ab-yè*  
 [1PlS head-Pl] come-VbIN accept.Perf-3PlS  
 'Our chiefs agreed to come.'

If the subjects are different, the verbal noun takes the embedded-clause subject as possessor.

- (xx2) *[ŋ bǎbǎ]* *[bàmàkó ŋ n-à:ndê-l]* *ábé-Ø*  
 [1SgP father] [Bamako 1SgS Epen-go-VbIN] accept.Perf-3SgS  
 'My father agreed/consented that I go to Bamako.'  
 (lit. "... accepted my going to Bamako")

### 17.4.5 'Want' (*képù ~ kény*) complements

For defective stative *képù ~ kény* 'want' and its negation *kény-là* see §11.2.5.2. The verb can take a NP object ('I want some sugar') or a clausal complement. The forms of clausal complements are described below.

#### 17.4.5.1 Verbal-noun complement (same subjects)

If the logical subject of the complement is coindexed with the matrix subject, we get an ordinary verbal noun (or similar nominal) complement (xx1). The coindexed subject is not overtly marked in the complement.

- (xx1) a. *[bàmàkò ándê-l]* *kéy<sup>n</sup>* *bò-Ø*  
 [Bamako go-VblN] want be-3SgS  
 'He/She wants to go to Bamako.'
- b. *[úná sógê-l]* *ŋ* *kèy<sup>n</sup>*  
 [goat buy-VblN] 1SgS want  
 'I would like to buy a goat.'

#### 17.4.5.2 Nonpast anterior complement (different subjects)

If the subjects are distinct, the complement of 'want' takes the form of a nonpast anterior clause with *né ~ nè* and a verb conjugated for pronominal subject (§15.2.2.2).

- (xx1) *[ŋ bòbó]* *[bàmàkò ŋ]* *ɲ-à:ndé nè]*  
 [1SgP father] [Bamako 1SgS Epen-go and.then]  
*kéy<sup>n</sup> bò-Ø*  
 want be-3SgS  
 'My father wants me to go to Bamako.'

#### 17.4.6 'Forget' (*îldê*) with verbal-noun complement

*îldê* 'forget' can take a NP complement ('I forgot his name', 'they forgot me'). A clausal complement in the sense 'forget to VP' takes verbal-noun form.

- (xx1) *égê-l* *îldê-Ø*  
 come-VblN forget.Perf-3SgS  
 'He/She forgot to come.'

'Forget' can of course also take a factive (propositional) complement. In (xx2), the complement has *gêŋ* 'place' (or more abstractly 'situation') as a noun "possessed" by the embedded proposition, cf. *the fact that* in English.

- (xx2) *[[á y-ègè]* *gêŋ]* *[ŋ y-îldê]*  
 [[2Sg Epen-come.Perf] <sup>HL</sup>place] [1SgS Epen-forget.Perf]  
 'I forgot (the fact) that you-Sg have come.'

#### 17.4.7 'Be afraid to' (*ní:gè*) with verbal-noun complement

An example is (xx1), where the subjects of the two clauses are the same.

- (xx1) *[nùŋ é-gê-l]* *ŋ* *nì:gô:*  
 [here come-VblN] 1SgS fear.Impf  
 'I am afraid to come here.'

When the subjects of the two clauses are different, we get a construction with a prohibitive verb (cf. *lest*).

- (xx2) *[mì-ŋ bündà-ndé-ý"]* *ŋ* *nì:gô:*  
 [1Sg-Acc hit-Prohib] 1SgS fear.Impf  
 'I am afraid lest he/she hit me.'

#### 17.4.8 'Begin' (*dògúlè*) with verbal-noun complement

*dògúlè* 'begin' and its verbal-noun complement are illustrated in (xx1).

- (xx1) *dúgú-rê-l* *ŋ* *dògúlè*  
 run-VblN 1SgS begin.Perf  
 'I began to run.'

#### 17.4.9 'Cease' (*ìngí-rè*) with verbal-noun complement

*ìngí-rè* 'stop (sth)' can also mean 'cease, give up (an activity)', implying permanent behavior change. It can take a verbal noun complement.

- (xx1) *[kònjè nê:-l]* *ŋ* *ŋ-ìngí-rè*  
 [beer drink-VblN] 1SgS Epen-stand-Tr.Perf  
 'I have stopped (= have given up) drinking beer.'

#### 17.4.10 'Help' (*bárgè*-) with nominal or imperfective complement

*bárgè* 'help' is a transitive verb that takes a (usually human) object. The domain is expressed either by a NP or by an imperfective subordinated clause. The NP type is seen in (xx1ab). (xx1a) has a cognate nominal related to the verb 'do farming', while (xx1b) has a verbal-noun phrase including an object. *bárgè* 'help'



has no obvious synchronic relationship to *báyrè* 'add' (the two senses are syncretic in some Dogon languages).

- (xx1) a. *á:mádù kùbò mì-ŋ bárgè-Ø*  
 Amadou farming 1Sg-Acc help.Perf-3SgS  
 'Amadou helped me (with) farming / singing.'
- b. *[dèm símê-l] mì-ŋ bárg-yè*  
 [house build-VbIN] 1Sg-Acc build.Perf-3PlS  
 'They helped me build the house.'

The alternative is an imperfective clause with *w<sup>n</sup>* (xx2). The subject of the embedded clause is expressed only as the direct object of the 'help' clause.

- (xx2) *[dēm sìmò w<sup>n</sup>] mì-ŋ bárig-yè*  
 [house build Impf] 1Sg-Acc help.Perf-3PlS  
 'They helped me build the house.'

The construction [X help Y [to VP]] is arguably ambiguous as to whether the implied agent of the lower VP consists of Y or of the pair {X Y}.

## 17.5 Purposive and causal clauses

### 17.5.1 Purposive clause with *-w<sup>n</sup>*

This construction is attested with a motion verb in the main clause, which has the same subject as the purposive clause. The verb in the purposive clause is {L}-toned with final *-w<sup>n</sup>*, and is not conjugated. A simple direct-object noun becomes {LH}-toned before this verb (xx1ab).

- (xx1) a. *[nǎ: nò-w<sup>n</sup>] égè-Ø / ég-yè*  
 [food<sup>LH</sup> eat-Purp] come.Perf-3SgS / -3PlS  
 'He-or-she/They came to eat.' (*nǎ:*)
- b. *[gěn nimbù-gò-w<sup>n</sup>] gú:ndè-Ø*  
 [fire<sup>LH</sup> fire.go.out-Caus-Purp] go.out.Perf-3SgS  
 'He/She went out in order to put out the fire.' (*gên*)
- c. *nò:yò-w<sup>n</sup> égè-Ø / ég-yè*  
 sleep-Purp come.Perf-3SgS / -3PlS  
 'He-or-she/They came to sleep.'

- d. *[mí-ŋ      gíyà-w<sup>n</sup>]      égè-Ø*  
 [1Sg-Acc    kill-Purp]      come.Perf-3SgS  
 'He/She came to kill me.'
- e. *[ŋ      sìrgá-gè      gùyà-w<sup>n</sup>]      égè-Ø*  
 [1SgP      chicken-Pl]      steal-Purp]      come.Perf-3SgS  
 'He/She came to steal my chickens.'
- f. *[è      sírgà]      gùyà-w<sup>n</sup>      égè-Ø*  
 [Def      chicken]      steal-Purp]      come.Perf-3SgS  
 'He/She came to steal the chicken.'

Further examples of the form of the purposive-clause verb are in (xx2).

(xx2)	Perf 3Sg	purposive	gloss
	<i>dwé:</i>	<i>(dǎ:) dâ-w<sup>n</sup></i>	'pound' (cognate nominal <i>dâ:</i> )
	<i>né:</i>	<i>(mǐ:) nâ-w<sup>n</sup></i>	'drink (water)'
	<i>kwé:</i>	<i>kâ-w<sup>n</sup></i>	'sew'
	<i>gúyè</i>	<i>gùyà-w<sup>n</sup></i>	'steal'
	<i>pénjé</i>	<i>pènjâ-w<sup>n</sup></i>	'milk (a cow)'
	<i>tómbé</i>	<i>tòmbâ-w<sup>n</sup></i>	'jump'
	<i>dé:ndè</i>	<i>dè:ndâ-w<sup>n</sup></i>	'abandon'
	<i>sógú-lè</i>	<i>sògù-lâ-w<sup>n</sup></i>	'sell'

#### 17.5.2 Different-subject purposive clause with *lè* after verb with {*o: ɔ: u:*}

This construction is attested with different-subject purposive clauses. The main clause can denote any purposeful action or activity. The purposive clause ends in *lè*, following a conjugated form of the verb with {LH} tones (except {HL} after 1Pl/2Pl proclitics), and with final long {*o: ɔ:*}, becoming *a:* for 3Pl subject. With slight tonal changes this is the same as the final-long-vowel imperfective (10.2.2.2).

- (xx1) a. *[bármà      ŋké-<sup>n</sup>      ŋ      tàbè]*  
 [pot      3Pl-Acc    1SgS      give.Perf]  
*[nǎ:      dǎngâ-w<sup>n</sup>      dínɔ:-Ø / dín-á:      lè*  
 [meal      cook-Impf]      get-3SgS / -3PlS      Purp  
 'I gave them a pot, so they would be able (=have the wherewithal)  
 to cook meals.' ('get' = 'be able to, be in a position to')
- b. *mòtó-nà      mǐ-ŋ      tábé-Ø,*

motorcycle-3SgP      1Sg-Acc      give.Perf-3SgS,  
*péná*      *ń*      *n-à:ndó:*      *lè*  
 Pinia      1SgS      Epen-go      Purp  
 'He gave me his motorcycle, so that I (might) go to Pinia.'

Paradigms for representative verbs are in (xx2).

