# A Grammar of Tiranige (Dogon, Mali) 

Jeffrey Heath<br>University of Michigan

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author's email
schweinehaxen@hotmail.com, jheath@umich.edu

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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 documented 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 generally thought to be a very early branch of the Niger-Congo lineage, though a clear demonstration of this has been elusive. No close relationships to other NC families have yet been demonstrated. Dogon (like the Ijoid family and the Pere language isolate in Côte d'Ivoire) lack the noun-class prefix system which is a defining characteristic of core Niger-Congo groups like Gur and Bantoid.

Dogon internal classification, as I currently understand it, can be summarized as in (1). There is a basic "western" versus "eastern" split, imperfectly correlating with the western and eastern cliffs of the main Dogon plateau. The cliffs on both sides are actually skewed diagonally, running from northeast to southwest. Yanda Dom and Tebul Ure are on the eastern cliffs and are separated from the rest of western Dogon by Tommo So. The columns in (1) disregard these points, and are tweaked to bring out geographical (and therefore contact) relationships both within each division and across the divide.

| western | eastern |
| :--- | :--- |
|  | Toro Tegu <br> Ben Tey, Bankan Tey <br> Jamsay group, Nanga |
| Yanda Dom, Tebul Ure |  |
| Najamba-Kindigué-Bondu <br> Tiranige | Tommo So <br> Donno So, Toro So group <br> Bunoge, Mombo, Ampari, Penange <br> Tengou-Togo group <br> Tomo Kan |
|  |  |

Tiranige is squarely in the western division. From a glance at maps one can see that their geographical neighbors within Dogon are the Bondu subgroup of Najamba-Kindigué-Bondu to the northeast, Tommo people on the plateau to the south-east, and

Dogul people on the plateau to the south. Social contact with these other Dogon groups is limited as explained below.

In terms of linguistic structure, Tiranige is an interesting bridge between the more northerly of the western languages, shown above it in (1), and the distinctive southwestern Dogon group (Bunoge, Mombo, Ampari, Penange). A hallmark of the latter are $1 \mathrm{st} / 2$ nd person pronominal-subject proclitics to the verb in indicative clauses. Many other Dogon languages have such proclitics (for all persons) only in relative clauses, preceding the verb or verb-participle, but in main clauses they mark pronominal subject exclusively by verb suffixes. Tiranige splits the difference. In indicative clauses, it has proclitics for 1 Pl and 2 Pl but verb suffixes for 1 Sg and 1 Pl (§4.3.1). In relative clauses, like all the other languages, it has proclitics for all pronominal categories before the verb-participle (§14.3).

Another important morphological feature shared uniquely by Tiranige and the southwestern languages is the capacitative verbal derivation with m-initial suffix (Tiranige -má-, §10.5) added to any verb.

### 1.2 Tiranige (aka Duleri) language and Tiranou people

Tiranige (tírá-ní-gé) is the endonym used by native speakers to denote the language. The suffix -gé also occrs in other language names. The people who speak this language are called tírá-nú:, singular tírá-bólè.

Fulbe call the Tiranou and their language nduuleri. In the form Duleri (French Douléri) this term is widely used among non-Tiranou speakers including other Dogon to denote the Tiranou and their language, and it has appeared in early Dogon dialect surveys.

The language is spoken in a number of villages in a rather rocky zone along and to the south of the western edge of the Dogon high plateau, and in a few newer villages that hug the cliffs on the plains below. The geographic limits are north latitude 1442 (Embali) to 1451 (Korendiou), and west longitude 0336 (Degui and Toumba) to 0346 (Semo). Parenthesized coordinates are estimated from maps. Others, those with three decimal points, are our own. The coordinates are in degrees, minutes, and decimal fractions of minutes.

| (2) | village | native name | north latitude |
| :--- | :--- | :--- | :--- | west longitude


| Gourari | gúlálí | 1449.382 | 0341.113 |
| :--- | :--- | :--- | :--- |
| Guimari | gímálí ~ jímálíl 1448.337 | 0340.921 |  |
| Keti | kérí | 1449.079 | 0341.055 |
| Korendiou | délí | $(1451$ | $0342)$ |
| Nefari | nèwàlí | $(1443$ | $0344)$ |
| Neou | nè: | 1444.209 | 0341820 |
| Ningo | ì̀ì | $(1450$ | $0338)$ |
| Pandali (abandoned) | "pandali" | - |  |
| Semo | sémá | $(1444$ | $0346)$ |
| Some | sòmèyà | $(1444$ | $0338)$ |
| Sora (abandoned) | "so:ra" | - |  |
| Tanga | tángá | 1448.742 | 0338.691 |
| Toumba | tùmbà | $(1448$ | $0336)$ |

Of these villages, only Boui, Ningo, and Korendiou are on the plains, all other villages being on the plateau above. The bulk of the Tiranou population is concentrated in a line of villages near the western edge of the plateau (Toumba, Degui, Tanga, Guimari, Gourari, Dougo, Damagari).

Sora (near Tanga) and Pandali (near Guimari), both now abandoned, are said to have been the oldest Tiranige speaking settlements. I do not have reliable tonal markings for the abandoned village sites, which were elicited in my earliest fieldwork in Tanga, since the speakers available in later fieldwork didn't recognize these names. Embali (near Nefari), which is partially abandoned but still inhabited by a few people, is said to be the third oldest.

Surnames (i.e. clan names) at Boui are Bassaga, Bassely, Yanogo, Bakandia, Kouba, Guindo, Dolo, and Dicko. Clan names at Ningo are Bakendia and Dicko. In Tanga we were told that all Tiranou on the plateau are named Dicko. A difficulty in interpreting the distribution of clan names is that Fulbe clan names were formerly extended to their slaves.

There is no road leading down from the plateau to the plains in the Tiranou zone (vehicles including motorcycles must go to Borko far to the east to get down to the plains), so the weekly market at Ningo can only be reached on foot from the plateau villages. In places, the cliffs are easily climbed, and children from Ningo commute on foot to Tanga for schooling. (Boui has its own school.) On the plateau itself, bush motorcycles can get around, but the terrain is too rocky for donkey-drawn carts, so there are no weekly markets. A few villages in the rugged area farther south (like Neou and Nefari), well separated from the western edge of the plateau, might have some contact with speakers of other Dogon languages (Bunoge, Dogulu, Tommo So). At the northeastern extremity of the main line of villages (e.g. Degui), Tiranige abuts the Bondu subgroup of Najamba-Kindigué-Bondu, which begins at Tapou and extends eastward to the more heavily populated Dogani-Borko-Tintam area. At the southwestern extremity of this main line of Tiranige villages on the western edge of
the plateau (e.g. Damagari), there is some contact with Bangande (speakers of the language isolate Bangime). The Bangande occupy several villages on the slopes of a valley that cuts into the plateau, but they regularly climb up and walk over a section of high plateau to reach Boui and the market village Ningo at the base of the cliffs. In the sandy plains stretching out north and west from the cliffs are a mix of BozoJenaama speakers (locally called Marka) and Fulbe-speaking villages.

In our visits to Boui and Tanga, we found no significant bilingualism with any other Dogon language or with Bangime or Bozo-Jenaama. Of course, some individuals there are bilingual due to particular family connections and life histories.

This leaves Fulfulde and Bambara. Fulfulde is the main language of the large market towns in the plains, the most important being Konna. Fulfulde is also used alongside Tiranige at the smaller weekly market in Ningo. There are numerous Fulfulde-speaking villages in the plains north and west of the cliffs, mostly populated by Rimaibé (ex-slaves of Fulbe). Fulbe women commute daily on foot to Dogon villages to sell fresh and curdled milk and butter. Many Dogon who own livestock have traditionally entrusted their animals to Fulbe herders. Fulfulde is also still important in Douentza and Mopti-Sevare in spite of inroads from Bambara. Some of the most southwesterly Tiranige-speaking villages on the plateau may have some contact with a cluster of Fulbe-speaking villages just to their south (Gasi, Madina, and Anga) on the edge of the Dogul area. Overall Fulfulde is the dominant second language and lingua franca in much of the Tiranige zone.

Some Tiranou young men travel to southern Mali for seasonal work, generally after the main harvest around late October. Others stay there for several years or move permanently, returning occasionally. Bambara is the dominant language in the south and some younger Dogon who have returned from there can speak Bambara to varying degrees. Bambara is also gradually spreading into Mopti-Sevare, and to a lesser extent into Konna and Douentza, as the lingua franca, at the expense of Fulfulde. We encountered very few Bambara-speaking Dogon in our visits to Boui and Tanga, but this is likely to change over time.

We had difficulty finding Tiranou who had been to school long enough to learn French well. The situation was not helped by a mass dropping out of school in Boui a few years before fieldwork began in 2011, as the community came to doubt the effectiveness and value of schooling. The school in Tanga is newer, and its first recruits had worked their way up to the fifth grade at the time of our visit in 2011.

From about 2018 to the time of writing (late 2021), the Tiranige-speaking area has been seriously affected by ethnic and religious polarization. In the plains, up to the edge of the cliffs, Fulbe Islamists are in control, while the plateau above the cliffs is controlled by Dogon "chasseurs" (hunters). Government schools have been closed. It has not been possible for me to revisit the area during this period.

Tiranige names for the contact languages are: yómbólí-gé (Najamba-Kindige aka Bondu), púndání-gé (Fulfulde), bàmbàlà-gé (Bambara), tòmò-gè (Tommo So), ćláw-gé (Bangime), and sámíyá-gé (Jenaama Bozo).

### 1.3 Environment

Most Tiranige speakers live on the high plateau, which is separated from the sandy plains below by cliffs. The old maps show altitudes of 380 m . on the plains near Ningo, and 609 m . at nearby Tanga on the edge of the plateau. The cliffs, however, are not steep and are easily climbed in several places.

The plateau, once one gets there, is fairly flat, with no imposing peaks. It is generally rocky with many slabs and boulders. The road along the edge of the plateau from Borko and Dogani southeast to the Tiranige speaking villages becomes progressively rockier as one approaches Tanga, and going farther east to Dougo, Guimari, and Gourari the road is difficult even for a $4 \times 4$. The southern part of the zone away from the cliffs (Neou, Some, Semo, Nefari) is particularly uneven and rocky.

The rocks, however, trap water and make farming possible. Some small dams (barrages) have been built in the hope of facilitating rice farming and dry-season cash-crop farming (onions), but the results have not lived up to expectations.

Fields in the sandy plains, particularly near the base of the cliffs, are exploited by residents of the villages located down below, and to some extent by residents of villages up above on the plateau edge who climb up and down the cliffs. Although the soil is sandy, precious water including direct rainfall and runoff from the plateau accumulates at the base. There is some dry-season gardening (papaya, mango, lettuce, tomato) just south of Boui.

The predominant staple crop, as elsewhere in Dogon country, is pearl millet (Cenchrus americanus, formerly Pennisetum glaucum). Other rainy-season crops are sorghum, peanut, groundnut (Vigna subterranea), cow-pea (Vigna unguiculata), and sesame.

Both the rocky plateau and the sandy plains permit herding of sheep and goats. Cattle herding is mostly done on the plains, but is often carried out there by Fulbe.

### 1.4 Previous study of and current fieldwork on Tiranige

### 1.4.1 Previous study

This language has been mentioned in the various surveys of Dogon languages and dialects, as either Duleri or Tiranige. No significant documentation of the language has been done previously.

### 1.4.2 Fieldwork

I first visited Boui (in the plains) briefly in 2010. I spent three days there, primarily collecting flora-fauna terminology.

During a 20-month field trip in 2011 and part of 2012, Tiranige was one of several Dogon languages that I worked on. I had hoped to have a junior project member undertake this assignment, but the deteriorating security situation beginning in northern Mali in early 2012 and later spreading to the Tiranige region made this impossible.

Along with Mali project manager Minkailou Djiguiba I surveyed Tiranigespeaking villages on the plateau from a temporary base in Tanga during a few days in 2011. I then worked on the language with a young speaker from Boui (born 1987) who knew some French for a total of about four weeks in two sessions, the main one in April-May 2012. This resulted in a rough draft of most of the grammar and a basic lexicon. Unless otherwise indicated the elicited examples in this grammar are from this speaker. However, he vanished into the Dogon diaspora shortly thereafter and I have not had access to him (or other educated speakers from Boui) since then.

In 2013 I worked for about one week with an an older speaker who was a shopkeeper in Ningo. He was a member of the "cordonnier" (leatherworker) caste (jáǹ, dialectally yá $\grave{w}^{n}$ ), which is dominant in the settled area immediately around the Ningo market. There are considerable dialectal differences between this speaker and the other one. For example, shifts of intervocalic *b to w and other similar consonantal lenitions have occurred in the Boui data but not in the Ningo data. There are also some lexical and grammatical differences. At this point it is not clear how much of the variation is due to geography (Boui versus Ningo), the age difference, or the caste difference. I suspect the latter (cordonniers versus others).

I also transcribed some texts (see end of this grammar) elicited from the Ningo speaker. He was more comfortable at that time with dictation than with recording (see texts 1 to 6 at the end of this grammar). In early 2017 I continued the grammatical and lexical elicitation with the Ningo speaker over about a month, and I was able to make a recording of him along with a kinsman. I began the transcription of that recording (here presented as T7) during that period.

In October 2021 I and my Malian project manager (Minkailou Djiguiba) caught up with the same Ningo speaker in Bamako, where he had relocated for health reasons in addition to the further collapse of the security situation in the region north and east of Mopti-Sevare. We made plans to bring him to our post-2012 base in Bobo Dioulasso in neighboring Burkina Faso for a few weeks to finish the work. This was done in early December 2021, where the fieldwork mainly involved corrections and additions to the grammar, corrections to the transcriptions of the dictated and recorded texts, and transcription of the last five minutes of text 7. A Tiranige lexical spreadsheet was also made by copying the Tiranige column from the comparative Dogon lexical spreadsheet, to which additions and corrections were made.

The grammar, texts, and lexicon would have been better had the security situation in Mali permitted me to return to Sevare and meet with multiple Tiranige speakers. In particular, it would have been nice to be able to re-check the Boui data
based on the differences observed between the early Boui material and the subsequent Ningo material.

While additional follow-up would be desirable, the fieldwork circumstances are getting worse rather than better and my other obligations are piling up. The Tiranige material is now in considerably better shape than it was before the 2021 sessions, and with all its shortcomings it is time to disseminate it and move on.

### 1.4.3 Acknowledgements

Primary funding for the overall Dogon linguistics project during the main period of fieldwork on Tiranige was grants BCS-0853364 (2009-13) and BCS-1263150 (201317) from the National Science Foundation, Documenting Endangered Languages (DEL) program.

During academic 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 documentary-style videos ( 2 to 20 minutes) dealing with practical activities and with cultural events such as festivals. The videos and some additional materials are or will be archived and available online at Deep Blue (University of Michigan Libraries), which can be searched under "Tiranige," "Central Mali," or my name. See also the project website at www.dogonlanguages.org.

## 2 Sketch

### 2.1 Phonology

### 2.1.1 Segmental phonology

Tiranige 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. Nasalized vowels occur but are uncommon.
$\mathrm{r}^{\mathrm{n}}$ is absent as n is not lenited. However, $\mathrm{y}^{\mathrm{n}}$ and $\mathrm{w}^{\mathrm{n}}$ are common word-finally (§3.2.7).

### 2.1.2 Prosody

Nouns (and to some extent numerals) have a range of lexical tone melodies: /H/, /HL/, /LH/, /L/, and a few cases of/LHL/ and /HLH/. Tones of verbs, and of modifying adjectives that are not also used as nouns, are supplied by grammatically conditioned tone overlays.

In CvCvCv , the medial syllable is in the weak metrical position. Short vowels in this position are subject to raising to $\{\mathrm{i} u\}$ and to syncope in some morphological contexts, especially suffixed $\mathrm{CvCv}-\mathrm{Cv}$ verb forms.

Modifying adjectives and possessors are the major tonosyntactic controllers. The formula for noun-adjective combinations is $\mathrm{N}^{\mathrm{L}}$ Adj ( ${ }^{\mathrm{L}} \mathrm{Adj}$ ). The first adjective after the noun is $\{\mathrm{H}\}$-toned (arguably this is the lexical or at least default tone for adjectives). The noun, and a second adjective if present, are dropped to $\{\mathrm{L}\}$ tones, as indicated by the superscripts.

Preposed possessors control $\{\mathrm{LH}\}$ on a following possessed noun and its modifiers; the H appears on the final syllable (the final mora for monosyllabics). The formula is Poss ${ }^{\mathrm{LH}} \mathrm{N}$.

Basic numerals drop to $\{\mathrm{L}\}$ tone after a noun, or a noun-adjective sequence, if there are no further modifiers. However, the further addition of a demonstrative triggers morphological and tonal changes in the numeral.

Definite rì can affect the tones of the final syllable of the preceding word in the NP. Definite rì and the basic demonstrative mbó trigger more substantial morphological and tonal changes on preceding sequences ending in a numeral. mbó is itself dropped to L-tone except when alone in the NP.

Head NPs in relative clauses undergo no additional tonal changes.

An $\{\mathrm{LH}\}$ overlay with H-tone on the final mora is common in predicates, specifically in focalized and relative clauses.

Intonational prolongation (symbol $\rightarrow$ ) is lexicalized in a few grammatical morphemes (e.g. bà $\rightarrow$ 'than') and adverbs (wàgà $\rightarrow$ 'far away'). There are no Jamsaytype "dying quail" intonation effects.

### 2.1.3 Key phonological rules

In the metrically weak position, short vowels raise to $\{i u\}$ and may syncopate. Syncope can trigger various minor processes to modify the resulting consonant clusters, e.g. /nw/ $\rightarrow$ mb.

There is no systematic nasalization-spreading across syllables.
Constituents (NPs, PPs, verbs) ending in an ...LH tone sequence with a finalsyllable (or final-mora) H-tone, whether lexical or grammatical, lose this H-tone before another constituent beginning with a H -tone. This is analysed here as Rightward L-Spreading (§3.6.3.3).

### 2.2 Inflectable verbs

Suffixal verb-to-verb derivations are reversive ('un-VERB'), causative, mediopassive vs. transitive, and reciprocal. Many adjectives have corresponding inchoative verbs, often but not always suffixal. Causatives of the inchoatives function as factitives.

Verbal inflection consists chiefly of perfective/imperfective aspect crossed with positive/negative polarity. Additional categories for aspect-marked indicative verbs include experiential perfect, resultative, and progressive.

There is also a capacitative form ('can VP').
There are aspect-neutral statives. These include statives derived from active verbs ('sit down' becomes 'be sitting, be seated') and a few underived defective quasi-verbs ('be', 'have', 'know', 'want', 'resemble').

For the aspect-marked, capacitative, and stative forms, the temporal reference point can be shifted from the moment of speaking to a point in the past by mutating suffixal vowels to $\varepsilon$ or adding -yz. For example, imperfective becomes past imperfective.

Deontic moods that are morphologically marked are imperative, hortative, and quoted imperative. The third-person hortative used in imprecations ('may God ...') is identical to the quoted imperative for Boui, but for Ningo the two are distinct.

### 2.3 Noun phrase (NP)

The noun that heads the NP may be preceded by a possessor, otherwise all modifiers follow the noun. Nonpronominal possessors precede the noun, as do pronominal possessors for inalienable nouns (kin terms). Pronominal possessors for alienables (i.e. most nouns) usually follow the noun (and any modifying adjectives or numerals).

Tonosyntactic processes occur in several noun-modifier combinations (chapter 6 ), so that lexical melodies of a word (usually the noun) are overridden by tone overlays. The basic possessum tone overlay is $\{\mathrm{LH}\}$, so the formula for possessed nouns is Poss ${ }^{\text {LH }} \mathrm{N}$. A preposed discourse-definite demonstrative, arguably a possessor (' N of that'), also overlays $\{\mathrm{LH}\}$ on the noun. A noun is tone-dropped before a modifying adjective, formula $\mathrm{N}^{\mathrm{L}}$ Adj. If there are two adjectives the second adjective is tone-dropped, formula $\mathrm{N}^{\mathrm{L}}$ Adj1 ${ }^{\mathrm{L}}$ Adj2. These formulae are correct if the H -tones of Adj1 are taken as the lexical melody, but one might argue that Adj1 has an $\{\mathrm{H}\}$ overlay and that modifying adjectives have no melody.

In combinations of a noun and a numeral, the noun has its lexical melody and the numeral is tone-dropped if the numeral is not followed by a determiner, formula N ${ }^{\mathrm{L}}$ Num, or including the plural suffix N-P1 ${ }^{\mathrm{L}}$ Num. Similarly, a noun plus postnominal demonstrative is $\mathrm{N}^{\mathrm{L}}$ Dem. In combinations of a noun plus the simple, enclitic-like definite marker rì, only minor local tone changes occur (e.g. a final L-tone on the noun raises to H ).

When two or more modifiers of distinct categories co-occur in the same NP, more complex constructional tonosyntactic patterns are observed. Particularly complex is N -Num plus a postnominal determiner. These combinations also require plural suffixation on the numeral (as well as on the noun), whereas elsewhere numerals do not get plural marking. Including plural suffixes, addition of the (L-toned) definite marker to $\mathrm{N}-\mathrm{Pl}{ }^{\mathrm{L}}$ Num results in tonosyntactically restructured $\mathrm{N}^{\mathrm{L}}-\mathrm{Pl}^{\mathrm{L}}{ }^{\mathrm{H}} \mathrm{Num}-{ }^{\mathrm{H}} \mathrm{Pl}$ Def-Pl. Addition of the postnominal demonstrative to $\mathrm{N}-\mathrm{Pl}{ }^{\mathrm{L}} \mathrm{Num}$ results in $\mathrm{N}-\mathrm{Pl}^{\mathrm{L}} \mathrm{Num}-\mathrm{Pl}^{\mathrm{H}}{ }^{\mathrm{L}}$ Dem- Pl . Because these are constructional tonal patterns, the usual distinction between tonosyntactic controller and target is blurred.