(xx2)	subject	'go in'	'go'	'dance'	'shatter'
	1Sg	<i>ń nǎ: lè</i>	<i>ń n-à:ndó: lè</i>	<i>ń yèbǎ: lè</i>	<i>ń tèbà-gó: lè</i>
	1Pl	<i>ń nǎ: lè</i>	<i>ń n-á:ndò: lè</i>	<i>ń yébbǎ: lè</i>	<i>ń tébà-gò: lè</i>
	2Sg	<i>á nǎ: lè</i>	<i>á n-à:ndó: lè</i>	<i>á yèbǎ: lè</i>	<i>á tèbà-gó: lè</i>
	2Pl	<i>à nǎ: lè</i>	<i>à n-á:ndò: lè</i>	<i>à yébbǎ: lè</i>	<i>à tébà-gò: lè</i>
	3Sg	<i>nǎ:-Ø lè</i>	<i>àndó:-Ø lè</i>	<i>yèbǎ:-Ø lè</i>	<i>tébà-gó:-Ø lè</i>
	3Pl	<i>nw-ǎ: lè</i>	<i>ànd-á: lè</i>	<i>yèbb-á: lè</i>	<i>tébà-g-á: lè</i>
		'do'			
	1Sg	<i>ń kànú: lè</i>			
	1Pl	<i>ń kánù: lè</i>			
	2Sg	<i>á kànú: lè</i>			
	2Pl	<i>à kánù: lè</i>			
	3Sg	<i>kànú:-Ø lè</i>			
	3Pl	<i>kàn-á: lè</i>			

### 17.5.3 Different-subject imperfective purposive-manner clause

Another way to express a different-subject purposive clause is a manner adverbial clause headed by *bàná*<sup>L</sup> 'way, manner' (§15.3.2). The verb has imperfective participial form (§14.4.3). Two examples, both with *bàná yò: nà* 'so that it ma (=work) may turn out well', are in [Text 3](#).

Paradigms for representative verbs in this construction with *bàná* are in (xx1).

(xx1)	subj	'go in'	'go'	'dance'	'shatter'
	1Sg	<i>nǎ: ń b-yà</i>	<i>àndò ń b-yà</i>	<i>yèbbò ń b-yà</i>	<i>tébà-gò ń b-yà</i>
	1Pl	<i>nǎ: ń bí-yà</i>	<i>ándò ń bí-yà</i>	<i>yébbò ń bí-yà</i>	<i>tébbà-gò ń bí-yà</i>
	2Sg	<i>nǎ-á yà</i>	<i>ándá-á yà</i>	<i>yèbbà-á yà</i>	<i>tébà-gà-á yà</i>
	2Pl	<i>nǎ-à yà</i>	<i>ándà-à yà</i>	<i>yébbà-à yà</i>	<i>tébbà-gà-à yà</i>

3Sg *nò: nà*      *àndò nà*      *yèbò nà*      *tèbà-gò nà*  
 3Pl *nô: ñké b-yà*      *ándò ñké b-yà*      *yébò ñké b-yà*      *téba-gò ñké b-yà*

‘do’

1Sg *kànù ñ b-yà*  
 1Pl *kánù ñ bí-yà*  
 2Sg *kànà-á yà*  
 2Pl *kánà-à yà*

3Sg *kàn nà*  
 3Pl *kánù ñké b-yà*

#### 17.5.4 Causal ('because') clause (final *nâm→*)

Alongside clause-initial *pàskó* (French *parce que*), which is ubiquitous in native languages of Mali as spoken by younger people, there is a native 'because' form *nâm→*, positioned clause-finally. It is evidently a variant of purposive-causal postposition *námù* (§8.3), but in this construction the final *u* is replaced by "intonational" prolongation of the *m*.

- (xx1) *òjú*      *jàmí:*      *bò-Ø*      *nâm→*,  
 road      ruined      be-3Sg      because,  
*pènà*      *ñ*      *ɲ-á:ndò-mà-ndà*  
 Pinia      1Pl      Epen-go-Capac-StatNeg  
 'We can't go to Pinia because the road is no good.'

#### 17.5.5 Obligational 'must' construction with *wà:jíbi* 'obligation'

*wà:jíbi* 'obligation, duty' can be made into a predicate nominal with the 'it is' clitic allomorph *=yò* (§11.2.1.1). The subject (or theme) is then a possessed verbal noun.

- (xx1) [*bàmàkó*      *ñ*      *ɲ-à:ndê-l*]      *wà:jíbi=yò*  
 [Bamako      1SgP      Epen-go-VblN]      obligation=it.is  
 'I must go to Bamako'.  
 (lit. "My going to Bamako is a duty.")

## 18 Anaphora

### 18.1 Reflexive

#### 18.1.1 Reflexive object ('my head' etc.)

A possessed form of *kó:* 'head' is used for reflexive object, compare English *-self/-selves* reflexives. Unlike English, Penange does not pluralize 'head' when the possessor (and therefore also the clausemate subject) is plural. Therefore 'ourselves' is literally "our head" rather than "our heads."

- (xx1) a. *kó:-ná* *sémé-Ø*  
 head-3SgP cut.Perf-3SgS  
 'He cut himself.' or 'She cut herself.'
- b. *[ɛ̃]* *kò:]* *ɛ̃* *sèmè*  
 [1SgP <sup>L</sup>head] 1SgS cut.Perf  
 'I cut-Past myself.'
- c. *[ɛ̃]* *kó:]* *ɛ̃* *sèmè*  
 [1PIP <sup>H</sup>head] 1PlS cut.Perf  
 'We cut ourselves.'

These specialized reflexive combinations are not sharply different from regular possessed forms of 'head(s)' in the literal sense. There is no overt difference between 'myself' above and 'my head' in (xx2a). With plural pronominal possessor (and plural heads), the plural suffix *-gè* is optional in the literal sense, e.g. 'our heads' in (xx2b), but is absent in reflexive 'ourselves'.

- (xx2) a. *[ɛ̃]* *kò:]* *mì-ɛ̃* *tíyò* *bò-Ø*  
 [head 1SgP] 1Sg-Acc hurt Impf-3SgS  
 'My head hurts.'
- b. *[mbé]* *kó:(-gè)]* *yáw-yáw* *bô-Ø*  
 [1PIP head] lightweight be-3PlS  
 'Our heads are light.'

### 18.1.2 Reflexive possessor

There is no overt marking of reflexivity in possessors. A 3Sg or 3Pl possessor may or may not be coindexed with a third-person clausemate subject. (xx1a,c) are therefore ambiguous. 'His dog' has the same form in (xx1a), where coindexation with the clausemate subject is possible, as in (xx1b) with a clearly distinct first person subject.

- (xx1) a. *úná-ná* *gíyé-Ø*  
 goat-3SgP kill.Perf-3SgS  
 'He<sub>x</sub> killed his<sub>x</sub> (own) dog.'  
 'He<sub>x</sub> killed his<sub>y</sub>/her<sub>y</sub> dog.'
- b. *úná-ná* *ǵ* *gìyè*  
 goat-3SgP 1SgP kill.Perf  
 'I killed his/her goat.'
- c. *sěydù* *bòbò-nà* *málgè-Ø*  
 Seydou father-3SgP see.Perf-3SgS  
 'Seydou<sub>x</sub> saw his<sub>x</sub>/his<sub>y</sub>/her<sub>y</sub> father.'

## 18.2 Emphatic pronouns

'My head' and related forms can also be used adverbially, with an instrumental postposition, as equivalents of emphatic pronouns.

- (xx1) a. *[[ǵ kò:] nì]* *ǵ* *sìmè*  
 [[1SgP head] Inst] 1SgS build.Perf  
 'I built (it) myself.'
- b. *[[kó:-ná ní]* *símè-Ø*  
 [[head-3SgP Inst] build.Perf-3SgS  
 'He built (it) himself.'

## 18.3 Logophoric subject pronouns

There are no all-purpose logophoric pronouns as such. However, logophoricity (coindexation of an argument in a quotation with the ascribed author of the quotation) can be expressed if the argument is subject of its clause, and if the referent in question is third person, i.e. neither the current speaker nor the current addressee.

**Singular logophoric subject** in this sense is expressed by a morpheme *à*, proclitic to the verb.

- (xx1) a. *sěydù* [*à* *y-égè*] *né-Ø*  
 Seydou [3LogoSgS Epen-come.Perf] say.Perf-3SgS  
 'Seydou<sub>x</sub> said that he<sub>x</sub> came.'  
 [identical to 'Seydou said that you-Pl came']
- b. *sěydù* [*à* *y-égé-l*] *né-Ø*  
 Seydou [3LogoSgS Epen-come-PerfNeg] say.Perf-3SgS  
 'Seydou<sub>x</sub> said that he<sub>x</sub> didn't come.'  
 [identical to 'Seydou said that you-Pl didn't come']
- c. *sěydù* [*égà-à* *wò*] *né-Ø*  
 Seydou [come-3LogoSgS Impf] say.Perf-3SgS  
 'Seydou<sub>x</sub> said that he<sub>x</sub> will come.'  
 [identical to 'Seydou said that you-Pl will come']
- b. *sěydù* *égà-à-l* *né-Ø*  
 Seydou come-3LogoSgS-PerfNeg say.Perf-3SgS  
 'Seydou<sub>x</sub> said that he<sub>x</sub> will not come.'  
 [identical to 'Seydou said that you-Pl will not come']

On various occasions, my assistant attempted to audibly distinguish 2Pl from logophoric singular subject for some inflectional categories. For the imperfective positive, one one occasion the medial long [a:] was reduced to [a] for the logophoric, see (xx1c); this was also applied to the imperfective negative, see (xx1d). On another occasion, he used *bó* rather than *wò* for the logophoric singular imperfective positive, see (xx1c). However, at other times he indicated that there was no difference, and this is also my overall conclusion.

Plural logophoric subject is expressed by adding 3Pl pronoun *ηké*, instead of the usual 3Pl subject suffix on the verb. This resembles nonsubject focus clauses with regular 3Pl subject. In the imperfective negative, *wòl* 'not be' is used instead of *-l* suffix (xx2d).

- (xx2) a. [*è* *wé:-gè*] [*ηké* *égè*] *níy<sup>n</sup>-yè*  
 [Def child-Pl] [3LogoPlS come.Perf] say.Perf-3PlS  
 'The children<sub>x</sub> said that they<sub>x</sub> came.'
- b. [*è* *wé:-gè*] [*ηké* *égé-l*] *níy<sup>n</sup>-yè*  
 [Def child-Pl] [3LogoPlS come-PerfNeg] say.Perf-3PlS  
 'The children<sub>x</sub> said that they<sub>x</sub> didn't come.'
- c. [*è* *wé:-gè*] [*égò* *ηké* *bò*] *níy<sup>n</sup>-yè*

[Def child-Pl] [come 3LogoPlS Impf] say.Perf-3PlS  
 'The children<sub>x</sub> said that they<sub>x</sub> will come.'

- d. [è wé:-gè] [égò nké wò] níy<sup>n</sup>-yè  
 [Def child-Pl] [come 3LogoPlS not.be] say.Perf-3PlS  
 'The children<sub>x</sub> said that they<sub>x</sub> will not come.'

There is no logophoric when the argument in the quoted clause is other than subject, e.g. direct object. In (xx3), the regular 3Sg pronoun *ɔ̀nɔ̀* is used, and there is no explicit indication of coindexation, so noncoindexed readings are possible.

- (xx3) *sěydù* [ɔ̀nɔ̀ à búndè né-Ø]  
 Seydou [3Sg 2PlS hit.Perf] say.Perf-3SgS  
 'Seydou<sub>x</sub> said that you-Pl hit him<sub>x</sub>/ him<sub>y</sub>/ her<sub>y</sub>.'

Logophoric subject is not expressed when the ascribed author is the current speaker or addressee. In these cases, the pronominal categories of the current speech event apply.

- (xx4) a. [égò í bò] í né  
 [come 1SgS Impf] 1SgS say.Perf  
 'I said I am coming.'
- b. [égá-á wò] á né  
 [come-2SgS Impf] 2SgS say.Perf  
 'You-Sg said that you-Sg are coming.'

#### 18.4 Reciprocal

The reciprocal ('they hit/saw each other') is expressed by a verbal derivation with suffix *-lè* added to an otherwise transitive verb with a referentially nonsingular subject (§9.5). The verb is optionally preceded by *bòw<sup>n</sup>* 'together, reciprocally'.



## 19 Grammatical pragmatics

### 19.1 Topic

#### 19.1.1 Topic (*gòn* ~ *gôn*)

The topic particle is *gòn* ~ *gôn*. It implies a contrast between the topicalized NP and other possible topics from the discourse or communicative context.

- (xx1) *[mí gôn àndó-ò-lì]*  
 [1Sg Topic] go-ImpfNeg-1SgS  
 'As for me, I'm not going.'

Representative forms are in (xx2). The form is *gôn* after a {H}- or {L}-toned word, but *gòn* after any word with a contour tone.

(xx1)	input	gloss	'as for'
a. pronouns			
	<i>mí</i>	1Sg	<i>mí gôn</i>
	<i>mbé</i>	1Pl	<i>mbé gôn</i>
	<i>ó</i>	2Sg	<i>ó gôn</i>
	<i>ònò</i>	3Sg	<i>ònò gôn</i>
	<i>ηké</i>	3Pl	<i>ηké gôn</i>
b.			
	<i>wè:</i>	'child'	<i>wè: gôn</i>
	<i>è wê:</i>	'the child'	<i>è wê: gòn</i>
	<i>wè:-gé</i>	'children'	<i>wè:-gé gôn</i>
	<i>sěydù</i>	'Seydou'	<i>sěydù gòn</i>
	<i>úná</i>	'goat'	<i>úná gôn</i>
	<i>úná-gé</i>	'goats'	<i>úná-gé gôn</i>

#### 19.1.2 'Also' (*pé*)

*pé* is added to NPs including pronouns, and to adverbial phrases such as locative PPs (xx1a), but can also be clause-final (xx1b). It can follow accusative NPs (xx1c).

- (xx1) a. *[bàmàkò bà pé]* *káy<sup>n</sup>* *ɲ* *kànù*  
 [Bamako Loc also] work(n) 1SgS do-Impf  
 'I work in Bamako too.'
- b. *nǎ:* *nw-â:* *pé*  
 song sing.Impf-3PlS also  
 'They sing too.'
- c. *[è wê: ɲ pé]* *búndé-Ø*  
 [Def child Acc also] hit.Perf-3SgS  
 'He/She hit-Past the child also.'

Pronominal combinations are *mí pé* (1Sg), *mbé pé* (1Pl), *ó pé* (2Sg), *ábé pé* (2Pl), *ǎnà pé* (3Sg), and *ɲké pé* (3Pl).

### 19.1.3 'Even' (*X pé*)

*pé* following a constituent expresses 'even X'.

- (xx1) a. *[wè: pé]* *dígò-mâ:* *bò-Ø*  
 [child even] go.up-can be-3SgS  
 'Even a child can go up (=climb).'
- b. *[wè:-ná-ɲgè pé]* *búndó*  
 [child-3SgP-Pl even] hit-Impf-3SgS  
 'He/She even hits his/her children.'

## 19.2 Preclausal discourse markers

### 19.2.1 'Well, ...' (*hàyà*)

Preclausal *hàyà* 'well, ...' or 'all right, ...' occurs in Penange as in most languages of the area. It can be used to acknowledge comprehension of an interlocutor's utterance (xx1a). It can also be a hesitation form suggesting lack of enthusiasm, much like English *well*.

- (xx1) a. *hàyà* *ɲ* *nùndè*  
 well 1SgS hear.Perf  
 'Okay, I have heard (understood).'
- b. *hàyà* *ɲ* *nà:lé* *nèw*

well            1SgS            think.Perf    first  
 'Well, I'll think it over first.'

### 19.2.2 'But ...' (*ngà*)

Clause-initial *ngà* 'but' belongs to a regionally widespread complex (other languages have e.g. *kà:*, *gà:*, or *ŋkà*).

- (xx1) *èm-bà    ándó    ɲ    bò,    ngà    wànjó-ó-lì*  
 there    go.Impf    1SgS    Impf,    but    stay-1SgS-ImpfNeg  
 'I am going there but I won't stay.'

## 19.3 'Only' particles

### 19.3.1 'Only' (*tirà→*)

*tirà→* 'only' is probably derived from an original numeral 'one' that does not otherwise survive in Penange. It can be added to a NP or similar constituent, which is usually focal (xx1a), or it can occur clause-finally especially when no suitable NP is present (xx1b).

- (xx1) a. *[ín    tirà→]    mì-ŋ    tábé    ná*  
 [Dem    only]    1Sg-Acc    give.Perf    3SgS  
 'He/She gave me this only [focus].'
- b. *nó:yá-á    wò    tirà→*  
 sleep-Impf-2SgS    Impf    only  
 'You-Sg only sleep.'

Circumlocutions of the type 'they don't replaster walls, if it is not (=unless it is) with honey', i.e. 'they only use honey to replaster walls', also occur especially in narrative; see (xx7) in text 1.

## 19.4 Phrase-final emphatics

### 19.4.1 Clause-final *kóy* 'sure' (firm agreement or answer)

The regionally widespread clause-final confirmational emphatic, in the form *kóy*, is in common use in Penange. It is used somewhat like English *sure* as in *It*

*sure it hot today*, or abbreviated *It sure is* as an emphatic confirmational response to *It's hot today* or to the question *Is it hot today?*

- (xx1)    *nwà:gè*        *bó-Ø*        *kóy*  
           hot            be-3SgS        Emph  
           'It sure is hot!'

#### 19.4.2 Clause-final *dé* (admonitive)

Another regionally widespread clause-final emphatic takes the form *dé* in Penenge. It has an admonitive or contradicting function. Cf. English low-pitched pragmatic *now* as in *Be careful now!*

- (xx1)    *nwà:gè*        *bó-Ø*        *dé*  
           hot            be-3SgS        Emph  
           '(Watch out,) it (e.g. pot) is hot!'

### 19.5 Greetings

The metalinguistic terms are *tíyà-m* 'greeting(n)' and verb *tíyá-mì* 'greet (sb)'.

A typical four-part (ABAB) greeting cycle for the morning is (xx1). *èlà* is contracted from *hé:lá* 'welfare, well-being'. *náyè* is the verb 'spend the night'. In the second AB sequence, *èlà n náy-yè*, pronounced [èlàn:ǎj:è], the extra *n* might be reduced from instrumental *ní*, while *náy-yè* is the regular 3Pl subject perfective form of *náyè*.

- (xx1)    A: *èlà = á náyè→*        'Did (you-Sg) spend the night well?'  
           *èlá = à náyè→*        'Did you-Pl spend the night well?'  
           B: *èlà ñ náyè*            '(Yes,) I spent the night well.'  
               *èlà ñ náyè*            '(Yes,) we spent the night well.'  
           A: *[èlà n] náy-yè→*        'Did they (your family) spend the night well?'  
           B: *[èlà n] náy-yè*        'They spent the night well.'

Around mid-day the greeting changes (xx2). The structures are exactly parallel, but the verb is now *dénè* 'spend the (mid-)day'.

- (xx2)    A: *èlà = á dénè→*        'Did you-Sg spend the day well?'

*èlà = à déné→* 'Did you-Pl spend the day well?'

B: *èlà ñ déné* ' (Yes,) I spent the day well.'  
*èlà ñ déné* ' (Yes,) we spent the day well.'

A: *[èlà n] दें-yè→* 'Did they (your family) spend the day well?'

B: *[èlà n] दें-yè* 'They spent the day well.'

A simple 'hello' type greeting, e.g. to someone encountered while one or the other is walking, is *tíyá→* (to one person), *tíyá yà* (to more than one person). The reply is *ò:wá→*.

A departing traveler is sent off with (xx3). The reply to this and similar invocations is the Arabic *?àmí:nà* 'amen!'. The verb 'cause to arrive' is in third-person hortative form, in {H}-toned form.

(xx3) *[èlà n] túbyá-mí* 'May (God) make (you) arrive in well-being!'

On Muslim holy days and some other celebrations such as weddings, standard wishes to other villagers are those in (xx4). In the abbreviated form (xx4a), the third-person hortative verb is {H}-toned (xx4a), as in (xx3) above. When an accusative pronoun is added to specify the recipient of 'show', the third-person hortative verb is {LHL}-toned (xx4b). Another version of (xx4a) is (xx4c).

- (xx4) a. *nà:ngòl tá:r(í)-yé*  
 next.year show-3Hort  
 'May (God) show (you/us) next year!'
- b. *?àmàná nà:ngòl ábé-<sup>n</sup> tà:rí-yè*  
 God next.year 2Pl-Acc show-3Hort  
 'May (God) show (you/us) next year!'
- c. *[é ègò bò] tá:r(í)-yé*  
 [thing come.Impf Impf] show-3Hort  
 'May (God) show (you/us) what is coming (=the future)!'