An important generalization is that combinations of the general type N-Mod1Mod2 with two postnominal modifiers often appear with the H-toned peak in the middle (schematically L-H-L), rather than at the right edge (L-L-H). This is in contrast with the predominantly right-headed tonosyntactic patterns (schematically L-L-H) of most Dogon languages, including eastern Dogon and the more northerly western Dogon languages.

### 2.4 Case-marking and PPs

Accusative gì is a postposition-like morpheme that follows a complete NP (DP). It is generally limited to pronouns and to human NPs. Indirect as well as direct objects are
accusative-marked, so there is no specifically dative postposition. For Ningo dialect, gì is also the basic locative postposition.

There are various other postpositions, the most basic ones being locative, instrumental, and purposive. There are several spatial postpositions (cf. English in back of $X$ ) that consist of a noun plus the primary locative postposition. See chapter 8 for postpositions as well as lexical adverbials.

### 2.5 Main clauses and constituent order

The basic order is SOV, as best seen when both subject and object in a transitive clause are nonpronominal (3).
(3) [mó:wélì rì] [à:màdú gì] bèndè-Ø
[vehicle Def] [A Acc] bump.Pfv-3SgSbj
'The vehicle bumped Amadou.' (Boui)

A spatiotemporal adverb that sets the scene may precede or follow the subject (4a). Other adverbial phrases, including spatiotemporals that have a more argument-like relationship to the predicate, typically intervene between subject and object (4b-c).
a. à:màdù á:gá ámbá sé:m-bò-Ø
A tomorrow sheep slaughter-Ipfv-3SgSbj
'Amadou will slaughter a sheep tomorrow.' (Boui)
[alternative ordering: á:gá à:màdù ámbá sé:m-bò-Ø]
b. à:màdú [bòmòkó yà] wàlè kám-bò-Ø

A [B Loc] work(n) do-Ipfv-3SgSbj
'Amadou works/will work in Bamako.' (Boui)
$\begin{array}{llll}\text { c. à:màdù } & \text { jíwá-à } & \text { sìkòró } & \text { gànì- } \\ \text { A } & \text { house-Loc } & \text { sugar } & \text { put.Pfv- } 3 \mathrm{SgSbj} \\ \text { 'Amadou put (the) sugar in the house.' (Boui) }\end{array}$
Double objects occur with ditransitive verbs (5). The recipient can be marked as accusative.

| à:màdù | á:gá | [ámbá | nè-wé $]$ | mì-gí | túló-wò-Ø |
| :--- | :--- | :--- | :--- | :--- | :--- |
| A | tomorrow | [sheep | 3Sg-Poss] | 1Sg-Acc | sell-Ipfv-3SgSbj |
| 'Amadou will sell me his sheep-Sg tomorrow.' (Boui) |  |  |  |  |  |

In imperatives, for the Boui speaker a NP or PP may follow the verb at least in elicitation (6b). The Ningo speaker accepted this but preferred the regular verb-final order (6c).

b. [tànà yà] tèlà [námà rì $]$
[knife Inst] cut.Imprt [meat Def]
'Cut-2Sg the meat with a knife!' (Boui)

| c.$[$ tànà yà $]$ | [námà | rì $]$ | tèlà |  |
| :--- | :--- | :--- | :--- | :--- |
| $[$ knife | Inst $]$ | $[$ meat | Def $]$ | cut.Imprt |
| $[=(\mathrm{b})]$ | (Ningo) |  |  |  |

### 2.6 Relative clauses and focalization

The relative construction (chapter 14) as a whole functions as an NP (or DP) in the higher clause. The overt head NP, maximally Poss-N-Adj-Num, is internal to the relative clause. It has the same form as it would have as a main-clause NP (there is no tone-dropping attributable to the relative clause). Determiners and 'all' quantifiers follow the verb-participle. The latter agrees in plurality with the head NP. Likewise, the verb-participle lacks the pronominal-subject suffixes for $1 \mathrm{Sg}, 2 \mathrm{Sg}$, and 3 Pl that occur in verbs in main clauses. There is no pronominal-subject marking in subject relatives. In nonsubject relatives, if the subject of a nonsubject relative is pronominal, it is marked by a proclitic pronoun. Verbs in relative clauses do mark regular aspect, negation, and past-time categories; the morphology is usually the same from main to relative clauses, but there is some specialization of perfective positive verbs in relatives. The verb-participle is usually the same from subject to nonsubject relatives, but the two are distinguished morphologically in the imperfective positive.

There is a focus marker that is added to non-verb constituents, which remain in their normal clause-internal position (chapter 13). In clauses with a focalized constituent, the verb is "defocalized" by means of an $\{\mathrm{LH}\}$ or $\{\mathrm{H}\}$ tone overlay. Relative clauses also apply these tone overlays to the verb-participle, but under somewhat distinct conditions, so relativization and focalization cannot be merged outright as "extraction" processes.

### 2.7 Interclausal syntax

There is no "bare" verb form, but the $\mathrm{E} / \mathrm{I}$-stem that functions in simple main clauses as the perfective positive is also found on nonfinal verbs in chains that resemble the direct chains of other Dogon languages (§15.1). In more loosely adjoined temporal adverbial clauses, the main distinction is between imperfective clauses with $-w^{n}$ 'while' on the verb (§15.2.1.2), and various perfective (anterior) clauses ('after') (§15.2.2). Same-subject and different-subject subordinated clauses do not have distinct subordinating morphemes. As in some other Dogon languages, anterior adverbial clauses ('after') distinguish past time (i.e. realis) from future time (irrealis) contexts (§15.2.2.2-3).

Conditional constructions are of standard Dogon type. The antecedent has a clause-final 'if' particle mè or mè-nè (§16.1). Counterfactuals make use of past-time marking in both antecedent and consequent clauses (§16.3).

Quotative complements make an interesting distinction between same-subject ('X said that X ...') and different-subject ('X said that Y ...') constructions, for second as well as third person subject. Although Tiranige has no logophoric (or other pure anaphoric) pronouns, quotative clauses have two ways of marking pronominal subject. A preverbal proclitic without quotative marker is associated with samesubject constructions, while a clause-initial pronoun with quotative marker is associated with different-subject constructions (§17.1.1.3). There is a special verb form used for quoted imperatives, which require a clause-initial subject (§17.1.2.1).

True factive clauses as complements of 'know' and 'see' take the form of headless relatives, cf. English the fact that ...

The majority of complements of "control" matrix-clause verbs are verbal-noun complements, which may include objects and other nonsubject constituents, similar to English infinitival VP complements (§17.4).

### 2.8 Lexicon ('eat' and 'drink')

Other Dogon languages obligatorily distinguish verbs meaning 'eat (grain-based meal such as tô)', 'eat (meat)', and 'drink', usually along with some other verbs like 'munch' (peanuts). The distinctions encode the manner of processing in the mouth, mainly the extent (or absence) of chewing.

Tiranige may be unique in merging 'eat (grain-based meal)' with 'drink' as jó:, while obligatorily distinguishing them from témó 'eat (meat)'. In addition to meat, the latter extends to hard fruits (such as not-quite-ripe mangoes), cassava, sweet potato, dates, and peanuts, i.e. generally anything that requires crunching by the molars.

## 3 Phonology

### 3.1 Internal phonological structure of stems and words

### 3.1.1 Syllables

Primary syllabic shapes that occur within stems are $\mathrm{Cv}, \mathrm{Cv}$ :, and CvL with sonorant L , and occasionally $\mathrm{Cv}: \mathrm{L}$. Word-initially, the C position may be vacant. The occasional syllable of type CvT with some stop T occurs in the interjection-like kák 'exactly’ (§8.4.3.2). CvT syllables can also occur secondarily as the result of syncope from CvTv before a suffix or compound final as in verbal noun gób-bà 'claim', or syncope from Cvrv followed by assimilation as in ég-gè 'those' < érí-gè.

Nouns, verbs, adjectives, and numerals have at least two moras (there are no monomoraic Cv stems). For verbs, see the full inventory of monosyllabic stems in §10.1.2.1. Examples of other monosyllabic stems are in (7).
a. Cv: (including v:, $\mathrm{Cv}:^{\text {n }}$, and Cwv :)

غ̀: 'cheek'
nú: 'oil' cf. mínú-nù 'shea-butter'
nú: '5'
tó: 'other'
gó: ${ }^{\text {n }} \quad$ 'body'
kwě: (Boui) 'calabash plant'
gwí: (Boui) 'skin'
b. CvL
kóy 'tree bark; shell'
bèl (Boui) 'animal' (cf. Ningo bèlì)
c. $\mathrm{Cv}: \mathrm{L}$

| só:y | '7' |
| :--- | :--- |
| á:y | 'yawn (n)' |
| bé: w | 'belching (n)' |

In words like nì:ngà 'two', the nasal-stop cluster is arguably the onset of the final syllable, perhaps as a prenasalized stop, in which case such words have no superheavy Cv :L syllables.

### 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 some conditions (§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 when the medial C of a CvCv - stem is homorganic to the initial suffixal C .

### 3.2 Consonants

The consonant phonemes are in (8). Marginal ones, mainly found in poorly assimilated loanwords, are parenthesized.
(8) Consonants

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |
| labial | p | b | m | $(\mathrm{f})$ | $(\mathrm{v})$ |  | w | $\mathrm{w}^{\mathrm{n}}$ |  |  |
| alveolar | t | d | n | S | $(\mathrm{z})$ | 1 | r |  |  |  |
| alveopalatal | c | j | n |  |  |  | y | $\mathrm{y}^{\mathrm{n}}$ |  |  |
| velar k g y   <br>       <br> laryngeal      <br>    (h) $(1)$  |  |  |  |  |  |  |  |  |  |  |

j is IPA $[\mathrm{f}], \mathrm{y}$ is $[\mathrm{j}]$.
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; 910. laryngeals

### 3.2.1 Alveopalatals $(\mathrm{c}, \mathrm{j})$ distinct from velars ( $\mathrm{k}, \mathrm{g}$ )

c is distinct from k even before front vowels. Likewise, j (lightly affricated palatoalveolar stop) is distinct from g before front (as well as back) vowels.

Examples: kìrì-kírì 'dizziness', cìwàlà 'hat', accusative particle gì, jìwé 'carrion'.

However, there are many dialectal pairings with $\{\mathrm{c} \mathrm{j}\}$ in Boui versus $\{\mathrm{kg}\}$ in Ningo before front vowels. Examples are cèy (Boui) versus kèy (Ningo) 'want', and jé:ŋgé (Boui) versus gé:ŋgé (Ningo) ‘blood’.

### 3.2.2 Back nasals ( $\mathrm{y}, \mathrm{n}$ )

Velar y and palatoalveolar n are distinct even before front vowels: yání́-yó 'fight (v)', míní-yó 'be ground into powder'.

### 3.2.3 g -Spirantization $(\mathrm{g} \rightarrow \gamma)$ absent

There is no systematic spirantization of g between back/low vowels.

### 3.2.4 Labials

Bilabial $\mathrm{p}, \mathrm{m}$, and b are basic consonants. Labiodental f is rare. It occurs in a few loanwords like sàlfàná ' 2 PM prayer', but other loanwords replace original *f with p (àlpàjìrí 'pre-dawn prayer').

In word-initial "clusters," Cw before a vowel can represent a desyllabified o or $\rho$, as in the perfective of monosyllabic verb stems (§10.2.1.1).

Elsewhere, unclustered w has an articulation approaching [ $\beta$ ], i.e. a bilabial approximant, before front vowels $\{\mathrm{i} \mathrm{e} \varepsilon\}$. The linguist's pronunciation with Englishtype [w] was frequently corrected.

### 3.2.5 Laryngeals (h, ?)

$h$ and $?$ are not regular phonemes in Tiranige. There are a few Fulfulde loanwords with initial h such as hàlí 'until, even' and hà:ráwn 'a minor Muslim holy day'.

Glottal stop can occur in carefully pronounced borrowings from Arabic (see comments on TL @ 05:04). As an intonation-like prosodic marker, final 1 is attested in gó? (T7 @ 19:01) and is common with emphatic dé( ) (§19.4.2).

### 3.2.6 Sibilants (s, z)

s is a common consonant: sáygó 'cook (rapidly)', sùmá 'waterskin', sâ: 'have'.
z occurs (rarely) in loanwords from source-language [z] or [3]: àlzérí
'Algeria', zándármú 'gendarme'.
Palatoalveolar $\{\check{s} \check{z}\}$ are essentially absent as distinct phonemes. s replaces source-language [J] in borrowings: síngóm 'chewing gum' with s for French [S]. Some speakers pronounce $[J]$ as an allophone of $s$ before $i$, as in síngá 'blister beetle', pronounced [síngá] ~ [Jíngá] depending on the speaker.

### 3.2.7 Nasalized sonorants ( $\mathrm{r}^{\mathrm{n}}$ absent, $\mathrm{w}^{\mathrm{n}}$ and $\mathrm{y}^{\mathrm{n}}$ word-finally)

There is no $\mathrm{r}^{\mathrm{n}}$ (nasalized tap).
$\mathrm{w}^{\mathrm{n}}$ occurs word-finally, in some cases as an independent morpheme (suffix or clitic). Examples are céẁ ${ }^{n}$ 'a little', néw ${ }^{n}$ 'salt', yá: tèw ${ }^{n}$ 'around there', $\varepsilon$ ww 'wet; fresh', mìlyó $\grave{\mathrm{w}}^{\mathrm{n}}$ 'million' ( $<\mathrm{Fr}$ ), dèw ${ }^{\mathrm{n}}$ 'day'. The progressive aspect is expressed by suffixing $-\mathrm{w}^{\mathrm{n}}$, which is followed by auxiliary verb bǒ: ( $\S 10.2 .2 .3$ ), the combination being variably heard as [mbǒ:-] plus lengthening of the preceding stem-final vowel. $=\grave{\mathrm{w}}^{\mathrm{n}}$ is also an important allomorph of the 'it is' clitic, which occurs in identificational predicates ( $(11.2 .1 .1)$ and as a focus marker (§13.1.1.4).

Word- or stem-final $\mathrm{w}^{\mathrm{n}}$ is easily heard prepausally, as when words are pronounced in isolation. Before a consonant, $\mathrm{w}^{\mathrm{n}}$ behaves like an assimilating nasal. For example, néw ${ }^{n}$ 'salt' has a possessed form néw ${ }^{n}$ mè: 'my salt' pronounced [ném:غ̀:]. Word-final $w^{\mathrm{n}}$ also combines idiosyncratically with interrogative particle le as [n:i] (§13.2.1). In ordinary transcription I usually write $\mathrm{w}^{\mathrm{n}}$ word-finally since it clarifies the morphemic composition.
$-y^{\mathrm{n}}$ is common as the regular 1 Sg pronominal-subject suffix on verbs (§10.3.1). Like $\mathrm{w}^{\mathrm{n}}$, word-final $\mathrm{y}^{\mathrm{n}}$ combines with interrogative particle le as [ $\mathrm{n}: \mathrm{i}$ ] (§13.2.1). I can cite one intervocalic case: gáyná 'wild fonio grass (Panicum)'.

Phonemically nonnasal syllable-final w , as in verbs ending with 2 Sg subject suffix -w, can be more or less phonetically nasalized when syllabified with a preceding Nv. However, this low-level nasalization is not systematic.

### 3.2.8 Consonant clusters

### 3.2.8.1 Word- and morpheme-initial CC clusters

There are some initial nasal-stop clusters: ndó- (Boui) ~ ndó- (Ningo) 'give' (only known verb with this onset, §10.1.2.3), ndà: 'person', ygàlà-ŋgàlà 'gallbladder', mbásán 'bassam (fabric)'. After a pause, the nasal is pronounced as its own syllable. However, the nasal does not have an independent tone; it is pronounced with L-tone except when it syllabifies with a final H -toned vowel in the preceding word.

The other initial clusters are of the form Cw before a front or low vowel $\{\mathrm{ie} \varepsilon \mathrm{a}\}$ in monosyllabic stems. In attested examples the initial C is $\{\mathrm{d} \mathrm{gtkns}\}$ This type of cluster occurs in monosyllabic nouns such as dwé: ‘ashes’ and gwí: ‘skin', and in the apparent compound final in òlò-kwá 'flint lighter'. It is common in perfective positive forms of Cv : verb stems with C not a palatoalveolar (dwè: 'insulted' or 'pounded', gwè: 'went out', see 10.2.1.1). The "w" is articulated as -ATR before $\varepsilon$, i.e. as a desyllabified [0] (more open than the usual w), and one could analyse it phonologically in this fashion.

### 3.2.8.2 Medial geminated CC clusters

Stem-internal geminate clusters are uncommon, and are probably confined to loanwords and to stems that have undergone syncope of a short high vowel. An example of each attested cluster is in (9). If I have one or more stem-internal example, one example is given. Most of these words are borrowings from Fulfulde, the ambient lingua franca. Most of the "unattested" geminates, while not represented in my current Tiranige lexicon, would likely show up in an expanded lexicon that includes Fulfulde borrowings that are in common use.

| (9) | bb | íbbà | 'handle (of kettle)' |
| :---: | :---: | :---: | :---: |
|  | cc | pèccèré | 'half' |
|  | dd | [unattested] |  |
|  | ff | [unattested] |  |
|  | gg | [unattested] |  |
|  | jj | [unattested] |  |
|  | kk | [unattested] |  |
|  | 11 | mbòllí | 'knobbed end (of stick)' |
|  | mm | [unattested] |  |
|  | nn | òlò-òlò kùnné | 'Adam's apple' |
|  | лл | [unattested] |  |
|  | ทŋ | kànyé | 'gold' (regional word) |
|  | pp | sàppà:ré | 'medication' |
|  | rr | [unattested] |  |
|  | ss | [unattested] |  |
|  | tt | [unattested] |  |
|  | ww | [unattested] |  |
|  | $w^{n} w^{n}$ | [unattested] |  |
|  | yy | ìjò yéyyá | 'home town' |
|  | $y^{n} y^{n}$ | [unattested] |  |

### 3.2.8.3 Medial nongeminate CC clusters

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

The only common medial clusters within stems are \{mb nd nj ng$\}$, i.e. nasal plus homorganic voiced stop. These could be analysed as prenasalized stops, but since they are relatively uncommon word- and stem-initially I refrain from making this call. Other CC clusters are generally either limited to loanwords, or occur only at stemsuffix or compound boundaries, usually as the result of 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. Again, in a fuller lexicon including many Fulfulde borrowings some of these blanks would be filled.
(10) Nasal plus consonant

| mb | ámbá | 'sheep' |
| :---: | :---: | :---: |
| nd | kándá | 'new' |
| nj | kúnjúgó | 'knee' |
| ng | tíngó | 'choke (on food)' |
| mp | sálámpó | 'alms' |
| nt | èntí kán(ú) | 'wean' |
| nc | - | - |
| 9k | sànkúnè | 'waterbag in well' |
| nz | - | - |
| ns | ygàràn-sá:kú | 'grain sack' |
| mj | - | - |
| my | - | - |
| ny | bún(î)-yó- | 'become red' |
| лу | - | - |
| 1у | yán(î)-yó- | 'kneel' |
| mw | $[\rightarrow \mathrm{mb}$ ] |  |
| nw | $[\rightarrow \mathrm{mb}$ ] |  |
| jw | - | - |
| jw | - | - |
| ml | - | - |
| nl | bín(í) = là | 'not be fat' |
| nl | - | - |
| nl | - | - |
| mr | [ $\rightarrow \mathrm{md}$ ] |  |
| nr | [ $\rightarrow$ nd] |  |
| nr | - | - |
| yr | - | - |

(11) Liquid plus consonant

| lb | - | - |
| :---: | :---: | :---: |
| ld | - | - |
| 1 j | - | - |
| $\lg$ | - | - |
| lp | - | - |
| lt | - | - |
| lc | - | - |
| 1 k | pél-kúléy ${ }^{\text {n }}$ | '60' |
| lz | - | - |
| 1 s | sèl-sèl | 'pointed' |
| 1 m | - | - |
| ln | - | - |
| $\ln$ | - | - |
| 1 l | - | - |
| ly | gúl(1̂)-yó- | 'thunder(v)' |
| lw | - | - |
| 1 r | - | - |
| rb | - | - |
| rd | - | - |
| rj | - | - |
| rg | - | - |
| rp | - | - |
| rt | - | - |
| rc | - | - |
| rk | - | - |
| rz | - | - |
| rs | - | - |
| rm | - | - |
| rn | - | - |
| rn | - | - |
| rn | - | - |
| ry | yígír-yé | 'stirring-stick' (cf. verb yígíró-) |


| rw | - | - |
| :--- | :--- | :--- |
| rl | - | - |

(12) Semivowel plus consonant

| yb | - | - |
| :--- | :--- | :--- |
| yd | - | - |
| yj | - | - |
| yg | - | - |
| yp | - | - |
| yt | - | - |
| yc | - | - |
| yk | - | - |
| yz | - | - |
| ys | - |  |


| ym | - | - |
| :--- | :--- | :--- |
| yn | báy-nâ- | 'not be big' |
| yn | - | - |
| yy | - | - |
| yl | - | - |
| yw | - | - |

yr pòyré
'light (illumination)'

| wb | - | - |
| :--- | :--- | :--- |
| wd | - | - |
| wj | - | - |
| wg | - | - |
| wp | - | - |
| wt | - | - |
| wc | - | - |
| wk | - | - |
|  | - | - |
| wz | - | - |
| ws | - | - |
| wm | - |  |


| wy | - | - |
| :--- | :--- | :--- |
| wy | ów-yó | 'sit' |
| wr | ów-ró- | - |
| wl | - | - |

Nasalized semivowels $y^{\mathrm{n}}$ and especially $\mathrm{w}^{\mathrm{n}}$ are common stem-finally and may be followed by another consonant, especially in compounds. However, in examples like bów"-bè 'key' (lit. "door-child"), this transcription is somewhat abstract, and the $w^{n}$ (or $\mathrm{y}^{\mathrm{n}}$ ) normally behaves like an assimilating nasal consonant, hence [bómbè].

### 3.2.8.4 Medial triple CCC clusters

Medial triple clusters are probably confined to loanwords (such clusters are common in Fulfulde), compounds, and nouns with frozen inanimate class suffix beginning in ng. From the latter category I can cite pólıgé 'egg', bòlnǵ 'vestibule', tílyǵ 'tree', bélngé 'fodder', and sòlngó 'Bozo (ethnic group)'. Clearly lyg is a favored triple cluster, with a liquid followed by a homorganic nasal plus voiced stop cluster. Another cluster of this type, 1 mb , is attested: kòlmbé 'gecko'.

Allowing boundaries, we can add y-nd in báy-ndó 'become big(ger)'.

### 3.2.8.5 Final CC clusters (absent)

Final CC clusters have not been observed.

### 3.3 Vowels

The vowels are those in (13). Nasalized vowels are uncommon (§3.3.2), but some gaps (parenthesized) may be accidental.
oral short long
u
o
0
a
$\varepsilon$
e
i
u:
o:
$\rho$ :
a:
$\varepsilon$ :
e:
i:
nasalized
short long
$\left(\mathrm{u}^{\mathrm{n}}\right) \quad \mathrm{u}:{ }^{\mathrm{n}}$
( $\left.\mathrm{o}^{\mathrm{n}}\right) \quad \mathrm{o}$ : ${ }^{\text {n }}$
$9^{\mathrm{n}} \quad\left(\mathrm{a}^{\mathrm{n}}\right)$
$\mathrm{a}^{\mathrm{n}} \quad \mathrm{a}:{ }^{\mathrm{n}}$
$\varepsilon^{\mathrm{n}} \quad\left(\varepsilon:^{\mathrm{n}}\right)$
( $\left.\mathrm{e}^{\mathrm{n}}\right) \quad\left(\mathrm{e}: \mathrm{e}^{\mathrm{n}}\right)$
$\mathrm{i}^{\mathrm{n}} \quad\left(\mathrm{i}:{ }^{\mathrm{n}}\right)$

### 3.3.1 Oral vowels

All short and long oral vowels are common. Monosyllabic noun, verb, adjective, and numeral stems require two moras, so Cv : and CvC are okay while Cv is not. Within nonmonosyllabic stems, long vowels usually occur in initial syllables, though there are some borrowed nouns with medial long vowels: sàppà:ré 'medication'. Particles, clitics, defective stative quasi-verbs like 'be', and suffixes can be Cv.

Long vowels occur not only internally in stems, but also in verbal inflectional suffixes, specifically combinations of a TAMP suffix and the 3P1 subject suffix (§10.3.1).

### 3.3.2 Nasalized vowels

Nasalized vowels are much less common than oral vowels. The attested short nasalized vowels are $\left\{0^{n} a^{n} \varepsilon^{n} i^{n}\right\}$. They are attested in a loanword ('bassam', Fr bazin), an onomatopoeic expressive adverbial ('vibrating'), and two reduplicative stems (14). The absence of $u^{n}$ may be accidental. The absence of $+A T R e^{n}$ and $o^{n}$ may reflect neutralization of $\pm$ ATR under nasalization, but there is an attested of long o: ${ }^{\text {n }}$ that casts doubt on neutralization.
(14) $\quad \mathrm{i}^{\mathrm{n}} \quad$ bín $\rightarrow$ gún(ú) $\quad$ 'vibrating' (onomatopoeic)
$\mathrm{e}^{\mathrm{n}} \quad-$
$\varepsilon^{\mathrm{n}} \quad$ t $\varepsilon^{\mathrm{n}}$-t $\mathrm{t} \mathrm{w}^{\mathrm{n}} \quad$ 'straight ${ }^{\prime}$
$\mathrm{a}^{\mathrm{n}} \quad$ mbásán ${ }^{\mathrm{n}} \quad$ 'bassam (fabric)'
$\rho^{\mathrm{n}} \quad$ bón ${ }^{\mathrm{n}} \mathrm{b}^{\mathrm{n}}{ }^{\mathrm{n}} \quad$ 'candy' $(<$ French bonbon $)$
$\mathrm{o}^{\mathrm{n}} \quad$ -
$\mathrm{u}^{\mathrm{n}} \quad-$
Long nasalized vowels are attested in a few monosyllable nouns (15). Most of the gaps are probably accidental.

| i: ${ }^{\text {n }}$ | - |  |
| :---: | :---: | :---: |
| e: ${ }^{\text {n }}$ | - |  |
| $\varepsilon:^{\text {n }}$ | - |  |
| $\mathrm{a}:{ }^{\text {n }}$ | pâ: ${ }^{\text {n }}$ kán(ú) | 'understand' |
| $0:^{\text {n }}$ | - |  |
| o : ${ }^{\text {n }}$ | gó: ${ }^{\text {n }}$ | 'body' |
| $\mathrm{u}:{ }^{\text {n }}$ | kǔ: ${ }^{\text {n }}$ | 'skiff (boat)' |

### 3.3.3 Initial vowels

Since the initial consonantal slot of a syllable can be unfilled stem- and word-initially, initial vowels are unrestricted, e.g. áyó 'arrive', غ̀:lèngè 'peanuts', órâ 'not be (somewhere)'.

### 3.3.4 Stem-final vowels

All vowel qualities may occur stem- and word-finally in nonverbs. For verbs, the situation is complicated by extensive vocalic ablaut, particularly affecting the final vowel, but all oral vowel qualities are attested stem-finally.

### 3.3.5 Vocalic harmony

Advanced tongue root (ATR) distinguishes two sets of mid-height vowels, +ATR $\{\mathrm{e} o\}$ and -ATR $\{\varepsilon \rho\}$. The two sets normally do not combine within a stem, so we can speak of lexical ATR harmony at the level of well-formedness constraints. High vowels $\{i \mathrm{u}\}$ are extraharmonic; they can combine in a stem with vowels of either ATR category. A minimal pair is (cínjó) ímbó 'blow (nose)’ versus ímbó ‘stretch out' or 'shut'. Low vowel a can combine with +ATR but not -ATR vowels, so a could be considered a member of the +ATR set.

Some exceptions to ATR harmony occur in noun stems that contain a frozen classifier suffix; see §4.1.1.2.

For most verbs, the A/O-stem (one of four vocalically defined forms of each verb stem) involves overlaying +ATR values on all vowels in the stem, with final $\{\varepsilon \rho\}$ becoming a and nonfinal $\{\varepsilon \rho\}$ becoming $\{\mathrm{e} o\}$.

On the other hand, demonstrative manner adverbs with suffix -rò shift +ATR stem vowels to -ATR, as in mbó 'this', mbó-rò 'like this' (§4.4.2.3).

### 3.3.6 Vocalism of verb-stem alternations

Verbs have four main vocalism stems defined by vocalic ablaut. The vocalism is determined by the stem's prosodic shape, ATR value, and presence/absence of nonfinal a-vowels. The vocalically defined stems are cross-cut by tone patterns for particular TAMP categories. The vocalic patterns are summarized in (16). For some + ATR stems, O-stem and A/O-stem are identical. For the O-stem (leftmost column) stem, the Boui speaker distinguished lexical -ATR (16a) from +ATR (16b) vowels. The final i of the I-stem is backed and rounded to $u$ before quotative wà. I will generally use the O -stem as the citation form, but other choices would also be possible, and none of the stems is a clearcut lexical pure play.
a. -ATR stems [for Ningo dialect see comments below] monosyllabic, a in A/O-stem, C onset in E/I-stem
ло: ла: ля: лi: 'eat, drink'
monosyllabic, s in $A / O$-stem, Cw onset in E/I-stem do: do: dwe: dwi: 'pound' or 'insult' nonmonosyllabic, final a in A/O-stem, nonfinal nonlow vowel jєyo jeya jeye jeyi 'kill' toyo toya toye toyi 'step on' diyo diya diye di: 'abandon' du-yo du-ya du-ye du-yi 'bathe'
b. +ATR stems
monosyllabic, final o in A/O-stem, Cw onset in E/I-stem
go: go: gwe: gwi: 'exit (v)'
nonmonosyllabic, final o in A/O-stem, nonfinal nonlow vowel
gujo gujo guje guji 'dig'
jiyo jiyo jiye ji: 'harvest' (Boui) noyo noyo noye noyi 'sleep' (variant nayo)
nonmonosyllabic, a in A/O-stem, nonfinal a-vowel

| najo | naja | naje | naji | 'have fun' |
| :--- | :--- | :--- | :--- | :--- |
| dayo | daya | daye | dayi | 'lay out' |

c. final-high-vowel type
nonmonosyllabic, final u in A/O-stem, nonfinal nonlow vowel

| un(u) | uno | uni | uni | 'go' |
| :--- | :--- | :--- | :--- | :--- |
| $\sin (\mathrm{u})$ | sino | sini | sini | 'convey' |

nonmonosyllabic, final a in A/O-stem, nonfinal a-vowel

| kan(u) | kana | kani | kani | 'do' |
| :--- | :--- | :--- | :--- | :--- |
| bamu | bama | bami | bami | 'beat (tomtom)' |

d. irregular
ndo (Boui) nda: nde: ndi: 'give' (Ningo O-stem ndo) gun(u) guna gune guni 'say'

The Ningo speaker, on the other hand, shifted -ATR to +ATR in the O-stem as in the A/O-stem, hence O-stems no: 'drink', jeyo 'kill', etc.

Inflectional categories associated with the various vocalism stems are given in (17). Categories are positive unless otherwise indicated. The groupings are valid for the majority final-nonhigh-vowel verb stems.

| O-stem | imperfective (positive and negative); prohibitive; hortative <br> negative; verbal noun (§4.2.3.1) |
| :--- | :--- |
| A/O-stem | imperative; perfective negative; durative (including <br> progressive); $-\mathrm{w}^{\mathrm{n}}$ 'while' subordinator (§15.2.1.2) |
| E/I-stem | perfective; recent perfect; experiential perfect; hortative |
| I-stem | quoted imperative (§10.7.3.1), agentive (§5.1.5) |

An A-stem, with final a and with +ATR nonfinal vocalism, occurs in the lexically restricted set of stative verbs ( $\$ 10.4 .1 .1$ ), and in one type of purposive clause (§17.5.2).

The stems with final high vowel (17c) are best treated separately from the main set of verbs exemplified in (17a-b). For the latter, i.e. those with final nonhigh vowel, the underlying ATR value is clearly seen in the Boui dialect form of the O-stem, which ends in o or $\rho$, and in the $E / I$-stem, which ends in e or $\varepsilon$. The underlying ATR value is disguised in the A/O- and I-stems, which for most verbs allow only + ATR vowels and a along with extraharmonic $\{i u\}$ throughout the stem. We can recover the underlying ATR value even from the A/O-stem by a somewhat tortuous calculation: stems with final o, and stems with nonfinal a vowel plus final a, are +ATR , while stems with final a and nonfinal vowel other than a are -ATR. In other words, unless the stem has a nonfinal a, the presence of a final a in the A/Ostem is an indirect (but reliable) indicator of -ATR quality. Therefore an A/O-stem like toya can only be from a -ATR verb, in spite of the +ATR o in the penult and the arguably +ATR final a. We are not so lucky with the I stem, which completely neutralizes ATR values, except that a nonfinal a vowel points to +ATR.

Stems with final high vowel are arguably classifiable as +ATR. This is because those with high-vowel penult have final o rather than $\rho$ in the A/O-stem. On the other hand, those with $a$ in the penult also have final $a$ in the A/O-stem. Another irregularity is that final-high-vowel stems with high-vowel penult use the O-stem (with final u) rather than the A/O-stem (with final o) in the imperative. As a result, the $\mathrm{A} / \mathrm{O}$-stem for these verbs is confined to the perfective negative.

### 3.4 Segmental phonological rules

### 3.4.1 Trans-syllabic consonantal processes

### 3.4.1.1 Nasalization-Spreading absent

There is no regular process of nasalization spreading from one syllable to the next.

### 3.4.2 Nonharmonic vocalic processes

### 3.4.2.1 V-lengthening before nd

The alternation in (18) seems to involve a combination of syncope (medial vowel) and lengthening of the first-syllable vowel before nd, which is itself derived from $/ \mathrm{nr} /$, see §9.4.1. Cf. also unsuffixed tún(ú) 'put (sth) inside (sth)'.

```
túní-yó- 'put on (clothes)' (Boui)
tú:n-dó- 'put (clothes) on (sb)' (Boui)
```

A lexical search brings out a suspiciously large number of stems of the shape $\mathrm{Cv}: \mathrm{NCv}$ (generally for both Boui and Ningo dialects) suggesting that * CvNCv may have evolved into $\mathrm{Cv}: \mathrm{NCv}$ by lengthening the first vowel. However, in most cases there is no synchronic alternation calling attention to the lengthening. Examples with nd include gó:ndú 'hooked end', dù:ndú 'stump', nó:ndó 'left (hand)', kú:ndù 'intact', yá:ndó 'remember', né:ndè 'tongue', só:ndí 'saliva', nó:ndí 'marrow', sé:ndè 'piece', pà:ndé 'trap(n)'. Examples with mb include cé:mbè 'stone', tó:mbé 'protrusion on tree trunk', tà:mbé 'double hitching post', dò:mbé 'threshold', í:mbè 'heart of palm', and dà:mbú 'tinder'. Examples with nj include ní:jjí 'sweet', mà:njó 'papaya', and í:njé
 There are other Cv:ygv stems that I exclude here since they are or may be frozen combinations of Cv : plus an old inanimate suffix.

Lengthening before NC cluster is not a productive synchronic process. No lengthening occurs in e.g. kándá 'new', bémbé 'chest (torso)', tíngó 'choke', or énjí 'vomiting'. The examples in the preceding paragraph, mostly nouns, are therefore flagged here for diachronic analysis. Among other Dogon languages, lengthening before NC is most conspicuous in Nanga, an eastern Dogon language that is geographically separated from Tiranige and not closely subgrouped with it.

### 3.4.2.2 Syncope

Short high vowels are subject to syncope (i.e. word-medial vowel deletion) in the medial syllable of a trisyllabic. Specifically, medial i/u in $\mathrm{CvC}_{2} \mathrm{i} / \mathrm{uC}_{3} \mathrm{v}$ usually syncopates when $\mathrm{C}_{2}$ is an unclustered $\{\mathrm{y}$ w $\mathrm{ln} \mathrm{\eta} \mathrm{r}\}$, i.e. a sonorant other than $\{\mathrm{mj}\}$. If $\mathrm{C}_{2} \mathrm{C}_{3}$ does not work as a cluster, syncope is blocked, as in yáyú-ró- 'cause to kneel', since yr is a bad cluster. However, in some cases the $\mathrm{C}_{3}$ position may be filled by a NC cluster whose nasal then may then merge with a preceding nasal: wén-dó'become small' from /wéní-ndó-/. Unreduced clusters like lyg are allowable elsewhere in the language (pólygé 'egg') and could presumably be generated by syncope.

Transparent examples of syncope occur in certain suffixal derivations in verbs that convert a CvCv - stem into $\mathrm{CvCi}-$ or CvCu -. This is the case with the reversive ( $\S 9.1$ ), and with the mediopassive and transitive suffixes which often form doublets from the same stem (§9.4). Finally, syncope occurs in verbal inflectional morphology, notably in the imperfective positive and capacitative verb forms.

| a. syncope only |  |  |  |
| :---: | :---: | :---: | :---: |
| reversive |  |  |  |
| tíyó- | 'lock (v)' | tíy-ló- | 'unlock' |
| gúwó- | 'hook, hang' | gúw-ló | 'unhook' |
| péló- | 'fold' | pél-ló- | 'unfold' |
| mediopassive (syncope optional) |  |  |  |
| yáyú-ró | 'cause to kne | yán(í) | knee |
| búní | 'red' | bún(1)-y | 'become red |

b. syncope, consonantal adjustments
transitive túní-yó- 'put on (clothes)' tú:n-dó- 'dress (sb)' (</túní-ró-)
intransitive
wéní-wè 'small’ wén-dó- 'become small' (</wéní-ndó-)
c. no syncope after m
kúmú-ló- 'open (eye)' kúmí-yó- 'shut (eye)'

Somewhat specialized patterns of syncope and associated consonant-cluster modifications occur in inflectional verbal morphology, involving $\mathrm{CvC}_{2} \mathrm{v}$ - stems and - $\mathrm{C}_{3} \mathrm{v}$ - suffixes where $\mathrm{C}_{2}$ and $\mathrm{C}_{3}$ are homorganic, either both labial or both alveolar. The relevant data are presented in depth in §10.1.2.5-6.

### 3.4.2.3 Apocope

Apocope is word-final vowel deletion. There is no widespread apocope in Tiranige, and final short $\{i \mathrm{u}\}$ can occur after consonants that allow them to syncopate wordmedially. For example, imperative 'go!' is ùnù, contrast syncopated imperfective úm-bò- 'goes' from /únú-wò-/ (Boui). I initially transcribed the noun 'dance' as yèw but a speaker corrected my pronunciation to bisyllabic yèwù, cf. definite yèwú rì 'the dance', so even word-final homorganic semivowel-vowel sequences do not allow apocope.

### 3.4.3 Local consonant sequence rules

### 3.4.3.1 Semivowel assimilation

$\mathrm{w}^{\mathrm{n}}$ is fairly common stem- and word-finally. When followed by another consonant it behaves like an assimilating nasal consonant (20a). $\mathrm{y}^{\mathrm{n}}$ is less common but has the same behavior (20c). Oral semivowel w, at least in 2 Sg suffix -w, shows similar assimilation before high-frequency clitics (20b).

```
a. \(\mathrm{w}^{\mathrm{n}} \mathrm{m} \rightarrow \mathrm{mm} \quad\) néw \({ }^{\mathrm{n}}\) mě: 'my salt' [nદ́m: c :]
    \(\mathrm{w}^{\mathrm{n}} \mathrm{n} \quad \rightarrow \quad \mathrm{nn} \quad\) néw \(\mathrm{w}^{\mathrm{n}}\) nè-wé 'his/her salt' [nén: ̀̀wé]
    \(\mathrm{w}^{\mathrm{n}} 1 \quad \rightarrow \quad 11 \quad\) nél \(=\) là 'it isn't salt' \(\left(\left\langle\mathrm{n} \varepsilon \mathrm{w}^{\mathrm{n}}\right)\right.\)
    \(w^{n} \mathrm{~b} \quad \rightarrow \quad \mathrm{mb} \quad\) nà:- \(\mathrm{w}^{\mathrm{n}}\) bò- \(\hat{y}^{\mathrm{n}}\) 'I am eating' [nà:mbǒj]
b. -w \(1 \quad \rightarrow \quad 11 \quad 2 \mathrm{Sg}\)-ẁ plus interrogative lè \(\rightarrow-1\) lè
    \(-\mathrm{w} m \quad \rightarrow \quad \mathrm{~mm} \quad\) 2Sg -ẁ plus mè 'if' (Boui, not Ningo, cf. §16.1)
c. \(\mathrm{y}^{\mathrm{n}} \mathrm{m} \quad \rightarrow \quad \mathrm{mm} \quad\) 1Sg- \(\mathrm{y}^{\mathrm{n}}\) plus mè 'if' (Boui and Ningo, cf. §16.1)
    \(\mathrm{y}^{\mathrm{n}} 1 \quad \rightarrow \quad \mathrm{nn} \quad 1 \mathrm{Sg}-\mathrm{y}^{\mathrm{n}}\) plus interrogative lè \(\rightarrow \mathrm{n}\) nì
```


### 3.4.3.2 $\mathrm{b} \sim \mathrm{w}$ alternations (fortition or lenition?)

A lenition of intervocalic * b to w is at various stages of completion. For the older speaker from Ningo, $b$ is generally retained. For the younger speaker from Boui, the lenition has been completed. However, for this speaker there are some $b \sim w$ alternations due to the fact that the segment in question can occur both intervocalically and adjacent to a consonant.

Some $\mathrm{b} \sim \mathrm{w}$ alternations arise when a suffix beginning with w is preceded by a stop or nasal. For example, verbal nouns suffix -wà (§4.2.3.1) and imperfective nonsubject relative morpheme -wá show up as -bà and -bá, respectively, when syncope leaves them preceded by m or (less often) n . This process is clearly best analysed as fortition (hardening) of $/ \mathrm{w} /$ to b .

The other major set of $b \sim w$ alternations is more difficult to model because of significant grammaticalization. The relevant forms, as pronounced by the Boui speaker, are those in (21).
a. bǒ:- 'be' in progressive (§10.2.2.3) or with adjectival predicate (§11.4.1)
b. bò- 'be (somewhere)' (§11.2.2.2)
é wò 'be present (here/there)' (§11.2.2.2)
c. -wò- (-bò-) imperfective (§10.2.2.1)

Imperfective -wò- itself hardens to -bò- after a stop or nasal, so the same fortition rule mentioned above can take care of this alternation. However, the alternation of bò 'be' (after a locational expression) and é wò looks more like a highly morphologized lenition of $b$ to $w$, especially if we agree that bò 'be somewhere' is still synchronically connected to bǒ:

Particularly intriguing are Boui dialect w-medial verb stems like táwó- 'touch' and imperfective táb-bò, which can be derived from /táw-wò/ after syncope from /táwó-wò/. Here, synchronic /ww/ appears to harden to bb. For more examples see (207a) in §10.1.2.5. For the older speaker from Ningo, the forms are tábó- and táb-bò, with no consonantal alternation.