## 20 Texts

[note: some tonal transcriptions need to be checked, especially for 3Sg perfective verbs before *nà*]

### 20.1 Text 1: Hyena, hare, and the honey (tale)

(xx1) A: *dábál-yé* *ŋ* *tùlè*  
tale 1SgS put.Perf

B: *ná:m*  
all.right

A: I have put (=I propose) a tale.

B: All right.

[standard tale opening AB sequence; remainder of text is told by A; *dábál-yé* with diminutive *-yé* §5.1.5; *ná:m* is a formal, 'amen'-like response]

(xx2) [*tà: nì*] [*jómè nì*],  
[hyena and] [hare and],  
*[ŋké dúgú]* *má:gá kàn nà*,  
[3PIP village] difficulty happen.Perf 3SgS,  
*ɲò:ɲí* *mà:j-jè nà*,  
food be.difficult-Inch.Perf 3SgS,

*dágúr-yè* *[[gándà ŋké ándé-y<sup>n</sup>] níy<sup>n</sup>-y<sup>n</sup>è]*,  
get.ready.Perf-3PIS [travel 3PIS go-3Hort] say.Perf-3PIS],

'Hyena and hare. A crisis occurred in their village. Food was difficult (to find). They got ready (i.e. packed up), they intended to travel.'

[NP conjunction §7.1.1; *ŋké dúgú* possessed noun §6.2.1.1; *kàn nà* and *mà:j-jè nà* tightly chained perfective clause §15.2.1.5; inchoative *mà:j-jè* for *má:g-yè* §9.6; 3PI perfective *-yé* ~ *-yè* §10.2.1.1, third-person hortative *-y<sup>n</sup>* §10.7.3.1, in quoted clause §17.1.2.1; *níy<sup>n</sup>-y<sup>n</sup>è* 'they said' from *né* §10.1.2.1]

(xx3) *èné gwíy-yè, ójú ímb-yè*,  
thus leave.Perf-3PIS, road catch.Perf-3PIS,  
*ùnù→ hâl wáj-jí-yè*,  
walk.Impf until distant-Inch.Perf-3PIS.

*ènè* [wàlà yé:né], *ηké-η* *màlgè* *nà*,  
 thus [man a.certain], 3Pl-Acc see.Perf 3SgS,  
*ηké-η* *ìngì-rè* *nà*, *sàrè* *nà*,  
 3Pl-Acc stop-Tr.Perf 3SgS, ask.Perf 3SgS,  
*mbà* *tégá-yá* *lè*,  
 where? head.for.Impf-3PIS QuotQ,

'Then they left (their village), they hit the road. They walked (and walked) until they had gone far away. Then a certain man saw them. He stopped them and asked, where were they going?'

[*ènè* 'thus, like this' in the sense 'then' in narratives §4.4.2.3; *gwíy-yè* ~ *gúy-yè* 'they left' §3.2.8.1, §10.2.1.1; *ùnù*→ imperfective subordinate clause with prolonged final vowel §15.2.1.2; *yé:né* 'a certain' §6.3.2; *tégá-yà* 'they head for'; quotative interrogative particle *lè* §17.1.3]

- (xx4) [*è* *wálá* *η*] *jámb-yè*,  
 [Def man Acc] reply.Perf-3PIS,  
*ηké* *gôn*, [*ηké* *dúgú*] *má:gá* *kàn* *nà*,  
 3Pl Topic, [3PIP village] difficulty happen.Perf 3SgS,  
*káy<sup>n</sup>* *dúndò* *ηké* *b-yà*,  
 work(n) look.for.Impf 3PIS Impf-3PIS,

'They replied to the man: as for them, a difficulty (=crisis) happened in their village, work [focus] was what they were looking for.'

[definite *è* §4.4.1.1; topic *gôn* §19.1.1; subject proclitic in focalized clause §13.1.1.4]

- (xx5) [*è* *wálá*] *ènè* [*dèm-nà* *bà*] *ηké-η* *sìndè* *nà*,  
 [Def man] thus [house-3SgP Loc] 3Pl-Acc convey.Perf 3SgS,  
*nà:* *ηké-η* *tàbè* *nà*, *jíy<sup>n</sup>-y<sup>n</sup>è*, *déng-yè* *wá:rù*,  
 meal 3Pl-Acc give.Perf 3SgS, eat.Perf-3PIS, finish.Perf-3PIS time,  
 [*òndò* *gôn*] [*kày<sup>n</sup>* *jwá→*] *à* *sá<sup>n</sup>*,  
 [3Sg Topic] [work(n) much] Logo have,  
*kàn-má:* *bì-yà* *bé-né*,  
 do-Capac be-3PIS if,

'Then the man took them to his house. He gave them a meal, they ate. When they had finished, (he said:) "I have a lot of work, if you-Pl can do it."

[*bà* locative postposition §8.2.3.1; *wá:rù* in temporal adverbial clause §15.2.1.1; *jwá→* 'a lot' §8.4.2; logophoric subject *à* §18.3; *sá<sup>n</sup>* 'have' §11.5.1; capacitative *-má:* §10.5.1; *bé-né* 'if' §16.1]

- (xx6) *jámb-yè*,  
 reply.Perf-3PIS,

[*káy<sup>n</sup> sî:*] *ɲké-ɲ tábé ná sèlè, kánù ɲké bò,*  
 [work(n) kind] 3PIS-Acc give.Perf 3SgS all, do.Impf 3PIS Impf,  
 [*ê:* *nâm*] *ég-yè,*  
 [Dem.Def Purp] come.Perf-3PIS,

'They replied: any kind of work that he gave them [focus] they would do; they had come for that.'

[compound *káy<sup>n</sup> sî:* 'kind of work' §5.1.1; perfective nonsubject relative clause §14.4.2; *sèlè* all after relative clause §14.6.2; discourse-definite demonstrative *ê:* §4.4.1.2; purposive postposition *námù* ~ *nâm* §8.3]

- (xx7) *ènè dèm-ná [è árgò] bí-yá=yò tà:rè nà,*  
 thus house-3SgS [Def replastering] be-Ppl=it.is show.Perf 3SgS,  
*hâl [é tà:ɲgà ní] àrgò-nd-yà,*  
 until [Def one Inst] replaster.Impf-3SgS.Neg-3PIS,  
*ìgè=là kán-Ø,*  
 honey=it.is.not do.Perf-3SgS,  
*àrg-â: bé-né pé,*  
 replaster.Impf-3PIS if even,  
*[ɲké nwé:] nèlò-nd-yà,*  
 [3PIP hand] lick.Impf-3SgS.Neg-3PIS

'Then he explained that his house was due for replastering (with mud), (and said) you-Pl don't (=must not) replaster (houses) with anything other than honey; (and) if you-Pl replaster, you-Pl do not (=must not) lick your hands.'

[participle *-yà* in nonsubject imperfective relative §14.4.3; *tà:ɲgà* 'one' §4.7.1.1; instrumental postposition *ní* §8.1.2; *=yò* 'it is' and *=là* 'it is not' §11.2.1.1-2; third person pronouns for quoted second person, §17.1.1; *bé-né pé* 'even if' §16.2.1]

- (xx8) *hàya yé: ný<sup>n</sup>-y<sup>n</sup>è, ènè káy<sup>n</sup> dógúl-yè,*  
 all.right yes say.Perf-3PIS, thus work(n) begin.Perf-3PIS,  
*àrgá:-yà ɲ,*  
 replaster.Impf-3PIS Impf,  
*tă.<sup>n</sup> mò:ɲì mós:ɲà-à-yà né-Ø né,*  
 hyena urine urinate.Impf-LogoSgS-Ppl say.Perf-3SgS and.then,  
*dáb-yé né, nwé:-nà nélé-Ø né,*  
 hide-MP.Perf and.then, hand-3SgP lick.Perf-3SgS and.then,  
*[è ɲké árgé sèlè] tíbé-Ø né,*  
 [what 3PIS replaster.Perf all] fall.Perf-3SgS and.then,

'They said, okay yes.' Then they began the work. While they were replastering, hyena said: I will go urinate. He hid, and licked his hands. All that they had replastered fell off (the wall).'



[*hàya* 'all right' §19.2.1; different-subject imperfective subordinator *η* §15.2.1.3; nonpast anterior subordinator *né* §15.2.2.2; default nonhuman *è* as head of relative §14.2.4]

- (xx9) *jómé* *òndò-η* *sáré-Ø* *né,*  
 hare 3Sg-Acc ask.Perf-3SgS and.then,  
*[à* *nélé-l]* *nó* *bò-Ø,*  
 [LogoSg lick-PerfNeg] say.Impf Impf-3SgS,  
 'If (when) hare asked him, he (=hyena) would say that he hadn't licked  
 (his hand).'

[conditional *né* §16.1]

- (xx10) *ènè* *káy<sup>n</sup>* *kán-nì* *déngé-Ø* *sèlè,*  
 thus work(n) do.Perf-3PlS finish.Perf-3SgS all,  
*[è wálá]* *wálé* *à* *sá:-ndà.*  
 [Def man] money LogoSgS have-not,  
*[ìgè nì]* *ηké-η* *sójà-à* *wò,*  
 [honey Inst] 3PlS pay-LogoSgS Impf,  
 'Then as soon as they had completed the work, the man (said) that he  
 had no money, (so) he would pay them with honey.'

[3Pl perfective *kán-nì* §10.2.1.1; *sójà-à wò* imperfective §10.2.2.1]

- (xx11) *[ntá sèlè]* *pó:*, *[[pô:y jángà]* *w<sup>n</sup>]* *gà:-rè* *nà,*  
 [person every] share(n), [[sack interior] Loc] put.in-Tr.Perf 3SgS  
*[[ηké dúgú]* *η]* *kónd-yè,*  
 [[3PIP village] Loc] go.back.Perf-3PlS,  
 'He put each person's share (of honey) in his (=the person's) sack. They  
 went back to their village.'