### 3.4.3.3 Dialectal $\mathrm{j} \sim \mathrm{y}$ and $\mathrm{n} \sim \mathrm{y}$ alternations

In a number of stems, Ningo has j corresponding to Boui y . This is especially common stem-initially as in (22).

| Boui | Ningo | gloss |
| :---: | :---: | :---: |
| yùwá | jì:bá | 'pocket' (< Arabic) |
| yùgù | jùgù | 'week' |
| yú:ndó | jú:ndó | 'find (a situation)' |
| yóré | jó:ré | 'stinginess' |
| yóló | jóló | 'look for' |
| yó: | jó: | 'pick up' |
| yó: | jó: | 'thorn, splinter' |
| yéná:gú | jéná:gú | 'rainy season' |
| yáw ${ }^{\text {n }}$ | jáǹ | 'leatherworker (caste)' |
| yággú | jángú | 'crossroads, intersection' |
| yànà | jànà | 'shed' |

Other stems have initial y in both dialects, e.g. yá: 'there (definite)' and yà:gù 'night'. This suggests that the proto-dialect had distinct ${ }^{\mathrm{y}} \mathrm{y}$ and ${ }^{*} \mathrm{j}$ and that some cases of initial ${ }_{\mathrm{j}}$ have lenited to y in Boui.

There are also a few cases of Boui initial y corresponding to Ningo n. The known examples have another nasal following the first vowel, which may have induced nasalization of initial *y to Ningo n.

| (23) | Boui | Ningo | gloss |
| :--- | :--- | :--- | :--- |
|  | yómó | nómó | 'be/do for a long time' |
|  | yòmbù | nòmbù | 'blanket' |
| yámbí-yó | námbí-yó | 'cover oneself' |  |
| yángé | ná:nígé | 'supper' |  |

### 3.4.3.4 $\mathrm{nj} \sim \mathrm{n}$

A minor alternation of nj and $\mathfrak{n}$ has been observed intervocalically at the beginning of the second syllable in a few words. The reduced form n occurs when a syllabic suffix has been added to make the stem or word trisyllabic, so that the second syllable is in a weak metrical position.

| ní:njí | 'sweet' | ní:ní-nâ- | 'not be sweet' (§11.4.2) |
| :--- | :--- | :--- | :--- |
| ménjí-wè | 'thin' | méní-ndó- | 'become thin' (§9.6) |
| mínjí | 'shea tree' | míní-nù- | 'shea butter' |
| ánjó- | 'be left over' | ànì-né | 'remainder, the rest' |

### 3.4.3.5 $\mathrm{r} \rightarrow \mathrm{d}$ after alveolar sonorant or stop

Tap $r$ does not cluster with preceding consonants other than semivowels $\{y w\}$. After a stop or sonorant (following syncope), $/ \mathrm{r} /$ hardens to d .

This happens with imperfective negative -râ- when a preceding Cv syllable beginning with alveolar $\{\mathrm{nll}\}$ syncopates. Data are in §10.1.2.6-7. Likewise negative predicative búrád-dâ- 'not be smooth', cf. búrádá 'smooth'(§11.4.2).

For the Ningo speaker, similar syncope before definite rì can trigger the rule, as in tón dì 'the planting' from /tów ${ }^{\mathrm{n}} \mathrm{ri} /$. Manner adverbs with suffix -rò added to a demonstrative stem provide another example in Ningo én-dò 'like this/that’ (§4.4.2.3).

### 3.4.3.6 rd $\rightarrow \mathrm{dd}$

$/ \mathrm{rd} /$ clusters are created when /rv-d/ or /rv-r/ syncopates. There is some variation in pronunciation between rd and dd in this case. In (25), the suffix is -râ- 'not be (adjective)', see (341) in §11.4.2.

| adjective | gloss | 'not be ADJ' |
| :--- | :--- | :--- |
| yágárá | 'coarse' | yágár-dâ- ~ yágád-dâ- (Boui) |

For Ningo, imperfective negative gíd-dà- $\varnothing$ 'he/she doesn't get' syncopated from /gír(o)-rà/ shows /rr/ $\rightarrow$ dd, probably via /rd/ (see preceding section).

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

Monosyllabic verbs with citation form Có:- and Có:- have perfectives that I transcribe Cwè:- and Cwè:-, see (214a) in §10.2.1.1. Here the w is essentially a devocalized $\rho$ or o, respectively, and one could alternatively transcribe Cǫ̀:- and Coè̀:-. I know of no cases of \#Cà̀:-, since Ca:- verbs in other Dogon languages appear in Tiranige as bisyllabic Cayo- with perfective Caye- (nàyè- 'spent the night', kàyè- 'shaved').

### 3.4.4.1 vv-Contraction

If the vocalic alternations in verb stems are analysed in terms of ablaut (i.e. mutations among vowel qualities), there is no need to posit underlying vowel sequences at the stem-suffix boundary. For example, the Cwè:- and Cwè:- perfectives just mentioned could be analysed as reflecting the application of an ablauted E-vocalism to /Co:-/ and /Co:-/.

Clearly suffixal morphemes in verbal derivation and inflection are nearly all C-initial (for 3 Pl subject see below). This leaves little scope for a putative vv-Contraction process. At regular word-boundaries, I did not observe contractions involving word-final and word-initial vowels, like i and u in (26).

| [bé-gè | rì $]$ | úm-b-à: |
| :--- | :--- | :--- |
| [child-Pl | Def] | go-Ipfv-3PlSbj |
| 'The children went (away).' (Boui) |  |  |

The best case for vv-Contraction is in 3Pl subject forms of verbs. The final verb in (26) reflects /ún-wò-/, cf. 3Sg úm-bò-Ø, plus the 3Pl suffix. The latter is rather variable segmentable and tonally, depending on the particular aspect-negation category, making phonological analysis nontransparent. In this imperfective combination, however, it is fairly clear that /o/ in /-wò-/ combines with something like 3 Pl allomorph /-à:/ to produce a long a: . The full list of input-output relations for vowel quality in nonpast 3 Pl subject forms is given in (27).

```
input output
a-X a: resultative -s-â: , imperfective negative -r-â:
o-X a: imperfective-w-à: ~ -b-à:
i-X i: perfective negative -n-î:
    " a: experiential perfect negative -tè:-n-â:
```

This points to $/ \mathrm{a}$ / as the probable vowel quality of the 3 Pl suffix. Note, however, that the "same" perfective negative suffix -ni- has two distinct outputs for 3Pl, depending on whether it is preceded by the experiential perfect morpheme.

In corresponding past forms, we always get $\varepsilon$ outputs in 3 Pl as in other forms, but it isn't clear whether this is due to contractions of the type $/ \varepsilon-\mathrm{a} / \rightarrow \varepsilon$ :, or whether past forms are produced by $\varepsilon$-ablaut overlaid on the corresponding nonpast forms (§10.6.1).

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

Monophthongization happens when a suffix or clitic consisting of a semivowel is added to a homorganic vowel, or when combinations like Cuwi-Cv and $\mathrm{Ciyi}-\mathrm{Cv}$ syncopate to Cuw-Cv and Ciy-Cv.

### 3.5 Cliticization

There are no second-position clitics of the Wackernagel type. The extent to which we should recognize phonological clitics is debatable. There are many function elements, often monosyllabic or subsyllabic, that could be considered as affixes, clitics, or particles (or, in verb complexes, auxiliaries). Analytic choices among these possibilities depend on the fixity of linear relationships and on phonological interactions, and the different considerations may diverge and may be individually fuzzy or moot. There is no stress or accent system that would clearly distinguish affixes, clitics, and particles.

I take $1 \mathrm{Sg}\left(-\grave{y}^{\mathrm{n}}\right), 2 \mathrm{Sg}(-\mathrm{w})$, and 3 Pl (e.g. -íyè) subject morphemes in verbal morphology to be suffixes. However, the 1 Pl and 2 Pl morphemes precede the verb; I incline to take them as proclitic to the verb but there is no strong argument against particle status and I transcribe them as separate words. Likewise for the $1 \mathrm{Sg}, 2 \mathrm{Sg}$, 3 Sg , and 3 Pl preverbal subject pronominals in nonsubject relative clauses.

A similar case is existential è $\sim$ é and its specifically distant counterpart yà ~ yá (§11.2.2.1), which precedes inflected verbs and quasi-verbs. Based on their linear position they could be considered proclitics to the verb. They have no segmental phonological interactions with the stem, but they do affect the form of the 'be (somewhere)' quasi-verb. Again, I prefer to transcribe them as separate words.

The past-time forms of verbs involve replacement of the final vowel of the nonpast form by $\varepsilon$, sometimes with a similar change in the penult. I take this to be suffixation, or better yet as vocalic mutation (ablaut), rather than as cliticization (§10.6).

I accept clitic status for the 'it is' morpheme, usually $=\grave{\mathrm{w}}^{\mathrm{n}}$, which is added at the end of NPs and related constituents (§11.2.1.1). In favor of clitic (rather than particle) status is the fact that it has allomorphs that depend on the form of the host. I extend this analysis to the negative counterpart $=$ là 'it is not' (§11.2.1.2).

I take plural -gè and -ygè to be suffixes rather than clitics or particles since they may occur two or more times within an NP, suggesting that they are parts of individual words. This contrasts with e.g. definite rì, accusative gì, and postpositions, which can occur only once in a NP.

### 3.6 Tones

Individual syllables are usually L or H , but contour-toned syllables $<\mathrm{HL}>$ and $<\mathrm{LH}>$ also occur in monosyllabics and in word-final syllables. $<$ LHL $>$ is rare but is attested in tồ ${ }^{\mathrm{n}}$ (Boui) and tồ: (Ningo) 'apart' (§8.4.5.1). This stem functions as predicate, it can be prolonged, and can be classified as an expressive adverbial. $<$ LHL $>$ syllables are also produced by contractions involving 3 Pl subject endings, as with 3 Pl auxiliary bà-â: in the progressive paradigm (227). There are no $<\mathrm{HLH}>$ syllables.
$<\ldots>$ encloses tone sequences within syllables. /.../ (slashes) enclose lexical tone melodies, and $\{\ldots\}$ (curly brackets) enclose grammatically conditioned tone overlays. This notation is omitted where irrelevant or indeterminate. Periods (full stops) separate syllables in notations like L.H.L (trisyllabic) and L.HL (bisyllabic).

### 3.6.1 Lexical tone melodies

3.6.1.1 Lexically/L/-melody stems allowed

In nouns and numerals, and to a lesser extent adjectives, stems have a lexical tone melody. Tiranige belongs to the subset of Dogon languages that allow lexically /L/-toned stems. In other words, there is no requirement that all stems have at least one H -tone.

### 3.6.1.2 Lexical tones of verbs

Verbs have no lexical tone melodies, and there are no "bare" verb stems. Verbs occur in several vocalism stems ( $\mathrm{E} / \mathrm{I}$-stem, $\mathrm{A} / \mathrm{O}$-stem, etc.), either with or without further
inflectional suffixes (§3.3.6). The tones of the stem depend on the inflectional category.

### 3.6.1.3 Lexical tone melodies for unsegmentable noun stems

Nouns do have lexical melodies. The majority are $/ \mathrm{H} \rightarrow \mathrm{H} /, / \mathrm{H} \rightarrow \mathrm{L} /$ (explained below), /L/, /LH/, and /HL/, along with a few more complex or shifting melodies especially in trisyllabic and longer stems. Because the lexical melodies can be modified, erased, or inverted in specific grammatical contexts, it is necessary to "peek" ahead into NP tonal grammar in order to tease apart the lexical melody.

In one set of contexts, the distinguishable melodies are $/ \mathrm{H} /, / \mathrm{L} / \mathrm{/} / \mathrm{LH} /$, and $/ \mathrm{HL} /$. The forms in (28) and similar arrays below show the phonetic tone in prepausal position. Using x as dummy, $\dot{x}$ is $H$, $\grave{x}$ is $L$, $\check{x}:$ is $\langle L H\rangle, \hat{x}$ : is $\langle H L\rangle, \bar{x}$ is $M[i d]$ tone, and $\hat{x}$ is $<H M>$ (not $<M L>$ as in IPA). Phonetic M-tone is a realization of phonemic H-tone in prepausal position in words that also have another H syllable. For example, phonemic HH is realized as HM, and HLH as HLM, in this position. M could also be transcribed as downstepped ${ }^{\downarrow} \mathrm{H}$. These data are from Ningo for which I have fuller information (Boui variations are mentioned at the end of this section).
isolation 'it isn't a _ plural gloss
a. /H/

| tè: | té: $=$ là | té:-gē | 'tea' |
| :--- | :--- | :--- | :--- |
| yè: | yé: $=$ là | yé: - gē | 'woman' |
| gíbā | gíbá $=$ là | gíbá-gē | 'house' |
| tóngíyē | tóngíyé $=$ là | tóngíyé-gē | 'foot' |
| númíy $\bar{\varepsilon}$ | númíyé $=$ là | númíyé-gē | 'hand' |

b. /L/

| wè: | wè: = là | wè:-gè | 'thing' |
| :--- | :--- | :--- | :--- |
| ijò | ijò $=$ là | ijò-gè | 'village' |

c. /LH/
gàbú gàbú = là gàbú-gē 'onion'
gùlùmbá
gùlùmbá $=$ là
gùlùmbá-gē
'pigeon'
d. /HL/
níyè níyè $=$ là níyè-gē 'bird'
kúmìyè kúmìyè = là kúmìyè-gē 'calabash' (Ningo)
If some additional morphosyntactic contexts (definite singular, singular or plural noun plus numeral) are added, the result is (29). The /L/, /LH/, and /HL/ melodies are still
clearly distinguishable. However, the $/ \mathrm{H} /$ category in (28a) above must now be split into two subtypes, here labeled $/ \mathrm{H} \rightarrow \mathrm{H} /$ and $/ \mathrm{H} \rightarrow \mathrm{L} /$. The $/ \mathrm{H} \rightarrow \mathrm{H} /$ type is
phonologically unproblematic, except that nonmonosyllabics dissimilate to a following H-toned numeral (here 'three'), becoming L-toned. The $/ \mathrm{H} \rightarrow \mathrm{L} /$ type shifts its H-tones onto a following L-toned numeral (here 'one' and 'two'), but fails to dissimilate (alternatively, it re-assimilates) to a following H-toned numeral. Another difference between $/ \mathrm{H} \rightarrow \mathrm{H} /$ and $/ \mathrm{H} \rightarrow \mathrm{L} /$ is that the $/ \mathrm{H} \rightarrow \mathrm{H} /$ type merges with $/ \mathrm{L} /$ melody before the definite marker, ending up as LH-toned.
DefSg 'one _' 'two _s
'three _s'
gloss
a. /H/ subtype $/ H \rightarrow H /$
té: rì té: tò:mà té:-gé nì:ngà té:-gē tá:ndī 'tea' tòngìyé rì tóngíyé-gé nì:ngà 'foot' tóngíyé tò:mà tòngìyè-gè tá:ndī
subtype $/ H \rightarrow L /$
yé: rì yè: tó:mā yè:-gè ní:ngā yé:-gé tá:ndī 'woman'
gíbà rì gìbà tó:mā gìbà-gè ní:ngā gíbá-gé tá:ndī 'house'
númíyé rì nùmìyè-gè ní:ygā 'hand'
nùmìyè tó:mā
númíyé-gé tá:ndī
b. /L/
wě: rì wè: tò:mà wè:-gè nì:ŋgà wè:-gè tá:ndī 'thing'
ìjó rì ìjò tò:mà ìjò-gè nì:ngà ìjò-gè tá:ndī 'village'
c. /LH/
gàbú rì gàbú tò:mà gàbú-gé nì:ngà gàbú-gè tá:ndī 'onion'
gùlùmbá rì gùlùmbá-gé nì:ggà 'pigeon'
gùlùmbá tò:mà gùlùmbá-gè tá:ndī
d. /HL/
níyè rì níyè tò:mà níyè-gé nì:ngà níyè-gè tá:ndī 'bird'
kúmìyé rì kúmìyè tò:mà kúmìyè-gé nì:ngà kúmìyè-gè tá:ndī 'calabash

The distribution of these nominal melodies for three common stem shapes is summarized in (30).
a. $\mathrm{Cv}: \quad / \mathrm{H} \rightarrow \mathrm{L} /$ dominant
/LH/, /L/ attested
$/ \mathrm{H} \rightarrow \mathrm{H} /$ rare ('tea', 'foot')

```
b. \(\mathrm{CvCv} \quad / \mathrm{H} \rightarrow \mathrm{L} /\) and \(/ \mathrm{L} /\) co-dominant
    \(/ \mathrm{LH} /\) attested (borrowings, cultural vocab)
    /HL/ attested (old diminutive)
    \(/ \mathrm{H} \rightarrow \mathrm{H} /\) unattested
```

c. trisyllabics $/ \mathrm{H} \rightarrow \mathrm{H} /$, /H $\rightarrow \mathrm{L} /$, /HL/ attested for at least two stems
$/ \mathrm{LH} /$ attested in cultural vocab
/L/ unattested
$/ \mathrm{H} \rightarrow \mathrm{H} /$ and $/ \mathrm{HL} /$ are largely confined, in native vocabulary, to extra-heavy (e.g. trisyllabic) stems, while /LH/ is strongly associated with loanwords (especially from Fulfulde) and with regionally widespread cultural vocabulary of whatever origin. /L/ is unattested in trisyllabics and uncommon in monosyllabics. Therefore $/ \mathrm{H} \rightarrow \mathrm{L} /$ is the most productive melody overall, with strong competition from /L/ in bisyllabics.

Two melodies other than $/ \mathrm{H} \rightarrow \mathrm{H} /$, /H $\rightarrow \mathrm{L} /$, /L/, /LH/, and /HL/ are attested for trisyllabics. One is /LHL/, attested in àlpú:jù 'lung' (Ningo dialect), plural àlpú:jù-gē. This stem appears to be a hybrid between a widespread Dogon iterated onomatopoeic term, e.g. Yanda Dom pú:zù-pá:zù 'lung', and the set of borrowings from Arabic via Fulfulde beginning with àl-

The second unusual trisyllabic melody might be represented either as /HLH/ or as $/ \mathbf{H L} /+\mathbf{H}$, i.e. $/ \mathrm{HL} /$ plus a floating H-tone that is variably realized on a following morpheme or on the final syllable of the stem itself. This is 'mango', which is realized prepausally as singular mángòrō (H.L.M) and plural mángòrò-gē (H.L.L-M). This differs tonally only in the singular from regular /HL/ trisyllabics, as in tángìlè (H.L.L) 'split nut', plural tángìlè-gē (H.L.L-M).

The Boui speaker's gùlùmbà-gé 'pigeons' versus Ningo gùlùmbá-gē (29c), and gàw-gé 'onions' for Ningo gàbú-gè, shift a final H -tone onto the plural suffix.

All lexical melodies of noun stems are erased in connection with stem-wide $\{\mathrm{L}\}$ overlay (before a modifying adjective) or $\{\mathrm{LH}\}$ overlay (after a possessor).

### 3.6.1.4 Lexical tone melodies for adjectives and numerals

Adjectives do not have distinctive lexical tone melodies, except for a few that can also be used as nouns. Modifying adjectives appear with H-tones, whether lexical /H/ melody or an $\{\mathrm{H}\}$ overlay, when immediately following a noun, and with L-tones (presumably an $\{\mathrm{L}\}$ overlay) when following another adjective ( $\S 2.3$ ).

Independent forms of numerals, also heard in complex numerals, present lexical melodies, $/ \mathrm{L} /$ with tò:mà ' 1 ', nì: $\mathrm{ggà}$ ' 2 ', cè: :jò ' 4 ', kùlèy ' 6 ', and pìyòlù ' 10 ', $/ H /$ with tá:ndí ‘ 3 ', nú: ‘ 5 ', ś́:y ‘ 7 ', sé:lé ' 8 ', and tó:wá ' 9 '.

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

The tone break is generally between penult and ultimate for nonmonosyllabic stems: tángílè 'side', gùlùmbá 'pigeon'.

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

There are few uncompounded tritonal nouns (likewise for other stem-classes). For /LHL/ I can cite àlpú:jù 'lung' (Ningo), gùyéngè 'aquatic tortoise', and sànásà 'paper wasp'. mángòró 'mango' and dólèlé 'circle' are among the few /HLH/ cases.

### 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 stem depends on a combination of a) the inflectional category (e.g. perfective negative) and $b$ ) the person and number of the subject. Details are given in the relevant sections of chapter 10.

The regular tone patterns for each inflection/subject combination can then be overridden by a $\{\mathrm{LH}\}$ overlay applicable to defocalized predicates (i.e. predicates in clauses containing a more or less focalized constituent) and to some relative clauses.

### 3.6.2.2 Grammatical tones for noun stems

Nouns get an $\{\mathrm{LH}\}$ overlay when preceded by a possessor, erasing lexical tone melodies (§6.2.1-2).

Nouns drop tones to $\{\mathrm{L}\}$ when followed by a modifying adjective (§6.3.1), and as initials in some types of compound (§5.1.2-3, §5.1.5).

There are changes limited to final-syllable tones of noun stems when followed by definite rì (§4.4.4.1) or plural suffix -gè (§4.1.1.1). These changes affect the final syllable of the noun, and do not erase the entire lexical tone melody. Though somewhat morphologized, they belong to tone sandhi rather than to abstract tonosyntax.

### 3.6.2.3 Grammatical tones for adjectives and numerals

Within NPs, the tones of modifying adjectives are determined by their linear position: H-toned for the first adjective after a noun, L-toned for the second (§4.5.1, §6.3.3.1). A minor exception is that suffixed diminutive adjectives like wéní-wè have a final

L-tone as first modifying adjective. I incline to take the H -tones of the first adjective as reflecting their lexical melody, but one could make a case for $\{\mathrm{H}\}$ overlay (implying that there is no lexical melody). Nearly all adjectives are also H-toned in predicates (§11.4.1), the exception being yágá 'pretty', yàgà-m bǒ: 'be pretty' (§11.4.1.1).