[*sèlè* 'all' in the distributive sense 'each'; *gà:-rè* 'put (sth) in (sth) for (sb)' with benefactive, from *gálé* 'put (sth) in (sth)', §9.4.1]

- (xx12) *ég-yè,* *ηké* *ntá-gè,* *[è ígè]* *tá:r-yè,*  
 come.Perf-3PlS 3PIP person-Pl, [Def honey] show.Perf-3PlS,  
*tà.<sup>n</sup>* *ìgè-nà* *[[dèm jángà]* *η]* *nwà:-mì* *nà,*  
 hyena honey-3Pl [[house inside] Loc] go.in-Caus.Perf 3SgS,  
*jómé* *bàgùlè* *nà,* *[è ígè]* *nèmè* *nà,*  
 hare go.around.Perf 3SgS, [Def honey] take.Perf 3SgS,  
*[òmbògòndò wé:-gé]* *dù:ndè* *nà,*  
 [bees child-Pl] put.down.Perf 3SgS,

'They came (to the village). The showed the honey to their people (=kin). Hyena put his honey inside the house. Hare came around (stealthily). He took the honey, and put some bees (in hyena's sack).'

[*X jángà*] *ŋ* 'inside X §8.2.4; 'bees' is collective, individuated by adding 'child']

- (xx13) *tà:<sup>n</sup> dó:síjé nèmè nà, [[jòmè dêm] ɲ]*  
hyena metal.ladle take.Perf 3SgS, [[hare house] Loc]  
*[gèni kíyá-yà pínì] kàn nè,*  
[fire pick.up.Impf-Ppl like] do.Perf and.then,  
*[ìgé ɲǎ:-yà ɲ] tèmbè nè,*  
[honey eat.Impf-3PlS Impf] encounter.Perf and.then,  
'Hyena took a metal ladle and did as though (=pretended to) pick up some fire (i.e. embers) at hare's house. He (= hyena) encountered them (= hare's family) while they were eating honey.'  
*[pínì]* in 'as though' clause §15.3.2.2; different-subject imperfective clause 'while' §15.2.1.3]

- (xx14) *ɔ̀nɔ̀-ɲ gá:-r-yé nè, gú:-ndé né,*  
3Sg-Acc put-Tr.Perf-3PlS and.then, go.out.Perf and.then,,  
*[[[è gèn] kò] w"] mɔ̀:ɲì mánjé né,*  
[[[Def fire] on] Loc] urine urinate.Perf and.then,  
*nímbú-gé né,*  
extinguish-Tr.Perf and.then,  
*[è tó:] ɔ̀nɔ̀-ɲ gá:-r-yé nè,*  
[Def other] 3Sg-Acc put-Tr.Perf-3PlS and.then,  
'They (=hare's people) put (embers) in it for him, he (=hyena) went out, and he urinated on the fire (i.e. embers) and extinguished it. They gave him another (fire).'  
[*X kò*] *ɲ* 'on X' §8.2.7; *mɔ̀:ɲì mánjé* cognate noun-verb §11.1.2.5; *nímbú-gé* 'extinguish (fire)' from *nímbé* '(fire) go out' §9.2.2]

- (xx15) *káná nà ɲ, [jòmè ígè] ɲkè nà,*  
do.Impf 3SgS Impf, [hare honey] be.used.up.Perf 3SgS,  
*[dèm-nà bá] àndè nà,*  
[house-3SgP Loc] go.Perf 3SgS,  
*[wè:-ná-ɲgè nì] [ɔ̀nɔ̀ ní] [dèmù ɲ] núy<sup>n</sup>-y<sup>n</sup>è.*  
[child-3SgP-Pl and] [3SgS and] [house Loc] go.in.Perf-3PlS,  
'While he (=hyena) was doing (thus), hare's honey was used up. He (=hyena) went (back) to his house. He and his children went into the house.'  
[*wè:-ná-(ɲ)gè*] 'his/her children' §6.2.1.2]

- (xx16) *[wè:-gè négá] [bándá ɲ] dè:ndè nà,*  
[child-Pl two] [outside Loc] leave.Perf 3Sgs,  
*[è bów<sup>n</sup>] nèjí-yé nè nà,*

[Def	door]	press-3Hort	say.Perf	and.then,
<i>m?m</i>	<i>à</i>	<i>né</i>	<i>nè,</i>	<i>bàngù-là-ndé-y<sup>n</sup>,</i>
no!	LogoSgS	say.Perf	if,	shut-Rev-Prohib-PlS,
<i>mhm</i>	<i>à</i>	<i>né</i>	<i>nè,</i>	<i>bàngù-lí-yè,</i>
yes!	LogoSgS	say.Perf	if,	shut-Rev-3Hort,

'He (=hyena) left two children outside (the house). He told them to push on the door; if he said 'unh-uhn!' (= no!) they should not open (it), (but) if he said 'unh-huh!' (= yes!) they should open it.'

[*néga* 'two' §4.7.1.2; third-person hortative -*yè* ~ -*yè* (twice), §10.7.3.1]

(xx17)	<i>[è</i>	<i>pó:y]</i>	<i>tèw-lè</i>	<i>nà,</i>
	[Def	sack]	cover-Rev.Perf	3SgS,
	<i>[òmbògòndò</i>	<i>wé:-gè]</i>	<i>gó:-ng-yè</i>	<i>jwá→,</i>
	[bees	child-Pl]	go.out.Perf-3PlS	a.lot
	<i>[héké-η</i>	<i>nùngò</i>	<i>w<sup>n</sup>]</i>	<i>dógúl-yè,</i>
	[3Pl-Acc	bite.Impf	Impf]	begin.Perf-3PlS,
	<i>n→</i>	<i>nò:-Ø</i>		
	"n-n-n"	say.Impf-3SgS		

'He (=hyena) opened the sack. Lots of bees came out, they began to bite them (hyena and his family members except the two who were outside). He was saying "n-n-n".'

[*gó:-ngè* 'go out' versus *gwé:* 'leave' §10.1.2.3; hyena's "n→", pronounced indistinctly while he is being attacked by bees, was an attempt to say 'yes' but sounded more like 'no']

(xx18)	<i>[è</i>	<i>wé:-gè]</i>	<i>nèjá→</i>	<i>bàyr-â:</i>
	[Def	child-Pl]	press.Impf	add.Impf-3PlS
	<i>hâl</i>	<i>dóg-yè,</i>		
	until	die.Perf-3PlS		

'The (two) children pushed harder (on the door), until they (=hyena and family) died.'

[3Sg equivalent *nèjá→* *bàyrô:-Ø* with final-lengthened A/O-stem on first verb §15.2.1.2, from verb *néjé*; *báyrè* 'add' as chained verb in the sense 'VP more']

(xx19)	<i>dábál-yé</i>	<i>[[gégè</i>	<i>ñ</i>	<i>tèmbè]</i>	<i>ñ]</i>	<i>[ñ</i>	<i>dũ:ndè]</i>
	tale	[[place	1SgS	encounter]	Loc]	[1SgS	put.down.Perf]
	'I (have) put the tale down where I found it.'						
	[standard tale-ending phrase]						

## 20.2 Text 2: Hyena and hare pay off a debt (tale)

(xx1) A: *dábál-yé* *ŋ* *tùlè*  
tale 1SgS put.Perf

B: *ná:m*  
all.right

A: I have put (=I propose) a tale.

B: All right.

(xx2) [*tà: nì*] [*jómè nì*],  
[hyena and] [hare and],  
[*ègàgè yé:né*] [[[*sàbàl-kàn tà:ngà*] *kí:*] *ŋ*],  
[morning a.certain] [[[merchant one] custody] Loc]  
*yòrì ném-yè,* [*sójó ŋ*] *kòndò kán-nì,*  
credit take.Perf-3PlS, [pay.Impf Impf] failure do.Perf-3PlS],  
[*è sàbàl-kàn*], [*ŋké-ŋ gíyà-à wò*] *nè nà,*  
[Def merchant], [3Pl-Acc kill.Impf-LogoSgS Impf] say.Perf 3SgS,  
'Hyena and hare. One morning they took credit (=bought on credit)  
from a merchant. (Later) they were unable to repay him. The merchant said:  
I will kill you-Pl.'  
[agentive *sàbàl-kàn* 'merchant' from *sàbàl kán(i)* 'do commerce' §5.1.4;  
[X *kí:*] *ŋ* 'in the custody of X' §8.2.13; *kòndò kán* 'fail, be unable' §11.1.2.2;  
said "I will kill you-Pl" expressed as "LogoSgS will kill them" §17.1.1]

(xx3) *èné bòw<sup>n</sup> málgá-l-yè,*  
thus reciprocally see-Recip.Perf-3PlS,  
[*ŋké ní:-ngè*] *ŋké sógú-lá-máy<sup>n</sup>,*  
[3Pl mother-Pl] 3PlS buy-Rev-Allative.Hort,  
'Then they (hyena and hare) saw each other. They decided to sell their  
mothers.'  
[reciprocal verbal suffix *-lé* and particle *bòw<sup>n</sup>* §9.5; allative hortative  
§10.7.2.3]

(xx4) *jómè [[bòlè òmbè] nì] [nì:-ná ŋ] sòjè nà,*  
hare [[thread fragile] Inst] [mother-3SgP Acc] tie.Perf 3SgS,  
*tà:<sup>n</sup> [yòlòbù nì] [nì:-ná ŋ] sòjè nà,*  
hyena [chain Inst] [mother-3SgP Acc] tie.Perf 3SgS,  
'Hare tied his mother up with a fragile (=threadbare) thread. Hyena tied  
his mother up with a chain.'

- (xx5) *jómè* [*nì:-ná* *η*] *dàbàl-dè* *nà*,  
hare [mother-3SgP Acc] whisper-Tr.Perf 3SgS,  
*kómbóló* *ηké* *túbyé* *né* *sèlè*,  
outback 3PIS arrive if all,  
*[tónjé* *né]* *àndí-yè*,  
[pull.off and.then] go-3Hort,

'Hare whispered to his mother: as soon as they reached the outback, she should pull it (=thread) off with a tug and go away.'

[*dábál-dè* 'whisper to (sb)' §9.4.1]

- (xx6) [*kómbóló* *η*] *túbyí-yé* *sèlè*,  
[outback Loc] arrive.Perf-3PIS all,  
*[jòmè* *nî:]* *tónjè* *nà*, *dúgú-rè-Ø*,  
[hare mother] pull.off 3SgS, run-Tr-Perf,  
*ànò* *gón*, *nì:-nà* *póllè-Ø*,  
3Sg Topic, mother-3SgS escape.Perf-3SgS

'When they reached the outback, hare's mother pulled it off with a tug and ran away. As for him (=hare), his mother escaped.'

- (xx7) *tà.<sup>n</sup>* *jàmbè* *nà*, *nì:-nà* *ηké-η* *bèlô:-Ø*,  
hyena reply.Perf 3SgS, mother-3SgS 3Pl-Acc suffice.Impf-3SgS,  
*ànd-yè*, [*tà.<sup>n</sup>* *nî:]* *sógú-l-yè*,  
go.Perf-3PIS, [hyena mother] buy-Rev.Perf-3PIS,  
*[wàlè* *jwá→]* *dín-yè*, [*dèmù* *η*] *kónd-yè*,  
[money a.lot] get.Perf-3PIS, [house Loc] go.back.Perf-3PIS,

'Hyena spoke up, (saying) that his mother would be enough for them. They went and sold hyena's mother. They got a lot of money. They went back home.'

- (xx8) [*è* *wálé]* *wélá-g-yè*,  
[Def money] divide-Tr.Perf-3PIS,  
[[*è* *sábàl-kàn]* *ñé:]* *táb-yè*,  
[[Def merchant] thing] give.Perf-3PIS,  
*èné* *yòrì* [[*ηké* *páró]* *η*] *gwé:Ø*,  
thus credit [[3PIP neck] Loc] leave.Perf-3SgS,

'They divided the money. They gave (=repaid) the merchants' (share). In that way the credit (=debt) got off of their neck(s).'

[*ñé:* default inanimate possessed noun, §6.2]

- (xx9) *jómè*, *ntá-ná-gè* *kíyé* *b-yà*,  
hare, person-3SgP-Pl complete be-3PIS,

[nàfòrò pé] díné-Ø,  
 [wealth too] get.Perf-3SgS,  
 tà.<sup>n</sup> nàfòrò díné-Ø, [nì:-nà gɔ́] wǎl-Ø  
 hyena wealth get.Perf-3SgS, [mother-3SgP Topic] not.be-3SgS

'(As for) hare, his people (=family) was intact, and he got wealth (=became wealthy) too. (As for) hyena, he (too) got wealth, (but) his mother was no longer there.'

[kíyé b-yà 'they are intact, complete', negative kíyé wǎl-yà ; gɔ́ wǎl- for gɔ́n wǎl-]

- (xx10) dábál-yé [[gɛ́ŋ ĩ tɛ́mbɛ́] ñ] [ĩ dũ.ndɛ́]  
 tale [[place 1SgS encounter] Loc] [1SgS put.down.Perf]  
 'I put the tale down where I found it.'  
 [standard tale-ending phrase]

### 20.3 Text 3 Collective work

- (xx1) *pòlbà* *káy<sup>n</sup>*,  
 collectivity work,  
*[ègàgè pírígí]* *[wàlà-gè ní]* *[ságállá-gé ní]*,  
 [morning early.morning] [man-Pl and] [youth-Pl and],  
*[̀̀kè káy<sup>n</sup>-gólyé-gè]* *káldí-yé* *nè*,  
 [3PIP work-gear-Pl] prepare.Perf-3Pl and.then,  
*[[dèm-gè<sup>HL</sup> túndù] bà]* *gú:-ndí-yé* *nè*,  
 [[house-Pl<sup>HL</sup> behind] Loc] go.out-Intr.Perf-3PlS and.then,  
*ségál-gí-yé* *nè*, *wàlà-gè* *dígám*,  
 assemble-Recip-3PlS and.then, man-Pl<sup>HL</sup> talk(n),  
 ‘Collective (volunteer) work. Early in the morning, men and youths get their work gear ready. They go out and assemble behind (=at the edge of) the houses (=village). (We’re talking) talk about men.’

- (xx2) *[è káy<sup>n</sup>]* *bànà* *yò:* *nà*,  
 [Def work(n)] manner be.good.Impf.Ppl 3SgS,  
*[dám-mí: nè]* *bòw<sup>n</sup>* *péjì-gí-yé* *nè*,  
 [speak-3PlS and.then] Recip understand-Recip-3PlS and.then,  
*èné* *[è káy<sup>n</sup>]* *dógúlò* *b-yà*,  
 like.that [Def work(n)] begin Impf-3PlS,  
 ‘So that the work may turn out well, they speak and come to a mutual understanding. Then they begin the work.’

- (xx3) *[è káy<sup>n</sup>]* *kánù* *̀̀kè* *b-yà* *è:*,  
 [Def work(n)] do 3PlS Impf-Ppl that.Def,  
*kìnì-[bógè-l]=yò*, *màrtó-gè* *nì*, *bàlànmìn* *nì*,  
 stone-[break-VblN]=it.is, hammer-Pl with, lever with,  
*kèmbù-[kèmbí-yè]* *nì*,  
 pinching(n)-[pinch.Perf-Instr] with,  
*è:* *nì*, *sìm-túmà* *nì*,  
 that.Def with, palm-wood with,  
*è:* *nì*, *púná* *nì*,  
 that.Def with, powder with,  
 ‘The work that they do (is) that (=whatchamacallit?), breaking rocks, with hammers, with levers, with tongs (to hold the rocks), with that (=whatchamacallit?) with borassus palm logs, with that (=whatchamacallit?), with powder (=explosives).’

- (xx4) *[è káy<sup>n</sup>]* *dògùl-á:* *bè-nè,*  
 [Def work(n)] begin.Impf-3PIS if,  
*búl wéláí-yé nè,*  
 group(s) divide-3PIS and.then,  
*[bá:líkì-gè tó:-nà] [wè:-gè tó:-nà]*  
 [adult-Pl apart] [child-Pl apart]  
*[ságállá-gé tó:-nà],*  
 [youth-Pl apart],

‘When they begin the work, they divide themselves into groups, adults apart (in one group), children apart (in another group), youths apart (in a third group).’

- (xx5) *kà:lò<sup>L</sup> wálá,*  
 griot<sup>L</sup> male,  
*[bólyé ní] [ñké pá ñ] dínghà-Ø*  
 [tomtom with] [3PIS side Loc] follow-3SgS  
*wè:-gé kèmbù-[kèmbí-yè] dín-d-yè-l [ñké káy<sup>n</sup>],*  
 child-Pl pinching(n)-[pinch.Perf-Instr] hold-MP-VbIN [3PIP work(n)],  
*ságállá-gé [màrtò nì] bógè-l [ñké káy<sup>n</sup>],*  
 youth-Pl [hammer with] hit-VbIN [3PIP work(n)],

‘A male griot goes along with them at their side with a tomtom. The work of children is to hold the tongs. The work of youths is to hit (the rock) with hammers.’

- (xx6) *wàlà ká:mnó-gé, bàná kàn bí-yà nì,*  
 man old-Pl, manner do Impf-3PIS with,  
*bàná yò: nà nì,*  
 manner be.good.Impf.Ppl 3SgS with,  
*dágúró ñké b-yà,*  
 prepare 3PIS Impf-Ppl,  
*kìnì, ègàgè pírígíl dògùlí-yé nè,*  
 stone, morning early.morning begin-3PIS and.then,  
*hâl dòyà:lò-gè<sup>HL</sup> wágâr,*  
 until lunch-Pl<sup>HL</sup> time,

‘Old men prepare (=instruct) them (=children and youths) as to the way they do (the work), so that it (=work) may turn out well. As for the rocks, they (=workers) begin early in the morning (and continue) until lunchtime.’

- (xx7) *néllí-yé nè, nà: jí:-yé nè,*  
 rest.Perf-3PIS and.then, meal eat.meal-3PIS and.then,  
*sèndì kán-ní: nè,*  
 prayer do-3PIS and.then,



*ènέ*      *[nè:gù-lò]-pé,*      *kày<sup>n</sup>*      *dógúlò*      *b-yà,*  
 like.that      [two-Ord]-time,      work(n)      begin      Impf-3PlS,  
 ‘They rest, they eat a meal (lunch), they pray (2 PM Muslim prayer).  
 After that they begin work a second time.’

- (xx8) *káy<sup>n</sup>*      *kàn-á:*      *bè-nè,*  
          work(n)      do.Impf-3PlS      if,  
*sàwlè-lmà*      *nì,*      *jàngù-n-sià*      *nì,*      *kán*      *b-yà,*  
 vigorous-Nom      with,      soul-happy      with,      do      Impf-3Pl  
*nùn*      *nèmà→,*      *hâl*      *[è*      *káy<sup>n</sup>]*      *ḡkê-l,*  
 now      take,      until      [Def      work(n)]      finish-VblN,  
*[[gè:dèni]<sup>L</sup>*      *kúndú]*      <sup>HL</sup>*káy<sup>n</sup>]=yò*      *pè,*  
 [[day]<sup>L</sup>      intact]      <sup>HL</sup>work(n)=it.is      Emph,  
 ‘When they work, they do (it) with vigor and happiness (=enthusiasm),  
 all the way until the job is completed. It’s indeed an entire day.’

- (xx9) *[è*      *káy<sup>n</sup>]*      *kàn-á:*      *bè-nè,*  
          [Def      work(n)]      do.Impf-3PlS      if,  
*ó*      *[è*      *ntá]*      *kày<sup>n</sup>-nà*      *kánù*      *ḡkê*      *b-yà,*  
 2Sg      [Def      person]      work(n)-3SgP      do      3PlS      Impf-Ppl,  
*[òmà*      *ní]*      *[jà:*      *nì]*      *ḡkê*      *á*      *dòngù-ré*      *nè,*  
 [porridge      and]      [meal      and]      3PlO      2SgS      cook-Tr      and.then,  
*yò:-gé,*      *[è*      *jâ:]*      *dóḡgê-l*      *[ḡkê*      *káy<sup>n</sup>],*  
 woman-Pl,      [Def      meal]      cook-VblN      [3PIP      work]  
*[ê:*      *nì]*      *[mì-wê-l*      *nì],*  
 [that.Def      and]      [water-draw-VblN      and],  
 ‘If they do the work, you (who are) the person whose work they are  
 doing, you cook porridge and a meal for them. Women, their job is to cook  
 the meal, that and (going to) draw water (at the well).’

- (xx10) *[ê:*      *túndù*      *ḡ],*  
          [that.Def      after      Loc]  
*wàlà-gé*      *kìnì*      *bógó:*      *dénò*      *b-yà,*  
 man-Pl      stone      break.Impf      pass.day      Impf-3PlS,  
*hâl*      *dè:ndà*      *démé-Ø*      *né,*  
 until      afternoon      afternoon.arrive-3SgS      and.then,  
 ‘After that, the men (=youths) spend the day breaking rocks, until  
 afternoon comes.’