Nonsingular numerals including ' 2 ' to ' 10 ' do distinguish lexical tone melodies, /L/ versus /H/, in isolation forms (both dialects) and for Ningo dialect in N Num combinations. The distinction is neutralized by tone overlays in other combinations (§4.7.1.2, §6.4).

### 3.6.3 Low-level tone rules

### 3.6.3.1 Contour-Tone Resyllabification

A final falling-toned syllable that is followed by a Cì clitic merges its L-tone element with the L-tone of the clitic.
a. prohibitive -lâ plus quotative wà $\quad \rightarrow \quad$-lá wà
b. imperfective negative 3 Sg -râ-Ø plus wà $\quad \rightarrow \quad$-rá wà

### 3.6.3.2 Contour-Tone Mora-Addition

A word-final Cv syllable that acquires a rising tone contour is extended to Cv : . The best examples of this are forms of bò 'be (somewhere)' and sâ: 'have'.
bò 'be (somewhere)' used with locational phrases has conjugated forms like 1 Sg bò- $\mathrm{y}^{\mathrm{n}}$ and 1 Pl nì bò- $Ø$ (§11.2.2.2). There is also a rising-toned variant bǒ: used in the progressive ( $\S 10.2 .2 .3$ ) and in adjectival predicates (§11.4.1.1). bǒ: has conjugated forms like 1 Sg bò- yn $^{\text {n }}$ and 1 Pl nì bǒ: . A reasonable underlying form for this variant is /bǒ-/. No lengthening is needed in 1 Sg bò- y $^{\text {n }}$ since the semivowel constitutes a second mora (tone-bearing unit). However, 1 Pl nì bǒ: and other forms with no suffix are lengthened to allow the rising tone to be articulated.

The 'have' quasi-verb (§11.5.1) has forms like 1 Sg è sá-ỳn and 1 Pl nì è sâ: (shown with existential è). The underlying form is $/ \mathrm{sâ}-/$. The suffixed 1 Sg form is unproblematic, but the unsuffixed forms like 1Pl require a lengthened vowel. The rising-toned variant sǎ: in relative clauses (§14.4.2) likewise has a long vowel.

### 3.6.3.3 Rightward L-Spreading (LH\#H to LL\#H)

When a word ending in a rising pattern, either a L.H syllable sequence or a single $<\mathrm{LH}>$-toned syllable, is followed by a word beginning with a H -tone, the final H -tone
element of the first word is deleted. One way to formulate this is as spreading of the L-tone component in the first word to its boundary with the next word.

This process routinely affects LH-toned nouns, either those with lexical /LH/ melody like sàydú 'Seydou (man's name)' or due to an $\{\mathrm{LH}\}$ overlays on possessums as in mì ${ }^{\text {LH}}$ bàwá (Boui) 'my father'. The final H -tone is audible prepausally, and when the following word begins with a L-tone (32a). The final H is lost in (32b) before a word beginning in H-tone. ${ }^{\text {LH }}$ bàwà in (32b) shows the tonosyntactic ${ }^{\text {LH }}$ superscript even though the final H is later dropped to L .
a. [mì LHbàwá] / sàydú gwè:-Ø
[1SgPoss father] / Seydou exit(v).Pfv-3SgSbj
'My father/Seydou has gone out.' (Boui)
b. [mì $\left.{ }^{\text {LH}} \mathrm{bàwà}\right]$ / sàydù gó:-wò-Ø
[1SgPoss father] / Seydou exit(v)-Ipfv-3SgSbj
'My father/Seydou (will) go out.' (Boui)
(Ningo [mì Lbà:] gó:-bò-Ø)

### 3.6.3.4 Rightward H-Spreading (HL\#L to HH\#L)

Inconsistently, and sometimes just partially, the first L-toned syllable in an [...HL][L...] sequence can raised to H . In other words, the H-tone of the preceding syllable can spread rightward. This is parallel to Rightward L-Spreading but it is less systematic.

For example, cé:mbè 'rock, mountain' is a lexically /HL/-toned noun. When it is followed by an L-tone (including <LH>), as in cé:mbè mě: 'my stone', the pitch of the stem-final e is variably raised, so it can be heard as [cé:mbèmě:], [cé:mbēmと̌:] (with mid-level pitch), or [cé:mbémě:] (with higher pitch).

Postpositions like locative yà (Boui dialect) can also be affected: bòmòkó yà 'in Bamako', but sometimes [bòmòḱ yá] bǒ:-Ø 'he/she is in Bamako'.

The Boui speaker also raised otherwise L-toned pronominal proclitics to H-toned after reflexive object ${ }^{\text {LH}}$ kògó before an L-tone (33a-b).

|  | [nà | ${ }^{\text {LH}}$ kògó] | ná | jà:lè |
| :---: | :---: | :---: | :---: | :---: |
|  | [3SgPoss | head] | 3 SgSbj | look.at. |
|  | 'He looked at himself.' |  |  |  |
|  | [nì | ${ }^{\text {LH}}$ kògó] | ní | tèlè |
|  | [1PlPoss | head] | 1PlSbj | cut.Pfv |
|  | 'We cut ourselves.' |  |  |  |

The Ningo speaker did not raise the tone of the proclitics in this construction.

This spreading is distinct from the process where a floating H -tone jumps from one syllable to another, leaving an L-tone in its original location. See (377c) and the end of §3.6.1.3.

### 3.7 Lexically and grammatically sensitive terminal prolongation

### 3.7.1 Morphemes with lexically specified prolongation $(\rightarrow)$

Some elements relevant to grammar that regularly have terminal prolongation are bà $\rightarrow$ 'than’ (§12.1-2), mà $\rightarrow$ 'or’ (§7.2.1.1), wá $\rightarrow$ 'or' (§7.2.2), and kùnú $\rightarrow$ 'a lot'. There are also some examples of expressive adverbials with final prolongation (§8.4.5).

### 3.7.2 Terminal pitch and lengthening with 'and' and 'or'

Incompleteness is expressed by higher than modal terminal pitch, and completeness by maximally low terminal pitch. This pattern can occur in parallelistic constructions like NP conjunctions and is sometimes indicated in transcription by arrows, as in [X yà $\nearrow$, Y yà $\searrow$ ] meaning ' X and Y ' (§7.1.1). It can also occur in narrative when two clauses are juxtaposed (§7.1.2).
yà 'and' has a variant yâ: with lengthened vowel and falling pitch in extended lists (§7.1.1.3). This is arguably an intonationally modified form of yà. The same prosody occurs in wô: 'whether' which occurs in parallelistic 'whether X or (whether) Y' sequences (§7.2.1.3).

Disjunctions mà $\rightarrow$ 'or' and wá $\rightarrow$ 'or' can be prolonged (§7.2.1.1, §7.2.2).

## 4 Nominal, pronominal, and adjectival morphology

### 4.1 Nouns

### 4.1.1 Simple nouns

Most ordinary singular nouns are monomorphemic. There are no synchronic gender or noun-class morphemes, though there are some frozen vestiges of class suffixes (§4.1.1.2). There are some reduplicated or iterated stems (§4.1.4-5), and some suffixally derived nouns, both adnominal and deverbal (§4.2).

For the lexical tone melodies of nouns, see §3.6.1.3. The lexical melody plays an important role in the phonology of suffixed plurals (§4.1.1.1 just below). Lexical tones of nouns may be overridden by syntactically controlled tonosyntactic overlays.

Most nouns are bisyllabic or longer. Monosyllabic CvC and Cv : C nouns include bèl 'animal', kóy ‘grass’, á:y ‘yawn (n)’ and bé:w ‘belching’ (cognate nominal). There are a few examples of Cv :, as in bé: 'child', yé: 'woman' (but often compounded ndà-yé:), gó: 'body', mó: 'neck', dó: 'back of skull', só: ‘fabric', and yé: 'fart'. The noun gwí: 'skin' is similar in structure.

Cv is usually too short for a noun stem. For a marginal counterexample see the discussion of yé in time-of-day collocations in §11.1.1.4.

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

Plurality of nouns (and of noun-adjective combinations) is marked by suffix -gè, whose surface tone depends on the tone class of the noun and the presence of a following numeral or definite marker. -gè pluralizes human, animate, and inanimate nouns. There is no synchronically recognizable singular morpheme.

Singular/plural pairs showing the basic tonology are in (34).
singular plural
gloss
a. lexically $/ \mathrm{H} /$-toned noun
ámbá ámbá-gé 'sheep’ (Boui)
b. lexically /HL/-toned noun
níyè níyè-gé 'bird'


Most crop terms occur in what is historically a plural form, and are treated as plural in concord and agreement: èrègè 'rice', yò:gè '(pearl) millet', nù:ygè 'cowpeas', pó:ygé 'fonio', pàl(ì)yéngè 'sesame'. Unsuffixed forms occur as compound initials.

Since -gè is tone-raised to -gé after $/ \mathrm{H} /$ and $/ \mathrm{LH} /$ lexical melodies, but not after /HL/, /LHL/, or /L/, clearly the tone-raising happens by spreading from the final Htone of the stem. In (34d), the final H-tone appears to jump from the stem to the suffix for the Boui speaker, leaving the stem $\{\mathrm{L}\}$-toned; see Rightward L-Spreading §3.6.3.3. This did not happen with the Ningo speaker.
-gè also occurs after modifying adjectives and relative-clause verbs. Numerals have a different allomorph -ygè.

### 4.1.1.2 Frozen classifying suffixes (*-yge, *-ge, *-ygっ)

There are many nouns that appear to end in a frozen animacy-number suffix -yge, -ge, or -ygo. These match segmentable inanimate singular classifying suffixes in Najamba. Other western (but not eastern) Dogon languages have analogues, at least in frozen form. The tone of -nge or -ge is acquired from the preceding syllable in almost all cases. Most of the words in question are level H- or Ltoned.
a. frozen *-nge (alphabetical)
bélıgé 'grass' (Ningo béléngé)
kè:lèngè 'horn'
dé:ngé 'hip'
غ̀:lèngè 'peanut'
غ̀mèggè 'milk' Émó- 'milk (a cow)'
íníngé 'tooth'
jé:ygé 'blood'
kùlèngè 'hair'
kàjìngè 'tendon'
nà:ngè 'meal' nó:- 'eat (meal)'
pégíngé 'button' pégé- 'button (a shirt)'

| pólygé <br> pùnàngè | 'egg', <br> séngé |
| :--- | :--- |
| 'flour, powder' pórí pùnàngé 'néré-tree flour', pórí- <br> pùnà 'yellow' <br> yìlìngè 'grain, seed' (especially millet grain) | 'wood' |

b. frozen *-ge after nasal other than $\mathfrak{y}$ (could reflect *-ge or *-ŋge)
béngé 'fodder'
yángé 'supper'
c. frozen *-ge after vowel (alphabetical)
ámúgé 'reddish fuzz (flowers) on millet spike'
í:gé 'honey’
órógé 'millet cakes’
sò:gè 'dried wild grape seeds or cow-peas'
ùnjìgè 'breast'
d. frozen *-ngo
tílngó 'tree'

Segmentation is synchronically possible in a few cases based on a cognate verb or other form. One might argue that segmentation is possible in all cases, at least for trisyllabic stems, and especially with -nge because of its frequency, its lexical semantic associations (vegetation, food, body parts), and its invariant (nonharmonizing) +ATR vowel. However, the Tiranige nouns in (35) are morphologically invariant as uncompounded nouns in the senses indicated, and some can combine with plural morpheme -ge, e.g. pólıgé-gé 'eggs'. In addition, -nge and ge in most of the nouns in (35) do not appear on adjectives: pòlngè mó: 'a good egg', èrègè mó: 'good rice'.

For - $n g e$ as a deverbal nominalizing suffix, see $\S 4.2 .3 .2$.
Because -gé $\sim$-gè is the plural suffix in Tiranige, and is not limited to animates, one can easily imagine how nouns ending in this syllable could be reanalysed as plurals with collective sense. This does seem to have happened with several names of cultivated cereals and other seed crops, for which the singular-plural distinction would be difficult to apply (individual grains, grain spikes, fruits, and plants are expressed as compounds). The nouns in (36) are examples. Although some of them do not occur in a distinct singular form, they require 3 Pl agreement on verbs when they function as clausal subjects. I suspect that there is variation among speakers regarding verbal agreement for some of the terms in (35) and (36).

| nù:ygè | 'cow-pea' <br> pàlèngé (Boui) |
| :--- | :--- |
|  | 'sesame' (Ningo pàlyéngé, cf.Tebul Ure pòlé:, Najamba <br> singular pă:l-1ggò and plural pà:lè) |
| ánjígé | 'roselle (bissap)' |
| èrègè | 'rice' |
| yò:gè | 'millet' |
| émágé | 'sorghum' (Ningo) |

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

ndà: 'person', with regular plural ndà-gè 'people', is ndá: ${ }^{\text {Ha }}$ as relative head under some conditions (§14.2.7). The nouns yé: 'woman' and (low-toned) bànà 'man' are often elaborated as compounds ndà-báná 'man' and ndà-yé: 'woman'.
bé: 'child' has a slightly irregular plural bé-gé with shortened vowel.
wè: 'thing' has a regular plural wè:-gè. As relative head it can be H -toned wé: ${ }^{H}$ (§14.2.7). An irregular iteration wé:wè means '(not) anything (at all)', i.e. 'nothing (at all)' in a negative clause (T7 @ 17:25).

### 4.1.3 Initial Cv - reduplication in nouns is rare

Initial Cv - reduplication is not common or conspicuous in Tiranige noun stems. The nouns ('grasshopper', 'beetle', 'hyena', etc.) that often show initial reduplication in other Dogon languages either lack Tiranige cognates or have unreduplicated cognates (kà: ‘grasshopper’, tá: ‘leopard’).

A few nouns and compound finals that have a reduplicative appearance are in (37). Forms are from Boui.
a. gógójé 'tree gecko’
bòbórí 'colubrid snake sp. (Psammophis)'
gógóró 'padlock'
gúgúlú 'kneading stick'
b. kà:-dú:dù 'grasshopper sp. (Kraussaria)'

### 4.1.4 Final reduplication in nouns

Final reduplication is also not a clearly definable type in Tiranige noun stems.

### 4.1.5 Nouns with full-stem iteration

Several noun stems are full-stem iterations in form, though the stem does not occur in unreduplicated form. In a few cases there is a nasal or a: extension at the end of the first iteration. Forms are from Boui.

| a. LL-LH |  |
| :---: | :---: |
| kù:-kǔ: | 'machete blade' (local Fr coupe-coupe) |
| kùlà-kùlá | 'hump (cow, camel)' |
| kùnù-kùnú | 'white acacia (Senegalia laeta)' |
| ìnì-ìní | 'scorpion' |
| tùmbù-tùmbú | 'mistletoe' |
| tìmì-tìmí | 'bush sp. (Scoparia)' |
| bùlà-bùlá | 'blue (dye or color)' |
| b. HL-HL $s \hat{\varepsilon}^{n}-s \varepsilon \mathfrak{w}^{n}$ | 'bush sp. (Senna)' |
| c. LL-HL |  |
| wèlè-wélè | 'sandgrouse' |
| pèlè-pélè | 'dove' |
| kònò-kónò | 'long-tailed starling' |
| kòjì-kójì | 'viper sp. (Echis)' |
| màyè-máyè | 'zorilla (mammal)' |
| kìyà-kíyà | 'lightning flash’ |
| kìrì-kírì | 'dizziness; epilepsy’ |
| yùgù-yùgú | 'used-clothing pile in market' |
| kàlày-kálàw ${ }^{\text {n }}$ | 'hail (stones)' or 'tall herb sp. (Senna) ' |
| with medial nasal tìlà- ${ }^{\text {ntílà }}$ | 'thick-knee (bird)' (variant of till $\varepsilon^{\mathrm{n}}$-tílič ${ }^{\mathrm{n}}$ ) |
| with medial à: |  |
| pìlà:-pílì | 'butterfly' and 'winged termite' |
| tòngà:-tóngì | 'woodpecker’ verb tóngó- 'drill' |

Some iterations involve vocalic mutations, with a-vowels favored in the second iteration. Triple iterations are always of this type, with the third iteration reverting to the vowel quality of the first.
a. LL-LH
kòlò-kàlá $\quad$ 'tree locust'
b. L-L-H
tò:-tà:-tó: $\quad$ 'Vieillot's barbet (bird)' onomatopoeic
tèn - tàn ${ }^{\mathrm{n}}$-téw ${ }^{\mathrm{n}} \quad$ 'tree sp. (Cassia)'
c. $\mathrm{H}-\mathrm{H}-\mathrm{H}$
dín-dán-díw ${ }^{\mathrm{n}} \quad$ (sound of footsteps)

### 4.1.6 Frozen initial a- or aN- in nouns (absent)

I have not found any examples that suggest segmentation of initial a- or variant.

### 4.2 Derived nominals

### 4.2.1 Characteristic derivative (-ŋgá, -gá)

A few cases involving a suffix - ggá have been observed (40).
characteristic gloss input noun gloss
a. H-toned
ké:lé-ygá 'having a horn’ kè:lèngè 'horn' (§4.1.1.2)
kùlà-kúlá-ygá 'humped' kùlà-kùlá 'hump'
kó:ní-ngá 'sorceror’ kó:ní 'evil spell’
dé:ní-ŋgá 'crazy person’ dè:nì-ŋgè 'craziness’ (cf. §4.2.3.2)
yóré-ŋgá ‘stingy person’ yóré (Boui) ‘avarice’ (cf. Ningo jó:ré)
b. suffix L-toned
báná-ygà 'fearless person’ bànà 'man'
-ŋgá recurs in tó:má-ŋgá $=\grave{\mathrm{w}}^{\mathrm{n}}$ 'is the same’ (§12.2.2). L-toned -ŋgà in áná-ŋgà
'when?' is obscure.
In (41), -gá seems to have a similar function.
(41) úrú-gá 'sick person' úrú 'illness'
gólónjí-gá 'lazy person' gólónjó 'laziness'
Elicitation of other hoped-for examples usually produced a periphrasis with sâ: 'have' in participial form sà: (plural sà:-gè): [yéná kùlèngé] sà: 'one who has a beard, bearded one'.

### 4.2.2 Deverbal -ngo nominals

The examples in (42) are from Ningo. The nominals denote either places or objects. óbó-ygó is morphologically closer to stative óbà 'be sitting (=seated)' than to mediopassive óbí-yó.

| verb | gloss | nominal | gloss |
| :--- | :--- | :--- | :--- |
| óbí-yó | 'sit down' | óbó-ŋgó | 'sitting place, seat; chair' |
| bí-yó | 'lie down' | bí:-ygó | 'mat' |

For other verbs, like 'sleep', that might lend themselves to such a formation ('sleeping place'), the Ningo aspeaker rejected this construction in favor of a relative clause with gélé 'place' as head. However, -ygo can appear in various semantic functions with some verbs other than 'sit' and 'lie down'. In (43), the Ningo speaker suggested that yógí-ngó means something like 'reason for coming'.

| [yógí-ngó | [ò | ${ }^{\text {LH }}$ Wと̌:]] | ndé | kàná: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| [come-Nom | [2SgPoss | thing]] | what? | do.Purp | come.Pfv-2SgSbj |
| 'Your-Sg (re | n for) co | g, why | you | me? |  |

### 4.2.3 Abstractive deverbal nominals

By "abstractive" is meant nominalizations that primarily denote an event type or an instantiation of such an event type. Cf. English -ing and some (but not all) cases of tion and the like. The following subsections present the Tiranige formations, beginning with the most productive one.

### 4.2.3.1 Productive verbal noun (-wà ~ -bà)

An abstractive verbal noun is freely formed by suffixing -wà (Boui) or -bà (Ningo) to the $\{\mathrm{H}\}$-toned O-stem of the verb. The (morpho-)phonology is the same as for imperfective -wò ( $\S 10.2 .2 .1$ ). In other words, a final $u$ is syncopated before the suffix, and a final $\left\{\begin{array}{ll}0 & 0\end{array}\right\}$ is syncopated after an unclustered $\{\mathrm{mw}\}$. In Boui, the suffixal w hardens to b after syncope, $/ \mathrm{nb} /$ assimilates to mb , and some stems lengthen Cv́m-bà to Cv́:m-bà.

```
O-stem verbal noun gloss
```

(Boui forms)
a. final nonhigh vowel, +ATR

| gó: | gó:-wà | 'going out' |
| :--- | :--- | :--- |
| yógó | yógó-wà | 'coming' |

b. final nonhigh vowel, -ATR

| tónó | tónó-wà | 'butchering' |
| :--- | :--- | :--- |
| yégó | yégó-wà | 'falling' |
| ع́mó | ह́:m-bà | 'milking (cows)' |
| nó: | nó:-wà | 'eating (meals); drinking' |

c. final nonhigh vowel, unclustered medial w or m

| áwó | áb-bà | 'accepting' |
| :--- | :--- | :--- |
| sémó | sé:m-bà | 'slaughtering' |

d. final high vowel

| dám(ú) | dá:m-bà | 'speaking' |
| :--- | :--- | :--- |
| kán(ú) | kám-bà | 'do' |

It is not clear whether verbal noun -wà has any historical or synchronic relationship to -wá in nonsubject imperfective relative clauses (the H-tone of -wá is part of an $\{\mathrm{LH}\}$ tone overlay). See §14.4.2.

For textual occurrences of -bà for Ningo dialect see (536), (538), (539), and T7 @ 00:00, 00:30. 06:02, 06:16, 06:19, 07:45, 08:02, 11:14 (2, one with plural -gé), 11:56 (2), 12:06, 12:27, 12:56, 15:36, 16:02, 16:08, 16:28, 18:22, 18:32, and 21:46.