- (xx11) *wàlà*      *ká:mnó-gé,*      *ḡkê-ḡ*      *ségálá-m-mí:*      *nè,*  
          man      old-Pl,      3Pl-Acc      assemble-Caus.Perf-3PlS      and.then,  
*ḡkê-ḡ*      *kùnà*      *bál-yé*      *nè,*

3Pl-Acc      thanks      give.thanks.Perf-3PlS      and.then,  
 [ɲké      <sup>HL</sup>káy<sup>n</sup>-gólyé-gè]      némmí-yé      nè,  
 [3PlP      <sup>HL</sup>work(n)-gear-Pl]      take.Perf-3PlS      and.then,  
 [dùgù      ɲ]      dígí-ndí-yé      nè,  
 [village      to]      go.up-Tr.Perf-3PlS      and.then,

‘Old men assemble them (younger men) and give thanks to them. They (workers) take their work gear and go (back) up to the village.’

(xx11) [[è      káy<sup>n</sup>-nà]      ɲké      kán]      démù      ɲ,  
 [[Def      work(n)-3SgP]      3PlS      do]      house      at,  
 dénám-mí:      nè,  
 say.good.evening.Perf-3PlS      and.then,

ènè      [ɲtá      sèlè]      [dèm-nà      ɲ]      ándò      bò-Ø  
 like.that      [person      all]      [house-3SgP      to]      go      Impf-3SgS

‘At the house of (the person) whose work they have done, they say good evening. Then everyone goes (back) to his (own) house.’

## 20.4 Text 4 Brotherly love

- (xx1) *wàyà yé:né, sú:<sup>n</sup> wê: nì,*  
 year a.certain, [fasting month] in  
*[dé: ní] [nóbé ní],*  
 [elder.sib and] [younger.sib and]  
*bòw<sup>n</sup> télálí-g-yè,*  
 Recip disagree-Recip.Perf-3PLS,  
*wálé nâm→, [nà:-ngè ní], [àlàmunò-gè ní],*  
 money because.of, [cow-Pl and], [sheep-Pl and],  
*jwà: sá<sup>n</sup>-yà-yè, dèmbè:-ngè=yó pè,*  
 a.lot have-3PLS-Past, blacksmith-Pl=it.is Emph,  
 ‘One year, during Ramadan (Muslim fasting month), an older brother  
 and a younger brother had a disagreement, because of money. They had lots  
 of cattle and sheep. They were of the blacksmith (metalworker) caste.’

- (xx2) *[è nóbé ê:] dàwlà sâ:<sup>n</sup> bò-yè,*  
 [Def younger.sib Def] elegance have Impf-Past,  
*[kán ní] [wàlè-tòmbò ní],*  
 [gold and] [silver and],  
*dòjù-gè bí-yà-yè,*  
 forging-Pl be-3PLS-Past,  
 ‘The younger brother was elegant (popular with others). They (both  
 brothers) forged (did metalwork) with gold and silver.’

- (xx3) *èné dèn tà:ngà, [è dé:]*  
 like.that day one, [Def elder.sib]  
*[[è nké ná:-ngè] sôw<sup>n</sup> bà] àndô:-Ø,*  
 [[Def 3PIP cow-Pl] presence Loc] go.Impf-3SgS  
*imbô: sògù-lô: kán bò-Ø-yè,*  
 catch.Impf buy-Rev.Impf do Prog-3SgS-Past  
*hâl [è dá:bá-gè] gámbúl-yè,*  
 until [Def animal-Pl] diminish.Perf-3PLS,  
 ‘Then (starting) one day, the older brother was going among their  
 (jointly owned) cows. He was seizing (one cow at a time) and selling it, to  
 the point where their animals (=herd) were reduced.’

- (xx4) *[è nóbé pê], dèn tà:ngà,*  
 [Def younger.sib too], day one,  
*[è dé:] pá<sup>n</sup> dágùrè nà,*

[Def elder.sib] beside get.ready.Perf 3SgS,  
*ηké ándé nèn-Ø,*  
 3Pl go.Perf say.Perf-3SgS,

[è dá:bá-gè] *ηké sé:má-má-y<sup>n</sup>-yà,*  
 [Def animal-Pl] 3PlS look-Caus-Pl-Hort,

‘The younger brother for his part, one day, he got ready (to go) with the elder brother. He said, “let’s go take a look at the animals!”’

(xx5) *ánd-yè,* [è dá:bá-gè] *máligí-yè,*  
 go.Perf-3PlS, [Def animal-Pl] see.Perf-3PlS,

[è *nóbé*] [è dá:bá-gè]  
 [Def younger.sib] [Def animal-Pl]

[*gìré-nà ò*] *ηká:líg-yè,* *jámbè nà,*  
 [eye-3SgP Loc] become.small.Perf-3PlS, reply.Perf 3SgS,

‘They went and they saw the animals. (As for) the younger brother, the animals struck him (“were in his eye”) as few. He spoke up.’

(xx6) *bòw<sup>n</sup> sógè-yè [tùndù ò gòn],*  
 together buy.Perf-Past [behind Loc exactly],

[è *wánjè-gè*] [ò *né = w*],  
 [Def remainder-Pl] [1Sg Poss=it.is],

[è *dé:*] *òndò-η ntíyè-Ø,*  
 [Def elder.sib] 3Sg-Acc hurt.Perf-3SgS,

*dò:-wé: némè nà,*  
 pestle pick.up.Perf 3SgS,

[è *nóbé-η*] *búndà wò né nà,*  
 [Def younger.sib-Acc] hit Impf say.Perf 3SgS,

‘(Younger brother:) As a result of the fact that they had jointly bought (the animals), the ones left belong to me.’ (As for) the elder brother, (this) hurt him. He picked up a pestle, and said he would (=tried to) hit the younger brother (with it).’

(xx7) [*ntà tó:-gé*] *òndò-η gámb-yè,*  
 [person other-Pl] 3Sg-Acc block.Perf-3PlS,

*ábè-l-Ø,* *jámb-yè,*  
 accept-PerfNeg-3SgS, reply.Perf-3PlS,

*òndò-η á nàré nè,*  
 3Sg-Acc 2SgS touch.Perf if,

*ó-η dè:ndò-ò-lí,*  
 2Sg-Acc abandon-1PlS-ImpfNeg,

‘Other people restrained him, (but) he refused (to stop). They spoke up: “if you touch him, we will not (ever) leave you alone.”’

- (xx8) [è dúgú ñ] gú:nd-yè,  
 [Def house Loc] go.out.Perf-3PlS,  
 [ñké dému ñ] téjji-yè,  
 [3PlP house Loc] head.for.Perf-3PlS,  
 [è dé:] [gémbó jángà ñ],  
 [Def elder.sib] [compound inside Loc]  
 [nòbbé-nà-ñ] nwá:-mî-l àbè-l-Ø,  
 [younger.sib-3SgP-Acc] go.in-Caus-VblN accept-PerfNeg-3SgS,  
 ‘They (=the two brothers) went outside the houses (=village). They headed for their house. The older brother refused to let the younger brother go inside the (housing) compound.’  
*[The two brothers shared a courtyard inside a walled compound.]*

- (xx9) èné [nòlò-nà sôw<sup>n</sup> bà] ándè nà,  
 like.this [friend-3SgP chez Loc] go.Perf 3SgS,  
 só:ndó→ hâl dógó dógé-Ø,  
 converse.Impf until night night.fall.Perf-3SgS,  
 [à gwé:] né nà,  
 [LogoSg go.out] say.Perf 3SgS,  
 ‘Then he (=younger brother) went to a friend’s place. (They) conversed until night had fallen. He (=younger brother) said he was going out (=going back home).’

- (xx10) [è nóló] jámbè nà,  
 [Def friend] reply.Perf 3SgS,  
 [ò ní] [à dé:] nì] bòw<sup>n</sup> à jáy<sup>n</sup>,  
 [2Sg and] [2SgP elder.sib and] Recip 2Pl fight.Perf,  
 ó-ñ gî gíyà wò né-Ø,  
 2Sg-Acc Rdp kill Impf say.Perf-3SgS,  
 [dèmù á] tègà] á nè,  
 [house 2SgS head.for.Impf] 2SgS say.Perf,  
 nùw<sup>n</sup> náyá,  
 here spend.night.Imprt,  
 ‘The friend replied: “you and your older brother have fought. He said he would kill you. You said you would go home, (but instead) stay here for the night!”’

- (xx11) jámbè nà,  
 reply.Perf 3SgS,  
 àmàná bàyà bó-Ø, ñ n-à:ndé nè,  
 God great be, 1SgS Aug-go.Perf if

[è kân ná sèlè] = yò,  
[what do.Perf 3SgS all]=it.is,

‘He (=younger brother) replied: “God is great. If I go (home), (what you have predicted) is all (=exactly) what he (=older brother) will do.”’

(xx12) ènè [ŋké dé mú ñ] ègè-Ø,  
like.that [3PIP house Loc] come.Perf-3SgS,  
[égá nà ñ] [è dé:]  
[come 3SgS Impf] [Def elder.sib]  
[bòw<sup>n</sup> túndù ñ] dáb-yè nà,  
[door behind Loc] lurk-MP.Perf 3SgS,  
dùbé dì dín dā→,  
iron Rdp hold.Stat,

‘Then he (=younger brother) came to their house. As he was coming (=approaching), the elder brother lurked behind the door. He was holding an iron (bar).’

[égá nà ñ ‘as he was coming’ §15.2.1.3]

(xx13) [è dé:] <sup>HL</sup>wé:,  
[Def elder.sib] <sup>HL</sup>child,  
kúyè nà, [dógó w<sup>n</sup>] dígè nà,  
hide.Perf 3SgS, [roof Loc] go.up.Perf 3SgS,  
[[[è bóbó] nóbè] pá ñ]  
[[[Def father] younger.sib] side Loc]  
[à dé:] è<sup>n</sup> dábà, né nà,  
[LogoSgP elder.sib] Exist lurk.Stat-3SgS, say.Perf 3SgS,  
kòndò kán-Ø, nùndè-l-Ø,  
failure do.Perf-3SgS, hear-PerfNeg-3SgS,

‘(As for) the older brother’s son, he hid. He went up onto the roof. He said (=tried to give a warning) next to his father’s younger brother that his father was lurking (there). (But) he failed, he (=younger brother) didn’t hear.’

(xx14) ènè [ígódóní ñ] túb-yè nà,  
like.that [doorway Loc] arrive-MP.Perf 3SgS  
bòw<sup>n</sup> bá ngùlè nà, [kàmbà<sup>L</sup> tà:ngà] tábè nà,  
door open.Perf 3SgS, [step<sup>L</sup> one] give.Perf 3SgS,  
[è dé:] [[è dúbè] nì]  
[Def elder.sib] [[Def iron] with]  
kó:-ná póngè nà, tìbà-m nà,  
head-3SgP clobber.Perf 3SgS, fall-Caus.Perf 3SgS,

‘Then he (=younger brother) arrived at the doorway. He opened the door and took a step (in). The older brother clobbered him on the head with the iron. He fell.’

- (xx15) *[yð:-gè ní] [wè:-gè nì] kómó kóm-yè,*  
 [woman-Pl and] [child-Pl and] shout(n) shout.Perf.3PlS  
*jámbè nà, njó,*  
 reply.Perf 3SgS, today,  
*[kòmò kómé selè] gí gíyà wò,*  
 [shout(n) shout all] Rdp kill Prog,  
*[è nóbé] jámbè nà,*  
 [Def younger.sib] reply.Perf 3SgS,  
*njó gôn [mí-η gí gíyá wò] á nè,*  
 today exactly [1Sg-Acc Rdp kill Impf] 2SgS say.Perf,  
 ‘Women and children (in the household) shouted. He (=older brother) spoke up: “Today, I will kill anybody who shouts.” The younger brother spoke up: “Today he said he would kill me.”’

- (xx16) *èné [è dé:] [dèmù ò] nwé nà,*  
 like.that [Def elder.sib] [house Loc] go.in.Perf 3SgS,  
*tálá némè nà, égè nà,*  
 knife pick.up.Perf 3SgS, come.Perf 3SgS,  
*[[è nóbé] kó wò] òjè nà,*  
 [[Def younger.sib] on Loc] stand.Perf 3SgS,  
*dìgàm dàm-à→ sèlè,*  
 talk(n) speak.Impf-3PlS all,  
*[pàngù ní] á b-yà,*  
 [soul with] 2SgS be-Ppl,  
 ‘Then the older brother went into the house. He picked up a knife and came (back). He stood on (=over) the younger brother (and said:) “Since you are talking, you are (=must) (still) be alive.”’

- (xx17) *[è nóbé ò] sémè nà,*  
 [Def younger.sib Acc] cut.throat.of.Perf 3SgS,  
*kúgùjè nà, [bándá bá] tú:gè nà,*  
 drag.Perf 3SgS, [outside Loc] throw 3SgS,  
*[è bágá] kójè nà,*  
 [Def blood] scrape.Perf 3SgS,  
*[bándá bá] tú:gè nà,*  
 [outside Loc] throw.out.Perf 3SgS

‘He slaughtered (=cut the throat of) the younger brother, and dragged him and threw him outside. He scraped (=cleaned) up the blood (on the ground), and threw it outside.’

- (xx18) *[sòy-nà ní] [è dúbé ní] [è tálá ní],*  
 [boubou-3SgP and] [Def iron and] [Def knife and],  
*[négé:rè jángà ñ]* *gálè nà,*  
 [toilet inside Loc] put.in.Perf 3SgS,  
*yò: yé: nà, gú:ndè nà,*  
 daybreak day.break.Perf 3SgS, go.out.Perf 3SgS,  
*[ntá-gé málí-gé lè] sé:m nà,*  
 [person-Pl see.Perf-3PlS QuotQ] look.at.Perf 3SgS,

‘He put the (bloody) clothing and the iron (bar) and the knife inside the outhouse (toilet). At daybreak he went outside and looked (to check) whether people had seen (the corpse).’

- (xx19) *kóndè nà, èné [sàgàllà tà:ngà],*  
 go.back.Perf 3SgS, like.that [youth one],  
*[tángá-nà ñ] mál-gè nà,*  
 [pass-3SgS Loc] see.Perf 3SgS,  
*ntá-gé-ñ tá:rè nà, é-g-yè,*  
 person-Pl-Acc show.Perf 3SgS, come.Perf-3PlS,

‘He went back (inside). Then a youth passing by saw (the corpse). He showed (=reported) it to (other) people and they came.’

- (xx20) *bów<sup>n</sup> bál-yè, ñké-ñ tá:r-yè,*  
 door knock.Perf-3PlS, 3Pl-Acc show.Perf-3PlS,  
*[è dé:] ànò=là kán pínà→*  
 [Def elder.sib] 3Sg=it.is.not do.Perf pretending,  
*kómó kòmô: sòwěy<sup>n</sup>→ bindilô:,*  
 shout(n) shout.Impf on.ground roll.around.Impf,

‘They knocked on the door. They showed (=explained to) them (=the people in the household). The older brother acted as though it (=the murderer) was not him. He was crying out and rolling around on the ground (in feigned grief).’

*[kán pínà→ is invariant, not conjugated]*

- (xx21) *ènè ntá-gé yògóni ànò-ñ bári-gé nè-Ø,*  
 like.that person-Pl fast 3Sg-Acc help.Perf-3PlS say.Perf-3SgS,  
*nòbè-ná bàná díngá-yù ñké b-yà,*  
 [younger.sib manner bury-3Hort 3PlS Impf-Ppl,  
*[ènè gón] yò:-ndi-Ø níy<sup>n</sup>-y<sup>n</sup>è,*



[like.that exactly] be.good-Impf.Neg-3SgS say.Perf-3PlS,  
*sémbé-gé-ŋ* *yál-yè,* *ég-yè* *sé:m-mì,*  
 police-Pl-Acc call.Perf-3PlS, come.Perf-3PlS look.Perf-3PlS,  
*[è kánù ñké b-yà]* *kán-nì,* *ánd-yè,*  
 [what do 3PlS Impf-Ppl] do.Perf-3PlS, go.Perf-3PlS,

‘Then he told the people to help him immediately, so they might bury the younger brother. They said, “(that) isn’t good.” They called police, they came and looked. They did what they (always) do and they went away.’

(xx22) *[dèn tà:ndì-lò]* *ég-yè,*  
 [day three-Ord] come.Perf-3PlS,  
*ànó-ŋ ímb-yè sínd-yè bá:nd-yè,*  
 3Sg-Acc catch.Perf-3PlS convey.Perf-3PlS confine.Perf-3PlS,  
*kùrá:ⁿ tül-yè, dāmà-m-mì,*  
 electricity put.Perf-3PlS, speak-Caus.Perf-3PlS,

‘The third day (=three days later) they (=police) came (back). They arrested him, took him away, and imprisoned him. They applied electricity (to him), they made him talk.’

(xx23) *[bànà kàn ná sèlè]* *dām nà,*  
 [manner do.Perf 3SgS all] speak.Perf 3SgS,  
*ê: kǎwⁿwòlyô:,*  
 that.Def aside.from,  
*yó:-nà [[píjò ní] bó nà ñ] búndè nà,*  
 woman-3SgP [pregnancy with] be 3SgS Impf] hit 3SgS,  
*gàbò:-ndí-Ø yàré nà,*  
 survive-ImpfNeg-3SgS know.Perf 3SgS,

‘He spoke about every way he had done (crimes). Aside from that (the murder of his younger brother), he had (previously) beaten his wife while she was pregnant, knowing that she would not survive.’

(xx24) *[pà: ní] [mì: nì] [mù-nà ñ] dú:ndè nà,*  
 [food and] [water and] [side-3SgS Loc] put.down.Perf 3SgS,  
*[ójú-ná pāⁿ] ándè nà,*  
 [road-3SgP on] go.Perf 3SgS,  
*[è yó:] gábè-l-Ø,*  
 [Def woman] survive-PerfNeg-3SgS,

‘He had put food and water down beside her and had gone on his way. The woman did not survive.’

*[The food and water was to imply that he had left her with provisions before someone else came and killed her.]*

- (xx25) [ɛ: túndù ñ] [gòlgè nòngò] ɛ: nì,  
 [that.Def back Loc] [gear small] that.Def and,  
 ntá-gé-ŋ gámbò b-yà,  
 person-Pl-Acc fend.off Impf-Ppl,  
 [the gear for fighting with people]  
 jwá: sá:<sup>n</sup>-Ø-yè,  
 a.lot have-3SgS-Past,  
 x [tà:libù yé:né-ŋ] bündè nà giyà tē:-Ø,  
 [koranic.pupil a.certain-Acc] beat.Perf 3SgS kill ExpPerf-3SgS,  
 ‘Aside from that, he had a lot of small items (knives, etc.) for fighting people. He had (also) once beaten and killed a koranic-school pupil.’

- (xx26) [è dé:-ŋ] sínd-yè, bá:nd-yè,  
 [Def elder.sib-Acc] convey.Perf-3PlS, confine.Perf-3PlS,  
 [[wàyà já:mbà] túndù ñ] dúj-yè,  
 [[year many] back Loc] release.Perf-3PlS,  
 [è dúgù ñ] égè nà,  
 [Def village Loc] come.Perf 3SgS,  
 ‘They took the older brother away and imprisoned him. After many years they released him. He came (back) to the village.’

- (xx27) dùgù-nó-gè, jámb-yè,  
 village-person-Pl, reply.Perf-3PlS,  
 [dùgù jángà ñ] ànò-ŋ ñké málgé nè,  
 [village inside Loc] 3Sg-Acc 3PlS see if,  
 gíyà ñké bò,  
 kill 3PlS Impf,  
 [è dúgù] dújè nà, [ínì njò],  
 [Def village] abandon.Perf 3SgS, [Dem today]  
 [[gégè b-yà nà] ntà éy<sup>n</sup>] wòl-Ø  
 [[place be-Ppl 3SgS] person know.Ppl] not.be-3SgS  
 ‘The villagers spoke: if they (ever) saw him inside the village, they would kill him. He abandoned the village (then). Nowadays, there is nobody who knows the place where he is.’

## **Index**

[to be added]