This verbal noun is the most common form same-subject complements of certain higher-clause verbs (e.g. 'begin', 'want'), similar to English infinitival complements (§17.5).

### 4.2.3.2 Deverbal -ngé ~ -ngè nominals

Suffix -nge may have originally been an inanimate singular class suffix as in Najamba, see §4.1.1.2 above. The deverbal nominals with -nge that have been observed are in (45). Some of them have $\{\mathrm{HL}\}$-toned stem plus H-toned -ygé. Others have word-level $\{\mathrm{H}\}$ melody. Semantically, they are similar to verbal nouns in many cases.
nominal gloss verb gloss
a. $\{\mathrm{HL}-\mathrm{H}\}$-toned

| túmù-ngé | 'measurement' túmó | 'measure (tr)' |  |
| :--- | :--- | :--- | :--- |
| nónì-ygé | 'writing' | nónó | 'write' |
| úlè-ngé úló | 'drop seeds' (noun-verb collocation) |  |  |

b. $\{\mathrm{H}\}$-toned

| á:rí-yá- $\mathrm{ggé}$ | 'fatigue' | á:rí-yó | 'become tired' |
| :--- | :--- | :--- | :--- |
| álándí-yá-ŋgé | 'rest (n), | álándí-yó | 'rest, have a rest' |
| túmbúlá-ŋgé | 'beginning' | túmbúló | 'begin' |
| kúgúrí-yá-ngé | 'ending' | kúgúrí-yó | 'be the last one' |

If possessed, these nominal take the usual $\{\mathrm{LH}\}$ possessum overlay.
(46) [jéná ${ }^{\text {LH }}$ wàlé $] \quad{ }^{\text {LH tùmbùlà- } \eta g e ́ ~}$
[rainy.season work(n)] begin-Nom
'the beginning of the rainy-season work' (T2, (528))

### 4.2.3.3 Nominalizing -rí in 'sunset/sunrise'

[yè-kìndò]-[sígí-rí] ‘sunset’ and [yè-kìndò]-[túmí-rí] ‘sunrise’, cf. yé-kìndó ‘sun’ (Ningo), are derived from sígó 'descend' and túmú '(sun) rise'. The -rí corresponds to phonologically similar suffixes in some Dogon languages: Tommo So nàm túmmí-lé 'sunrise' and Najamba [ùjù-ŋgò̀]-[túmbí-lé] ‘sunrise’. Some other Dogon languages have an unrelated suffix in similar nominals with these senses.

### 4.2.3.4 Nominals with final vowel u/i

The nominal nó:-gú '(re-)entry', attested in the compound nó:-gú ${ }^{\text {LH }}$ dèní '(re-)entry day' (Ningo dialect), refers to the re-entry of circumcision novices into the village after 30-40 days of seclusion while their wounds heal. It is derived from the verb nó:-gó '(re-)enter’ (§9.3.1). See T7 @ 07:57 and the following segments.

There are a number of similar nominals ending in i or $u$, now functioning mostly as cognate nominals in collocations with the cognate verb (§11.1.2.5).

In text T7, see also ní:ndí 'accompanying' (cognate nominal) twice @ 01:58 and (possessed) ${ }^{\text {LH }}$ kàní ‘doing’ @ 18:02.

### 4.2.3.5 Nominals with -n(d) $\varepsilon$

Attestations are (definite) ànjì-né rì 'the remainder' (as pragmatic adverb 'the rest of the time; otherwise') T7 @ 02:50, and the cognate initial in agentive [kùbè-ndè]-kúbí ‘farmer, cultivator' T7 @ 15:15.

### 4.2.3.6 Fulfulde verb borrowings in nominal form

Many Fulfulde verbs are borrowed in the form of a bare nominal which is inflected and conjugated by addinga form of kán(ú) 'do'. The nominals generally have /LH/ melody (Fulfulde is atonal). Most of the nominals end in í, so they fit into the Tiranige pattern of nominals in final $\mathrm{i} / \mathrm{u}$ (preceding subsection). Some examples are in (47).
a. end in í
hàybí kán(ú) 'guard (v)'
hò:lí kán(ú) 'trust (v)'
jàkí kán(ú) 'be lacking'
ò:rí kán(ú) 'take livestock to pasture’
tàykí kán(ú) 'inspect'
rè:ní kán(ú) 'protect, give asylum to'
b. other
jàté kán(ú) 'calculate’

### 4.2.4 Instrument nominals with -yé

I can cite the uncompounded examples in (48). Forms are from Boui.
nominal gloss verb gloss
a. input already + ATR compatible
yígír-yé 'stirring stick' yígíró 'stir (with stick)'
bímbí-yé 'file (tool)' bímbó 'file (sth), scrape with a file'
tóngí-yé 'mortar ax’ tóngó 'chop out (interior of a mortar)'
ó:ndí-yé 'hooked hammer' ó:ndí-yó 'bend over, bow'

| b. overt shift to +ATR |  |  |  |
| :---: | :---: | :---: | :---: |
| wélí-yé | 'scraper' | wélí-yó | 'scrape out (interior of calabash or mortar)' |
| pégí-yé | 'hobbles (rope)' | pégó | 'hobble (animal)' (by tying its front legs together) |
| cénjí-yé | 'chisel, wedge' | cénjó | 'apply chisel or wedge to' |
| yémbí-yé | 'fan (n)' | yémbó | 'ventilate, fan (something)' |

-yé here requires +ATR stem-vocalism even with lexically -ATR verbs (48b). It is therefore distinct from -yé $\sim$-yé in product-of-action nominals, which preserve the lexical ATR class (§5.1.11).

For similar -yé nominals as part of function-specifying compounds like 'stick for beating donkeys', see (85) in §5.1.10.

In some other cases there are noun/verb pairs but no obvious derivational suffix: íjílí ‘broom', íjíló ‘sweep', perhaps tìmbì-rì 'lid (e.g. of waterjar)', tímbí-ró 'put lid on, cover with lid'. The final i suggests a morphemic connection with $i / u$ nominals (§4.2.3.4).

### 4.2.5 Uncompounded agentives

The attested agentives are nearly all compounds; see §5.1.5.
ká: yg á 'thief' is obscurely related to verbs kám(ú) 'steal (something)' and kámú-ró 'rob (someone)'. -ŋgá is found in a few characteristic derivatives (§4.2.1).

### 4.2.6 Gentilic -bòlદ̀ ~ -bólè

Gentilics define persons by their home village (Berlin-er, Paris-ian). ìjò ${ }^{\text {LH }}$ bòĺ́ 'villager' (T7 @ 19:04) is a possessive construction. Compounds, on the other hand, have -bòlદ̀ ~ -bólદ̀ as final. The known examples of compounds show -bòlè after /L/-toned village name (plural -nò-gè), and -bóľ̀ after /H/-toned village name (plural nú:).
a. ì̀ì-bòlè 'inhabitant of Ningo' (plural ìnì-nò-gè)
bùrù-bòlદ̀ 'inhabitant of Boui'
b. tírá-bólè 'Tiranou person’ (§1.2) (plural tírá-nú:)

### 4.3 Pronouns

### 4.3.1 Basic personal pronouns

The forms of personal pronouns, excluding postposed possessors, are in (50). There are no special inanimate pronouns or anaphoric pronouns. Possessed 'my head', 'your head', etc. is used for reflexive objects ( $\S 18.1 .1$ ).

The "independent" forms shown are not very common in texts. In main clauses, subject pronominal category is normally indicated by a mix of suffixes ( 1 Sg , $2 \mathrm{Sg}, 3 \mathrm{Pl}$ ), proclitics ( $1 \mathrm{Pl}, 2 \mathrm{Pl}$ ), and zero ( 3 Sg ). Proclitic forms for all pronouns are used in most other functions, including the accusative (shown), and to mark pronominal subjects of nonsubject relatives (also shown). These proclitics are L-toned in most contexts. In the independent" form and certain other combinations, such as with là 'also', the pronouns are H -toned.

Personal pronouns
subject

|  | Indep | 'also' | Acc | proclitic main clause relative clause |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1Sg | míl ${ }^{\text {n }}$ | mí là | mì-gí | mì | VERB- ${ }^{\text {n }}$ | mì VERB |
| 1 Pl | ní-w ${ }^{\text {n }}$ | ní là | nì-gí | nì | ní/nì VERB | nì VERB |
| 2Sg | ó: | ó là | ò-gí | ò | VERB-ẁ | ò VERB |
| 2 Pl | é-w ${ }^{\text {n }}$ | é là | è-gí | è | é/è VERB | è VERB |
| 3 Sg | ná-w ${ }^{\text {n }}$ | ná là | nà-gí | nà | VERB-Ø | nà VERB |
| 3 Pl | cé-w ${ }^{\text {n }}$ | cé là | cè̀-gí | cè | [variable] | kè VERB |
|  | (Ningo | ké-wn |  |  |  |  |

The Boui speaker palatalized the initial consonant of the 3 Pl to c , except as relativeclause subject. In Ningo the 3 Pl begins with k in all positions (ké là, etc.).

The 'also' series with H-toned pronoun and L-toned là is distinct from the very common combination of L-toned subject proclitic with future -lá (dropped to -là before an H -tone), as in 1 Sg future mì-lá.

### 4.3.2 Personal pronouns as possessors

Pronominal possessors are usually postposed to alienably possessed nouns, and have special forms (originally appositions like 'my thing', 'your thing', etc.), see §6.2.1.2. With inalienables (kin terms), and optionally with alienables, pronominal possessors are preposed, and have their regular, morphologically simple forms, see §6.2.2.

### 4.4 Definite and deictic words

### 4.4.1 Determiners

### 4.4.1.1 Definite marker (rì)

A clitic-like definite morpheme rì can be added after a noun and any modifiers (adjective, numeral, pronominal possessor). It follows plural -ge if present, and requires plural -yge on an immediately preceding nonsingular numeral. It can be followed by címà 'all', accusative gì, and of course postpositions. For the Ningo speaker, plural -ge rì can be elaborated as -ge r-gè, i.e. with the plural suffix repeated on the definite marker.
rì is L-toned. In a preceding nonmonosyllabic word ending in two H-toned syllables, the final syllable sometimes drops to L-tone in Boui dialect (51a-b). A monosyllabic stem is not affected (51c). A preceding entirely L-toned word adds a final H -tone in both dialects. The effect of these final-syllable tone changes is to reduce nonmonosyllabic preceding words to contoured LH or HL tone patterns in Boui.
$\begin{array}{lll}\text { a. ná:-gè } & \text { rì } \\ \text { cow-Pl } & \text { Def }\end{array}$ 'the cows’ (< ná:-gé) (Boui) (Ningo ná:-ŋgé rì)
b. kónjè rì
beer Def
'the beer' (< kónjé) (Boui)
(Ningo kónjé rì)
c. bé: rì
child Def
'the child' (bé:) (Boui = Ningo)
d. ìjó
rì
village Def
'the village' (<ìjò) (Boui = Ningo)
e. ná:-gé mè:-gé rì
cow-Pl 1SgPoss-Pl Def
'my cows (definite)' (Boui)

$\begin{array}{lllll}\text { e. } \begin{array}{llll}\text { [nà:-gè } \\ \text { [cow-Pl } & \text { tá:ndí-ygè } & \text { rì } & \text { címà] }\end{array} \text { ùn-íyè } \\ \text { three-Pl } & \text { Def } & \text { all] } & \text { go.Pfv-3PlSbj }\end{array}$
'All three (of the) cows went away.' (Boui)
[Ningo: [nà:-ngè̀ tá:ndí-gé rí póy] ùnì-yè]

In the combination of rì with plural -gè ( $\sim-\mathrm{yg}$ è), when the preceding noun is H -toned, I hear -gè rì ( $\sim$-ŋgè rì) instead of \#-gé rì ( $\sim$ \#-ŋggé rì), as in (51e) above and (52a). Other nouns have the same tone on -gè with or without rì (52b). This is consistent with the usual phonology of rì, which favors contour tone melodies on preceding nonmonosyllabic nouns.

| noun | gloss | 'Xs' | 'the Xs ' |
| :--- | :--- | :--- | :--- |
| a. ná: | 'cow' | ná:-gé | ná:-gè rì |
| b. gùlùmbá | 'pigeon' | gùlùmbà-gé | gùlùmbà-gé rì |
| níyè | 'bird' | níyè-gè | níyè-gè rì |
| àlpús | 'lung' | àlpús-gè | àlpús-gè rì |

Postposed pronominal possessors show rising tone before rì even when they would be heard with L-tone elsewhere. séngé mě: 'my millet', séngé mě: rì 'my millet (definite)'.

### 4.4.1.2 'This/that' (deictic demonstrative pronouns)

The basic deictic demonstratives are in (53). They make no distinction between human, animate, and inanimate. They take the normal plural morpheme -gè. Demonstrative mbó does not combine with definite rì. In the proximate, there is a dialectal difference.

The explicitly near-distant and far-distant demonstratives are really specialized definite relative clauses. -wò is a form of bò 'be (somewhere)'. In these combinations, é- functions as near-distant marker and yá- as far-distant marker. Elsewhere, é wò- (near-distant) and yá wò- (far-distant) are locational-existential predicates meaning 'be present (here/there)' or just 'exist'.

Discourse-definite érì occurs in contexts like érì $=w^{n}$ 'that's it' (e.g. confirming an interlocutor's statement). It is from *é rì with definite rì etymologically, but the plural érì-gè shows that rì is now fused to the stem.
unmarked definite gloss
a. General deictic

Boui

| mbó | - | 'this' |
| :---: | :---: | :---: |
| mbó-gè | - | 'these' |
| Ningo |  |  |
| Énì | - | 'this' |
| Éní-gè | - | 'these' |

b. Near-Distant

| - | é-wò rì | 'that (near)' |
| :--- | :--- | :--- |
| - | é-wò-gé rì | 'those (near)' |

[Ningo: -bò instead of -wò]
c. Far-distant

| - | yá-wò rì | 'that (far)' |
| :--- | :--- | :--- |
| - | yá-wò-gé rì | 'those (far)' |

[Ningo: -bò instead of -wò]
d. Discourse-definite
érì (Boui)
érì-gè (Boui) -
'those (aforementioned)'
érí-gè ~ ég-gè (Ningo)
A demonstrative may be used absolutely. It may follow a modified noun or the latter's extension as core NP (N-Adj) or numeral-final phrase N(-Adj)-Num. mbó drops its tones to ${ }^{\text {L }}$ mbò (plural mbò-gè) in these combinations, but the other demonstratives do not drop tones. érì may also precede a modified noun as a kind of possessor. See $\S 6.5$ for the syntax.
é may precede a noun (or postposition) in discourse-definite function. See é ${ }^{\text {LH }}$ tùnú gì 'behind (=in addition to) that' several times in T2 (529).

### 4.4.2 Demonstrative adverbs

### 4.4.2.1 Spatial demonstrative adverbs

The basic spatial adverbs that express deictic and discourse-definite categories are in (54). gì (Ningo) and yà (Boui) are locative postposition allomorphs, but are here written as suffixes since the forms are rather fused.
form gloss

| mbé: | 'here' (Boui = Ningo) |
| :--- | :--- |
| mó-yà | 'here' (Boui) |
| ह́nì-gì | 'here' (Ningo) |

é-yà 'over there (nearby)' (Boui)
érì-nà 'over there (nearby)' (Boui)
é-bó-r-gì 'over there (nearby)' (Ningo)
yá: 'over there (farther away or discourse-definite)' (Boui = Ningo)
é-bó-r-gì can be parsed as 'at/in what is there (nearby)', with definite rì.
The forms of some of these adverbs can be compared with existential proclitics è $\sim$ é (unmarked) and yà $\sim$ yá (distant) (§11.2.2.1).

### 4.4.2.2 Emphatic and approximative modifiers of adverbs

Modifiers of spatial adverbs are in (55). Elsewhere tòrò has a basic sense 'like' (§8.4.1) or 'since' (§15.2.1.5). Here (55b) it means 'around, somewhere near'.
form gloss
a. mó-yà yèré 'right here'
mó-yà jà:tí
'right here’ (< Fulfulde jaati)
b. mó-yà tòrò
'around here'
é-yà tòrò 'around there (nearby)'
yá: tòrò 'around there (farther away)
c. mbé: tèw ${ }^{\mathrm{n}}$ 'this way'
yá: tèw ${ }^{\mathrm{n}} \quad$ 'around (over) there'

### 4.4.2.3 'Like this/that' (mbó-rò, én-dò, દ́-rò)

These forms are based on demonstrative stems plus -rò, hardening to -dò after nasal (§3.4.3.5). The demonstrative vowel shifts to -ATR $\{\varepsilon \rho\}$.

Manner adverbial 'like this/that, thus, so' is mbó-rò in Boui. It is obscurely related to mbó 'this/that'. The predicative form is mbó-rò wò-Ø 'it's like that, that's how it is', with the same lenition of bò 'be' seen in existential é wò- 'be present' (§11.2.2.2). The negative predicate is syncopated mbó-l-là 'it's not like that'.

For the Ningo speaker, $\varepsilon$ n-d̀̀ 'like this' is used in deictic contexts (pointing or showing), and $\varepsilon$-rò means discourse-definite 'thus'. Compare ह́nì 'this' and érí 'that (definite)' in Ningo dialect.

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

Presentatives distinguish three spatial categories: proximal, near-distant, and fardistant. The presentative word may precede or follow the relevant NP.

| (56) | Boui | Ningo | category | gloss |
| :---: | :---: | :---: | :---: | :---: |
|  | mbó-nì |  | proximal | 'here's X' |
|  | é-wò-nì | é-bò-nì | near-distant | 'there's X (nearby)' |
|  | yá-wò-nì | yá-bò-nì | far-distant | 'there's X (far away)' |

### 4.5 Adjectives

Adjectives can be postnominal modifiers, or they can be predicates. This section describes their forms as modifiers. For adjectival predicates see $\S 11.4 .1$.

Within the NP, adjectives follow nouns and precede numerals. Sequences of two or more adjectives are possible. Adjectives induce tone-dropping on the preceding noun, hence [ $\mathrm{N}^{\mathrm{L}}$ Adj]. A second adjective is itself tone-dropped: $\left[\mathrm{N}^{\mathrm{L}}\right.$ Adj ${ }^{\text {L Adj }}$ ]. See $\S 6.3$ for the syntax and tonosyntax.

### 4.5.1 Morphologically simple adjectives

Morphologically simple adjectives are illustrated in (57). Forms are from Boui. The adjectives are all H -toned in immediate postnominal position. This could be attributed to lexical melody $/ \mathrm{H} /$ or, if adjectives have no lexical tone melody, to an $\{\mathrm{H}\}$ overlay activated in this position.
(57) simple adjectives

```
dimensions
    báy 'big (house, tree); wide (passageway); spacious
    (courtyard)'
    bíní 'big, fat, stout (animal, person, mountain); thick
        (wall)'
    yálá 'long, tall'
    nímí 'deep (well, hole)'
```

| íjígó | 'empty' = 'deserted' |
| :--- | :--- |
| né: ŋgó: (Boui) | 'heavy' (for 'lightweight' see §4.6.2) |
| ~ né:ŋgó-bó (Ningo) |  |

age and state
kúnjú 'old (man, woman)'
kándá 'new’
yógóró 'ruined, kaput'
モ́w ${ }^{\mathrm{n}} \quad$ 'fresh (vegetation)' (also 'wet')
íló 'ripe (grain, fruit); cooked, done (meat); sour, curdled (milk),
kóló 'fresh (milk); unripe; raw (meat)'
yángá 'lean (animal, meat)'
temperature and speed
númá
témúm
texture and hardness
búrádá
yágárá
málání
'hot (water, food); fast-moving, rapid' (for 'slow' see §4.5.4)
'cold, cool (water); slow-moving'
'smooth, sleek (surface)'
'coarse (surface)'
'soft (skin), fragile (string, dry leaf), i.e. snaps if pulled'
taste and smell
ámámú 'sour, acrid (like lemon)'
kújájá
'rotten (meat, fruit)'
ní:njí
'sweet, delicious' (also 'sharp')
gálágá
'bitter'
sharpness
ní:njí 'sharp (blade)' (also 'delicious, sweet')
dúmbú
'blunt (blade)'
evaluation
mó:
'good' (for 'bad’ see §4.5.4)
yágá
difficulty (for 'easy' see $\S 4.5 .4$ )
má:gá

```
color
    búní 'red (brown)'
    jém\varepsiloń 'black (dark)'
    púl\varepsiloń 'white (light-colored)'
moisture
    máy }\mp@subsup{}{}{n}\quad\mathrm{ 'dry'
    \varepsilońwn
```

The syncretism of 'sweet (taste)' and 'sharp (blade)' is regionally widespread (some Dogon languages, Songhay, Bangime, Bozo-Jenaama). Likewise, 'hot' and 'fast' and syncretic in many of these languages.

### 4.5.2 Iterated adjective stems

A few adjectival stems are optionally iterated with no clear change in sense (even with singular reference), though perhaps slightly emphatic: bíní-bíní, báy-báy, númánúmá (in the sense 'fast-moving'), yálá-yálá. For other adjectives in the section above, a speaker rejected iterations.

Another adjective is always iterated (58). It is a borrowing, probably originally from the name of a soap product.
(58) bùlà-bùlá 'blue'

### 4.5.3 Phrasal adjectives (exemplars)

Two complex adjectives, perhaps pressed into service to fill out a European coloradjective system, are in (59). They denote exemplars of the colors in question. They have parallels in other languages of the zone.

> adjective gloss literal sense
a. pórí-pùnà 'yellow' pórí pùnàygé 'néré-tree flour' (bright yellow)
b. kòy-kóló 'green' 'fresh grass'

### 4.5.4 Negative adjectives (-ná)

Suffix -ná (cf. stative negative -nà) can be added to adjectives to reverse their polarity. This is possible for any adjective that denotes a scale with an unmarked pole (zero). English pairs like helpful, unhelpful might give the flavor, but the semantics
are somewhat different here. A speaker rejected \#kándá-ná 'not new, un-new’, presumably since 'new' does not satisfy the semantic criteria.

Certain adjectival senses rendered by a simple lexical item in English are expressed by the negation of the polar adjective (60). Forms are from Boui.
(60) Pairs of positive and negative (polarized) adjectives
a. evaluation
mó: 'good'
mó:-ná 'bad, no good’
yágá 'pretty'
yágá-ná 'ugly'
b. difficulty
má:gá
má:gá-ná
'difficult (work)'
'easy (work)'
c. dimension
nímí
nímí-ná
'deep'
'shallow'
d. speed
númá
númá-ná
'fast-moving, rapid'
'slow-moving'
For predicative forms see §11.4.1.1 and for 'be good' §11.4.1.3.

### 4.5.5 Diminutive adjectives (-wè)

A few adjectives end in a kind of diminutive suffix -wè (Boui) or -bè (Ningo), undoubtedly derived from bé: 'child'. The adjectives in question denote relatively low values on zero-to-infinity scales (as opposed to bipolar scales with a neutral midpoint).
(61) form (Boui) gloss
wéní-wè 'small (house); narrow (passage)' (Ningo wéní-bè)
ménjí-wè 'slender (person, tree); thin (wall)’ (Ningo ménjí or ménjí-bè)
déní-wè 'short (rope, person)' (Ningo déní or déní-bè)

The Boui speaker allows no nondiminutive counterpart in the singular forms.
However, -wè is optionally omitted before plural -ge, hence wéní-wè-gé or wéní-gé. Plural suffix -gé is H-toned in both variants.

The Ningo speaker requires -bè in singular 'small', but allows both nondiminutive and diminutive forms for the two others. He produced plurals like tùmà-gè ${ }^{L}$ ménjí-gé ${ }^{\text {LH}}$ bè-gé 'thin sticks', where the diminutive is treated like a possessed form of bé-gé 'children' with $\{\mathrm{LH}\}$ overlay. This plural construction occurs even in Boui for morphologically similar nominal diminutives (§5.1.6).

### 4.6 Participles as adjectives

The main section on participles (i.e. forms of verbs used in relative clauses) is $\S 14.4$. Those that often function as adjective-like modifiers are covered in the subsections below.

### 4.6.1 Positive adjectival participles (-sá, -má, -ní, -yé)

Some simple English adjectives have Tiranige counterparts with participial endings (62). The most common is that in -sá (62a), based on the resultative suffix. The adjectival stems in (62a) are $\{\mathrm{H}\}$-toned whereas true resultative participles have $\{\mathrm{LH}\}$ melody, see (399a). $\{\mathrm{H}\}$-toned stems do occur in imperfective subject participles ( $\S 14.4 .2$ ), but the relevance of this to (62a) is unclear. Forms are from Boui.
(62) Derived adjectives
a. with -sá (cf. resultative -sà-, §10.2.1.5)
sómbé-sá 'wet, moistened (clothing)'
kúné-sá 'hard (rock)'
málé-sá 'supple, stretchable
máníyé-sá 'dry, dried (clothing, wood)'
yám-sá 'spoiled, rotten (fruit, meat)', 'damaged
(implement)'
síyé-sá 'plump, fatty (animal)'
pílé-sá 'plump (animal)'
ywé:-sá 'full (container)' (< yó: 'become full')
kúré-sá 'undiluted (milk, cream of millet)'
tíwé-sá 'dead’
b. with -má (cf. capacitative -má, §10.5.1) dú:rú-yó-má 'fast' (<'run')
dú:rú-yó-má-ná 'slow'
c. with -ní (cf. perfective negative -nì, §10.2.3.1) tíwá-ní 'alive, living' (< tíwó 'die')
d. with -yé (cf. passive stative $-y \varepsilon ́=\grave{\mathrm{w}}^{\mathrm{n}} \sim-$-yé $^{=} \grave{\mathrm{w}}^{\mathrm{n}}, \S 10.4 .1 .2$ )
súlí-yé 'slightly diluted (milk, cream of millet)'
mángá-mí-yé 'heavily diluted, watery'
sángí-yé 'cooked (meat)'

Some other "adjectival" senses are expressed by perfective participles of kándí-yó- 'make’ or 'fix', irregularly related to kán(ú) 'do’, following an expressive adverbial (63).
(63) sèl-sèl ${ }^{\text {LH}}$ kàndì-yé 'pointed'
tòpé-tòpé ${ }^{\text {LH} k a ̀ n d i ̀-y e ́ ~ ' s p o t t e d ' ~}$
òlú-òlú ${ }^{\text {LH}}$ kàndì-yé 'soft, easily broken (infected sore etc.)'

### 4.6.2 Negative participial adjectives (-rá)

In the polar adjective-like pairs in (64), the negatively defined quality is expressed as a negative form (with suffix -rá) of the positively defined quality. Compare imperfective negative -râ (§10.2.3.4). Forms are from Boui.
a. né:ygó: 'heavy'
né:ygó-rá 'lightweight'
b. gálágá
gálágó-rá
'bitter'
'bland-tasting'

### 4.7 Numerals

### 4.7.1 Cardinal numerals

Counting sequence (' 1 ' to ' 10 '): tò̀:mà, nì:ngà, tá:ndí, cè:jò, nú, kùlèy ${ }^{n}$, só:y, sé:lé, tó:wá, pìyòl(ù). In the middle section from ' 2 ' to ' 7 ' the alternation of /L/ and /H/ melodies gives the sequence an incantational quality. However, ' 8 ' breaks the pattern.

### 4.7.1.1 'One' and 'same’ (tò:mà), 'other' (tó:)

tò:mà is used in the counting sequence, in absolute function for 'one', and as a modifier after a noun or core NP: í:njé tò:mà 'one dog' (Boui), ìjò tò:mà 'one village'. It is $\{\mathrm{L}\}$-toned (before tone sandhi) in such combinations, and does not modify the lexical tone melody of the noun.

| í:ggé | tò:má | rì |
| :--- | :--- | :--- |
| dog | one | Def |
| 'the one dog' | (Ningo) |  |

As predicate, in the sense 'be (one and) the same, be identical', tómá-ngá hosts the 'it is' enclitic (66). See also plural tómá-ŋgá-gé $=\grave{\mathrm{w}}^{\mathrm{n}}$ in §12.2.2.
(66) [mbó yà] [mbó yà] tómá- y gá $=$ ẁ $^{\mathrm{n}}$
[Dem and] [Dem and] one=it.is
'This and that are one (=the same).' (Boui)
A possessed variant ${ }^{\text {LH }}$ tòmá occurs in the construction ' X alone', as in mì ${ }^{\mathrm{LH}}$ tòmá 'me alone’ (T7 @ 09:36). See also tòmá( $\rightarrow$ ) ‘only’ §19.3.1.
tó: 'other' is a regular adjective morphosyntactically. It controls tone-dropping on the noun: ì:njè ${ }^{L}$ tó: 'another dog' (<í:njé). In the absence of a noun, it is tò: 'another one' (T7 @ 09:20).
'Night' is yà:gù but it behaves like yà:gú before numerals: yà:gú tò:mà 'one night', likewise yà:g-gé nì:றgà 'two nights'. These data are from Ningo, cf. T7 @ 09:17).

### 4.7.1.2 '2' to ' 10 '

The numerals from ' 2 ' to ' 10 ' are shown in (67). After a noun, or a N-Adj combination, the tones of the numeral are $\{\mathrm{L}\}$, except that the only monosyllabic stem (' 5 ') fluctuates between H - and L-tone. Lexical melodies appear in the absolute form (as a one-word NP). ' 2 ', ' 4 ', and ' 10 ' have lexical/L/melodies.

Numerals ' 2 ' and up are added to nouns with plural suffix -gè (except for '_ hundred' and '_thousand', see below). There is no tonal interaction between the numeral and the preceding string. For Ningo, there is no tonal difference between numerals ' 2 ' to ' 10 ' in postnominal modifying function and the same numerals in absolute function. The Boui speaker generally dropped all of these numerals to L-toned in modifying function, but his isolation/absolute forms showed an /L/ versus /H/ distinction as in Ningo.

| (67) | gloss | after N (-Adj) |  | absolute |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Boui | Ningo | Boui | Ningo |
|  | '2' | nì: y gà | nì:ngà | nì:⿹勹à | nì:றgà |
|  | '3' | tà:ndì | tá:ndí | tá:ndí | tá:ndí |
|  | '4' | cè:jò | kè:jò | cè:jò | kè:jò |
|  | '5' | nù: (~ nú:) | nú: | nú: | nú: |
|  | ' 6 , | kùlè̀ ${ }^{\text {n }}$ | kùlèy ${ }^{\text {n }}$ | kùlèy ${ }^{\text {n }}$ | kùlèy ${ }^{\text {n }}$ |
|  | '7' | sò:y | só:y | só:y | só:y |
|  | '8' | sè:lè | síyélé | sé:lé | síyélé |
|  | '9' | tò:wà | tó:wá | tó:wá | tó:wá |
|  | ' 10 ' | pìyòlù | pìyòlù | pìyòlù | pìyòlù |

When followed by a demonstrative, definite marker, and/or a pronominal possessor, plural -(y)gé is added to the numeral, which now has an $\{\mathrm{H}\}$ overlay. Boui examples based on nì:ngà ' 2 ' are ní: $\mathrm{gá}$ - gg é mbò-gè 'these/those two', and ní:ggá-ygé mè:-gé 'my two'. Ningo has ह́ní-gè nì:ygá 'these two' with ' 2 ' as modifier rather than head, but definite ní:ŋgá-ŋgé rì 'the two’ and ní:ngá-ŋgé mè:-ŋgé 'my two'.

A numeral may follow a pronoun. In this case, the numeral gets an $\{\mathrm{LH}\}$ overlay, like a possessed noun: nì ${ }^{\text {LH }}$ nì: yg á 'us two' (Boui \& Ningo), cè ${ }^{\text {LH }}$ cè: jó 'the four of them' (Boui). The final H of $\{\mathrm{LH}\}$ is dropped if the following word begins with an H-tone by regular Rightward L-Spreading (§3.6.3.3).
4.7.1.3 Decimal multiples ( ${ }^{\prime} 20^{\prime}, \ldots$ ) and combinations ( ${ }^{\prime} 11^{\prime}, ‘ 59^{\prime}, \ldots$ )

The multiples of ' 10 ' are in (68). Forms are from Boui. The existence of unsegmentable stems for ' 40 ' and ' 80 ' suggests a partial base- 40 system superimposed on a decimal system. dé: '40' has cognates in the southwestern Dogon languages, as well as Bangime (dèbè) and Jenaama Bozo (dè:).

```
gloss form
'10' pìyòlù
`20' pé-néngà (Boui), p\varepsiloń-ná\etagà (Ningo)
`30' pé-rá:ndí
`40' dé:
'50' dé: pìyòlù
`60' pél-kúléỳ }\mp@subsup{}{}{n
`70' síygí-gí pìyòlù òrá
`80' síngí
'90' síngí yá pìyòlù
```

pé-néngà ' 20 ', pé-rá:ndí ‘ 30 ', and pél-kúléỳ ' 60 ’ are composite, with a reduced variant of pìyòlù ' 10 ' followed by a variant of the single-digit numeral.
síngí ' 80 ' is the so-called 'Dogon hundred', and ' 70 ' and ' 90 ' are phrases subtracting or adding ' 10 '.

Composite numerals like ' 47 ' consist of the decimal numeral followed by the single-digit numeral, separated by sùgó 'plus' or yà '. Forms are from Boui.
a. dé: só:y

40 seven
'47'
b. pé-néngá sùgò nú:

10-two plus five
'25'
c. síngí yà tá:ndí

80 and three
'83'
The Boui forms of the various decimal numerals in such combinations are in (70). ' 10 ' is reduced to pè- before sùgó.

$$
\begin{equation*}
\text { independent } \quad \text { before single-digit numeral } \mathrm{X} \tag{70}
\end{equation*}
$$

| ${ }^{\prime} 10$ ' | pìyòlù | pè-sùgó X |
| :---: | :---: | :---: |
| '20' | pé-néngà | pé-néngá sùgó X |
| '30' | pé-rá:ndí | pé-rá:ndí sùgó X |
| '40' | dé: | dé: X |
| '50' | dé: pìyòlù | [dé: pìyòlù] sùgó X |
| ' 60 ' | pél-kúléy ${ }^{\text {n }}$ | pél-kúléy ${ }^{\text {n }}$ sùgó X |
| '70' | síngí-gí pìyòlù òrá | [síngí-gí pìyòlù òrá] sùgó X |
| '80' | síngí | síngí yà X |
| '90' | síngí-yá pìyòlù | [síngí-yá pìyòlù] sùgó X |

For ' 50 ', the Ningo speaker produced dé: yà pìyòlù, with yà 'and' separating ' 40 ' from ' 10 '.

Except for the irregularly contracted [pè-sùgó X] with "teen" numerals, the decimal term has the same form in independent and composite contexts. Most decimal terms are followed by the 'plus' morpheme sùgó, but dé: ' 40 ' lacks the 'plus' morpheme in Boui dialect, and síngí ' 80 ' takes yà 'and' instead of sùgó.
4.7.1.4 Large numerals (' 100 ', ' 1000 ', $\ldots$ ) and their composites

The stems in (71) are usually noun-like morphosyntactically. Forms are from Boui.

| gloss | independent form | modifying a plural noun [ X ge] |
| :---: | :---: | :---: |
| a. 'hundred' | tè:mdèr ¢́ | [ $\mathrm{X} \mathrm{ge]} \mathrm{tè:mdèrè} \mathrm{(Boui)}$ |
|  | tè:mèdèŕ์ | [ X ge] t tè:mèdèrré (Ningo) |
| b. 'thousand' | mújú-sì̀à:mú | [ $\mathrm{X} \mathrm{ge]} \mathrm{mújú-sìlà:mú}$ |
|  | or: | mújú-silà:mú [ X ge] |
| c. 'million' | mìlyów ${ }^{\text {n }}$ (<French) | milyów ${ }^{\text {n }}$ [ X ge] |

These are noun-like syntactically and can be followed by single-digit numerals ('two hundred', 'three thousand', etc.). tè:mdèré is contracted in Boui to tè:mè before another numeral, which has its lexical tones (tè:mè nú: 'five hundred'). The composite mújú-silà:mú reduces to $\{\mathrm{H}\}$-toned mújú in such combinations, before a $\{\mathrm{L}\}$ - or $\{\mathrm{LH}\}$-toned single-digit numeral (mújú nù: ‘five thousand', Ningo mújú ${ }^{\text {LH}}$ nǔ:).

The Ningo forms for 'hundred' and 'thousand' are in (72a-b). In (72a), tè:mèdèŕ́ is usually truncated before the single-digit term, though fuller, untruncated pronunciations are possible in careful speech. The two single-digit terms beginning with n (' 2 ' and ' 5 ') have geminated nn . The extra n is transcribed here as though a suffix on 'hundred'; it is likely a vestige of the $d$ or $r$ of an older partially contracted form of tè:mèdèré. In (72b), there are no segmental issues, but note the tones of the single-digit numeral.

| a. '_ hundred' |  | tones of single-digit numeral |
| :---: | :---: | :---: |
| tè:mèdèré | '100' |  |
| tè:mé-n nì:ngà | '200' | L |
| tè:mè tá:ndí | '300' | H |
| tè:mé kè:jò | '400' | L |
| tè:mè-n nú: | '500' | H |
| tè:mé kùlèy ${ }^{\text {n }}$ | '600' | L |
| tè:mè só:y | '700' | H |
| tè:mè síyélé | '800' | H |
| tè:mè tó:wà | '900' | H |



| mújú | ${ }^{\mathrm{H} k \varepsilon ́: j}{ }^{\text {jó }}$ | '4000' | H |
| :---: | :---: | :---: | :---: |
| mújú | ${ }^{\text {LH }}$ nǔ: | '5000' | LH |
| mújú | ${ }^{\text {Hucúléy }}{ }^{\text {n }}$ | '6000' | H |
| mújú | ${ }^{L H}{ }_{\text {Š̌ }} \mathrm{y}$ | '7000' | LH |
| mújú | ${ }^{\text {LH }}$ Sìyèlé | '8000' | LH |
| mújú | ${ }^{\text {LH }}$ tò:wá | '2000' | LH |

Combining the absolute form with the formulae in (72a) and (72b) results in (73). Clearly the tonal form of the numeral used with 'hundred' is the regular tone. With 'thousand', on the other hand, lexical /H/ has $\{\mathrm{LH}\}$ overlay and lexical /L/ has $\{\mathrm{H}\}$.

| digit | absolute | lexical | '_ hundred' | '_thousand' |
| :--- | :--- | :--- | :--- | :--- |
| '2' | nì:ngà | L | L | H |
| '3 | tá:ndí | H | H | LH |
| '4' | kè:jò | L | L | H |
| '5' | nú: | H | H | LH |
| '6' | kùlèy | L | L | H |
| '7' | só:y | H | H | LH |
| ' 8 ' | síyélé | H | H | LH |
| '9' | tó:wá | H | H | LH |

'Million' is rarely used except in connection with currency.

### 4.7.1.5 Currency

The currency unit in Mali and several other Francophone West African states is the CFA franc (FCFA). During the fieldwork period (2012 to 2021), one US dollar was worth around 500 FCFA. In native Malian languages, counting is based on a unit equal to five FCFA, except for amounts of one million FCFA or greater. In Tiranige the 5 FCFA unit is called mbù:dú-wè in the singular, with diminutive -wè, and as plural mbù:dù-gé before numerals ' 2 ' and up.
(74) a. mbù:dú-wè
currency.unit-Dim
'5 FCFA' (Boui)
$\begin{array}{ll}\text { b. mbù:dù-gé } & \text { nì:ngà } \\ \text { currency.unit-Pl } & \text { two } \\ \text { ' } 10 \text { FCFA' (Boui) } & \end{array}$

### 4.7.1.6 Distributive numerals

Numerals are iterated to make distributives ('two by two', 'two currency units each', etc.). The numerals ' 1 ' to ' 10 ' divide into two tonal types, one having L-LH tones (i.e. $\{\mathrm{L}\}$ on the initial and $\{\mathrm{LH}\}$ on the final), the other having $\mathrm{H}-\mathrm{L}$ tones (i.e. $\{\mathrm{H}\}$ on the initial and $\{\mathrm{L}\}$ on the final. The initial $\{\mathrm{H}\}$ in the latter case may just be the lexical melody, if we assume that lexical /HL/ surfaces as all-H after the H -tone extends rightward to the boundary. ' 100 ' clearly shows the lexical/LH/. Forms are from Boui.

| gloss | simple | distributive | tones |
| :---: | :---: | :---: | :---: |
| '1' | tò:mà | tò:mà-tò:má | L-LH |
| '2' | nì:ngà | nì:ygà-nì:ygá | L-LH |
| '3' | tá:ndí | tá:ndí-tà:ndí | H-LH |
| '4' | cè:jò | cè:jò-cè:jó | L-LH |
| '5' | nú: | nú:-nǔ: | H-LH |
| '6' | kùlèy ${ }^{\text {n }}$ | kùlèy ${ }^{\text {- }}$-kùlěy ${ }^{\text {n }}$ | L-LH |
| '7' | só:y | só:y-š̌:y | H-L |
| '8' | sé:lé | sé:lé-sè:lé | H-L |
| '9' | tó:wá | tó:wá-tò:wá | H-L |
| '10' | pìyòlù | pìyòl(ù)-pìyòlú | L-LH |
| '20' | pé-néggà | [pé-néngá]-[pè-nèngà] | H-L |
| '40' | dé: | dé:-dè: | H-L |
| '80' | síngí | síngí-sìngì | H-L |
| ' 100 ' | tè:mdèré | tè:mdèré-ť̀:mdèrè | LH-L |

The negative predicative form is with = là 'it is not', as in nì:ngà-nì:ngá = là 'it isn't two by two'.

### 4.7.2 Ordinal adjectives

For interrogative ángá-n ‘how many-eth?’ see §13.2.7. Other ordinals are covered below.

### 4.7.2.1 'First' (díló, gó:) and 'last’ (kùgùrìyà-ngé)

Ordinal adjective 'first' is díló (Ningo), as in nwè: ${ }^{\text {L }}$ dílb '(the) first song', or gó: (Boui), as in bè: ${ }^{\text {L }}$ gó: mě: 'my first child'. Both forms can also be used adverbially to mean '(in) the old days; in the past'.

Adjective 'last' is kùgùrì-yà-ŋgé, as in bè: ${ }^{\text {L }}$ kùgùrì-yà-ŋgé mě: 'my last (i.e. most recent) child'. A tonal variant kúgúrí-yá-ggé has been recorded. These forms are related to the verb kúgúrí-yó 'be last (in a race), bring up the rear'.

For adverbial 'first(ly), at first'’, see §8.4.4.2.

### 4.7.2.2 Other ordinals (suffix -n)

Other ordinal adjectives are formed by adding suffix -n (Boui) or -nú (Ningo) to the numeral, whose tones are raised to $\{\mathrm{H}\}$. This raising affects only the final word in composite numerals, i.e. it does not extend to [ X sùgó] or [ X yà]. In fact, sùgó takes $\{\mathrm{L}\}$-toned form as sùgò in ordinals. There are slight segmental irregularities in 'third' (stem-final e for i) and in 'fifth' (a kind of reduplication, cf. independent nú: ' 5 '). Forms are from Boui. For Ningo some examples are in T7 @ 02:27-02:34.

> form
gloss
a. single-digit numeral
ní:றgá-n 'second'
tá:ndé-n 'third'
cé:jé-n 'fourth'
nú:nú-n 'fifth'
kúlé-n 'sixth'
só:y-n 'seventh'
sé:lé-n 'eighth'
tó:wá-n 'ninth'
píyólú-n 'tenth'
b. decimal
pé-nángá-n 'twentieth'
dé:-n 'fortieth'
c. decimal plus single-digit numeral pè-sùgò tó:má-n 'eleventh'
dé: tó:má-n 'forty-first'
d. hundred
té:mdéré-n 'hundredth'
e. hundred plus '1-99' numeral (two levels)
[tè:mdèré yà] pé-nángá-n 'hundred and twentieth’

### 4.7.3 Fractions and portions

Fraction terms are pècì-kámbà 'half', which assumes a binary division of the entity, and pècèré 'portion, division', which can be anything from binary on up.

## 5 Nominal and adjectival compounds

The compound types in this chapter are distinguished by the stem-classes of the initial and final, and by tone patterns which are often mixes of lexical melodies (for one component) and a tone overlay (for the other). Using n for noun, a for adjective, num for numeral, v for verb, and x for a variable word class (noun, adjective, perhaps adverb), one can represent the stem-class combinations with notation like [ x n$],[\mathrm{n} \mathrm{n}]$, [ $n \mathrm{v}$ ], and (with a suffix) [ $\mathrm{n} v-\mathrm{VblN}$ ]. Diacritics can be added to mark tones ( $\mathrm{x}=$ hightone overlay, $\hat{\mathrm{X}}=$ falling-tone overlay, $\check{\mathrm{x}}=$ rising-tone overlay, $\grave{\mathrm{x}}=$ low-tone overlay, $\overline{\mathrm{x}}$ $=$ regular lexical tone melody). Example: [ǹ n̄] is a noun-noun compound whose initial is dropped by $\{\mathrm{L}\}$ overlay and whose final has its lexical tones.

Among the noun-noun compound types are [ǹ $\bar{n}]$ with tone-dropped initial (as in noun-adjective phrases), and [ $\overline{\mathrm{n}} \check{\mathrm{n}}]$ with rising-toned final (as in possessorpossessum phrases). These may be compared to the English compound types doghouse ( $s$ ) = and (a) dog's life, respectively. [ñ $\overline{\mathrm{n}}$ ] is favored in most Dogon languages with highly lexicalized noun-noun compounds, but in Tiranige it is less common than the possessive type [ $\overline{\mathrm{n}} \check{\mathrm{n}}]$.

### 5.1 Nominal compounds

Nasal linkers between the initial and the final have not been observed in Tiranige.

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

This type, which involves no tonal change on either initial or final and therefore resembles apposition of two nouns with the same referent, is not attested with simple nominal initial and final. See, however, the comments on verbal noun compounds (§5.1.3).

### 5.1.2 Compounds of type [ì n̄]

In this type, the initial drops tones, while the final keeps its regular tones. The tonosyntax is therefore the same as for noun-adjective combinations, although the semantic relationship is quite different.

In Tiranige, this type is occasionally indistinguishable from possessive-type compounds of type [ $\bar{n} \check{n}$ ], viz., when the initial has lexical melody /L/ and the final has lexical melody /LH/.

Examples (from Boui) of unmistakable [ǹ $\bar{n}$ ] type are in (77). Here the ${ }^{L}$ superscript emphasizes the $\{L\}$ overlay on the initial. Elsewhere (e.g. in texts) such word-internal superscripts are usually omitted.

| compound | gloss | initial and final |
| :--- | :--- | :--- |
| jìwà̀-jíró | 'storage structure' | jíwá 'house', jíró 'eye' |
| jì̀òL-úmbúlú | 'face' | jíró 'eye' (final obscure) |
| òmòL'-págá | 'Ramadan (fasting)' | òmò 'mouth', cf. págó- 'tie' |

More specialized compound types beginning with a tone-dropped noun are subclasses of [ǹ $\bar{n}$ ] or closely related types. See especially the agentive compounds in $\S 5.1 .5$, where however there is ambiguity as to whether the deverbal agentive final is H -toned by itself or gets $\{\mathrm{H}\}$ overlay in the compounding process.

### 5.1.3 Verbal-noun compounds of type [ $\overline{\mathrm{n}}$ v́-VblN]

In these compounds, the final is a verbal noun with $\{\mathrm{H}\}$-toned O -stem of the verb plus suffix -wà (Boui) or -bà (Ningo). The initial is a noun with its lexical melody. Since the verbal noun is H-toned even without the initial (§4.2.3.1), these compounds can be considered a special case of $[\bar{n} \bar{n}]$ (§5.1.1), i.e. where no tone overlay is associated with compounding as such.

The noun may be a cognate nominal, in which case the compound is a bit superfluous in cases where the cognate nominal by itself can denote the action (e.g. tà:nì 'hunt'). In 'snuff' (78b) the initial tàwá drops to tàwà- by regular tone sandhi.

$$
\begin{equation*}
\text { compound } \quad \text { initial } \quad \text { gloss of compound } \tag{78}
\end{equation*}
$$

a. with cognate nominal tà:nì-[tá:ní-wà]
tà:nì 'hunt (n)' 'hunt, hunting'
b. with noncognate noun

| kògò-[púló-wà] | kògò 'head' | 'undoing old braids' |
| :--- | :--- | :--- |
| tàwà-[súnjó-wà] | tàwá 'tobacco' | 'snuff (sniffing tobacco)' |
| númá-[kúmbí-yó-wà] | númá 'hand' | 'fist' |
| tá:-[jó:-bà] | tá: 'pants' | 'male circumcision' ("pants- <br> taking) |

The same morphological and tonal type can function as instrumental-functional compounds of the 'drinking water' type (§5.1.10).

### 5.1.4 Possessive-type compounds [ $\bar{n}$ ň]

In this compound type, the initial behaves morphologically like a possessor, and the final has the $\{\mathrm{LH}\}$ overlay typical of possessums. This compound type is very productive in Tiranige.

| compound | gloss | initial and final |
| :---: | :---: | :---: |
| númá ${ }^{\text {LH }}$ dùjé | 'bracelet' | númá 'hand', dùjè 'necklace' |
| séngé ${ }^{\text {LH}}$ pùnàngé | 'millet flour' | séngé '(millet) grain', pùnàygè 'flour' |
| kà:gè ${ }^{\text {LH}}$ mǐ: | 'swill' | kà:gè 'bran', mí: 'water' |

Although the compound has possessive form, it functions syntactically as a common noun. The compound itself, e.g. númá ${ }^{\text {LH}}$ dùjé 'bracelet', can be possessed by a real possessor. In númá ${ }^{\text {LH }}$ dùjé mè: 'my bracelet', the compound is followed by a postposed pronominal possessor (§6.2.1.2). In à:màdú ${ }^{\text {LH }}$ nùmà-dùjé 'Amadou’s bracelet' with preposed possessor, the $\{\mathrm{LH}\}$ overlay is applied to the compound, erasing its compound-internal tone pattern. That is, the structure is 'Amadou's [handnecklace]', not the recursive possessive '[Amadou's hand's] necklace' which would appear as \#[à:màdú ${ }^{\mathrm{LH}}$ nùmá ${ }^{\mathrm{LH}}$ dùjé $]$.

### 5.1.5 Agentive compounds of type [ǹ v́]

The agentive form of the verb is $\{\mathrm{H}\}$-toned, shifts -ATR to + ATR in nonfinal syllables, and ends in i. This is the I-stem, also found in quoted imperatives (§10.7.3.1). Agentives in Tiranige do not occur independently; instead, they require initials that denote characteristic objects. A cognate nominal can serve as a default initial. In any case, the initial gets $\{\mathrm{L}\}$ overlay. Because uncompounded I-stem agentives do not occur ( $\$ 4.2 .5$ ), it is indeterminate whether the H -tones of the agentive final are acquired by an $\{\mathrm{H}\}$ overlay in the compounding process itself, or are already H -toned independently.

Monosyllabic Có:- verbs appear as agentive -Cí: or as -Cwí: depending on the point of articulation of the consonant, as with the simple perfective, see 'singer' (80a) and 'millet-cake eater' (80b).

Examples in (80) are from Boui.
compound gloss initial (with gloss) and verb
a. cognate nominal as initial

| nwè:-nwí | 'singer' | nwé: 'song', nó:- |
| :--- | :--- | :--- |
| twè:-twí | 'liar' | twé: 'falsehood', tó: |
| tà:nì-tá:ní | 'hunter' | tà:nì 'hunt', tá:nó |
| yèwù-yéwí | 'dancer' | yèwù 'dance (n)', yéwó |
| kùwò-kúwí | 'farmer' | kùwò 'farming', kúwó |

b. noncognate noun as initial
òrògè-ní: 'millet-cake eater' órógé 'millet cake', nó:
kògò-múndí 'braiding lady’ kògò 'head', múndó
jèjì-tí: 'weaver’ jéjí 'cotton thread', tíyó
nàmà-témí 'meat-eater’ námá 'meat', témú
The plural of -Cwí agentives is -Cúy-gé, often heard as -Cu:-gé or as [Cý:ge] with high front rounded vowel.

In [bèlì-gè]-gírí '(livestock) herder', the initial has the plural suffix, cf. bèlì-gè '(livestock) animals'. 'Farmer' is [kùbè-ndè]-kúbí with an unexpected medial morpheme instead of cognate nominal kùbò, cf. kùbò kúbś 'do farm work, cultivate (crops)'.

### 5.1.6 Compounds with bé: or -bè ~ -wè 'child'

bé: 'child' occurs as final in possessive-type compounds, denoting a fruit or similar product associated with the larger entity (81).

| tílygó | ${ }^{\text {LH}}$ bě: |
| :--- | :--- |
| tree | child |

'tree's child (i.e. fruit)' (Boui)
[plural tíllggó ${ }^{\text {LH}}$ bè-gé]

```

There are also some compounds where the 'child' term is reduced to -wè ~ -bè in the singular, resembling a suffix. Compare the three adjectival diminutives in -wè (§4.5.5). However, for the nouns in (82), plural -ge is added to both the noun stem and to 'child', which takes the possessed plural form \({ }^{\text {LH}}\) bè-gé. Forms are from Boui.
\begin{tabular}{|c|c|c|c|c|}
\hline compound & plural & gloss & initial & gloss \\
\hline a. bówn-bè númángé-bè & bów \({ }^{\mathrm{n}} \mathrm{LH}_{\mathrm{b}}\)-gè númángé \({ }^{\text {LH}}\) bè-gé & 'key'
'twin' & \begin{tabular}{l}
bów \({ }^{\text {n }}\) \\
númáygé
\end{tabular} & \begin{tabular}{l}
'door' \\
'pair of twins'
\end{tabular} \\
\hline b. dégé-wè & dégé-gé \({ }^{\text {LH}}\) bè-gé & 'kidney’ & - & - \\
\hline c. bè-báná-wè bé-yé-wè & bè-báná-gé \({ }^{\text {LH}} \mathrm{bè̀}-g e ́\) bé-yé-gé \({ }^{\text {LH}}\) bè̀-gé & 'boy'
‘girl' & bànà yé: & \begin{tabular}{l}
'man' \\
'woman'
\end{tabular} \\
\hline
\end{tabular}

The plurals have the form of possessive-type compounds with plural possessor and \{LH\}-toned possessed noun. In (82c), 'child' occurs both as the initial (with báná 'male' and yé: 'female') and as the final.

For 'eye(s)' I recorded jíró in Boui and gíríyé in Ningo. The latter resembles 'child' or diminutive compounds in some other Dogon languages, e.g. Yanda Dom gìd-íyè alongside gìdè 'eye(s)'.

\subsection*{5.1.7 Compounds with 'man' (bànà) and 'woman' (yé:)}

For bànà or ndà-báná 'man' and for yé: or ndà-yé: 'woman' as nouns (cf. ndà: 'person'), see §4.1.2. As modifying adjectives, 'male' is báná and 'female' is yé:, for example following a name for an animal species.

For the compounds 'boy' and 'girl' see (82c) above.
Other irregularities for 'woman' in compounds or in noun-adjective combinations have not been observed. In e.g. yè: \({ }^{L}\) kándá 'new bride' and ndà-yè: \({ }^{\text {L }}\) kúnjú 'old woman', for example, there are no irregularities in segmental form.

\subsection*{5.1.8 Compounds with tìngà or gùnàrì 'owner' as final}

A possessive-type compound of the type \(X^{\text {LH }}\) tìngá or \(X^{\text {LH }}\) gùnàrí means 'owner of \(\mathrm{X}^{\prime}\). \({ }^{\mathrm{LH}}\) tì̀gá and \({ }^{\mathrm{LH}}\) gùnàrí have the \(\{\mathrm{LH}\}\) overlay of possessed nouns. The initial noun X has its regular tones, as in jíwá \({ }^{\text {LH} t i ̀ y g a ́ ~ o r ~ j i ́ w a ́ ~}{ }^{\text {LH }}\) gùnàrí 'homeowner, head of household'. The lexical melodies are /L/: tìngà, gùnàrì. These nouns can also be used in the sense 'master (of a slave)', where they pattern as inalienables (in Boui, where alienability is more clearly demarcated than Ningo). 'My master' is mì \({ }^{L H}\) tìngá, mì \({ }^{\text {LH gùnàrí. }}\)
\(\mathrm{X}^{\mathrm{LH}}{ }_{\text {tìngá can also be used abstractly to characterize an individual by }}\) reference to a medical condition or other attribute: kirrì-kírì-gè \({ }^{\text {LH }}\) tìngá 'epileptic (person)'.

\subsection*{5.1.9 Natural-species compounds (X-nà(:)-X)}

Several Dogon languages have a specialized compounding pattern with a medial linker like -nà(:)- or -mà(:)- flanked by an iterated stem. It occurs in a handful of flora-fauna terms. For Tiranige I can cite the two examples in (83), which denote small but unpleasant species. The medial element is short-voweled in 'spider' and long-voweled in 'burry herb'.
```

kòbì-nà-kóbì 'spider'
nòngì-nà:-nóngì 'burry herb sp. (Pupalia)' (burrs stick to clothing)

```

For 'spider', the apparent stem kòbì- is not otherwise known. For Pupalia, the collocation nóngè-nóngè- \(w^{\mathrm{n}}\) bǒ: 'be sticky (adherent)' is related. Terms for Pupalia are also of this iterative pattern, but with a different iterated stem, in some other Dogon languages.

\subsection*{5.1.10 Instrumental-functional compounds (-wà, -yé)}

In (84), two functionally distinct types of water are expressed by adding a verbal noun with -wà that denotes the associated activity. The noun 'water' is not tone-dropped, so the verbal noun is not treated as an adjectival modifier. The construction is therefore tonally identical to the verbal-noun compounds in §5.1.3.
```

a. mí: nó:-wà
water drink-VblN
'drinking water, water for drinking' (Boui)
b. mí: dú-yó-wà
water bathe-MP-VblN
'water for bathing' (Ningo)

```

A quite different construction is exemplified in (85). Here the noun 'stick' is syntactically possessed, as shown by its rising tone overlay. It is preceded by a compound describing the function that the stick is applied to, consisting of an object noun ('donkey') and a form of the verb with -yé added to a +ATR form of the verb (contrast tèw-ìyè 'they hit' with the lexical -ATR vocalism). This morphological formation occurs in uncompounded form in §4.2.4.
\begin{tabular}{l} 
[kólóỳ̀ \\
[donkey \\
téw 1 )-yé \(]\)
\end{tabular}\(\quad{ }^{\text {LHtùmá }}\)
'stick for beating donkeys' (verb téwó- 'hit') (Boui)

Example (86) has a similar syntactic structure, but the verb 'pick' appears to occur in an otherwise unattested nominal form, with \(\{\mathrm{LH}\}\) overlay consistent with it being possessed by 'tooth'. As in (85) above, this compound itself functions as the possessor of the final noun ('wood').
(86) [íníngé \({ }^{\text {LH }}\) tòngòjé] \({ }^{\text {LH }}\) tè: yg gé
[tooth picking(n)] wood
'twig used as toothpick' (verb tóngójó 'pick [teeth]') (Boui)

\subsection*{5.1.11 Product-of-action compounds (-yé~-yé)}

A product-of-action expression can be generated by adding a form of the action verb with suffix \(-y \dot{\varepsilon} \sim\)-yé to a noun denoting the type of entity. The noun is tone-dropped to \(\{L\}\), indicating that the verb with \(-y \varepsilon ́ \sim-y e ́ ~ f u n c t i o n s ~ m o r p h o s y n t a c t i c a l l y ~ a s ~ a ~\) modifying adjective.
\begin{tabular}{|c|}
\hline a. è:lèngè \({ }^{L} /\) nàmà \(^{L}\) ánání-yé peanut / meat dry.roast-Prod 'roasted peanuts/meat' (غ̀:lèygè, nàmá) (Boui) \\
\hline b. غ̀:lèngè \({ }^{L} /\) sèngè̀ \({ }^{L}\) dú:-yé peanut / millet pound-Prod 'pounded peanuts/millet' (è:lè̀gè, séngé) (Boui) \\
\hline c. sèngè \({ }^{L}\) námí-yé millet stone.grind-Prod '(stone-)ground millet' (< séngé) (Boui) \\
\hline d. bèlèngè \({ }^{\text {L }}\) sémí-yé fodder cut-Prod 'the (already) cut grass' (Ningo) \\
\hline
\end{tabular}

The suffix -y \(\sim\)-yé resembles passive stative \(-\mathrm{y} \varepsilon ́=\grave{\mathrm{w}}^{\mathrm{n}} \sim-\mathrm{yé}=\grave{\mathrm{w}}^{\mathrm{n}}\) (§10.4.1.2), as well
 connection. -y \(\varepsilon \sim\)-yé is distinct from -yé in instrument nominals (§4.2.4, §5.1.10), which requires stem-wide conversion to +ATR vocalism.

\subsection*{5.2 Adjectival compounds}

\subsection*{5.2.1 Bahuvrihi ("Blackbeard") compounds}

\subsection*{5.2.1.1 With adjectival compound final}

An adjectival bahuvrihi like 'big-bellied' takes the segmental form of the underlying noun-adjective combination, but has an \(\{\mathrm{LH}\}\) overlay. The compound may may follow a noun as a kind of modifier. If so, the noun has its lexical tone melody. The construction noun plus bahuvrihi therefore has the tonal form of a possessorpossessum compound of type [ \(\bar{n} \check{n}]\).

In (88a, c) we have simple noun-adjective combinations. These are converted into bahuvrihis ( \(88 \mathrm{~b}, \mathrm{~d}\) ). The adjectives ('fat', 'black') differ tonally in the two constructions.
a. pìndì bíní
belly fat
'(a) big belly' (< pìndì) (Boui)
b. yé: \({ }^{\text {LH }}\) [pìndì-bìní]
woman belly-fat
'pot-bellied (big-bellied) woman' (Boui)
c. kògò \({ }^{\mathrm{L}}\) jémé
head black
'(a) black head' (< kògò) (Boui)
d. déní-wè \({ }^{\text {LH }}\) [kògò-jèmé]
snake-Dim head-black
'black-headed snake' (Boui)

\subsection*{5.2.1.2 With numeral compound final}

I was not able to elicit a similar bahuvrihi compound for numerals from the Boui speaker. Instead, a relative clause with the regular NP (e.g. 'one eye') as object of kándí-yó ‘make’ or ‘fix’ was produced; compare (63) in §4.6.1. In (89), both 'man’ and 'one eye' have the same forms they have elsewhere as NPs.
```

ndà-báná [jíró tò:mà] ' LHkàndì-yé
man [eye one] make-MP.PfvRel
'a man with (lit. "who made") one eye' (Boui)

```

For the Ningo speaker, a similar construction was found but without the final verb. This looks more like simple apposition.
(90)
a. ndà: [gíríyé tò:mà]
person [eye one]
'one-eyed person' or 'one eye' (Ningo)
b. ná: [kògò-gè nì:ngà]
cow [head-Pl two]
'a two-headed cow' (Ningo)

\section*{6 Noun Phrase structure}

\subsection*{6.1 Organization of NP constituents}

\subsection*{6.1.1 Linear order}

The basic linear oder of elements is (91). The plural morpheme is omitted from the formulae since it may occur after two or more words within the same NP.
(91) -1 preposed possessor (nonpronominal or pronominal)

0 noun
+1 modifying adjective
+2 cardinal numeral
+3 postposed pronominal possessor
+4 determiner (demonstrative or definite)
+5 universal quantifier (címà 'all')
As in several other Dogon languages, adjectives and numerals optionally invert in the presence of a preposed possessor, see §6.4.2.

Examples illustrating the relative ordering of adjacent elements are in (92). The overall linear ordering in (91) is cobbled together from such examples. In the "type" formulae, \(\mathrm{n}=\) noun and \(\mathrm{a}=\) adjective.
type
a. jìwà \({ }^{\mathrm{L}}\) wéní-wè house small
'(a) small house'
b. jìwà \({ }^{L}\) wéní(-wè)-gé nì:ทgà [n-a-num] house small(-Dim)-Pl two 'two small houses'
\(\begin{array}{lll}\text { c. jíwá-gé tà:ndì-ngé } & { }^{\text {L mbò-gè }} & \text { [n-num-dem] } \\ \text { house-Pl three-Pl } & \text { Dem-Pl } & \end{array}\)
'these/those three houses'
d. jíwá-gé \({ }^{\text {L }}\) mbò-gè \({ }^{\text {L cìmà }}\) [n-dem-'all'] house-Pl Dem-Pl all 'all of these/those houses'
e. à:màdú \({ }^{\text {LH }}\) jìwá [poss-n]
A house
'Amadou's house'
f1. à:màdú \({ }^{\text {LH }}\) [jìwà wènì-gè tà:ndì-ggé] [poss-n-a-num]
A [house small-Pl three-Pl]
'Amadou's three small houses'
or:
f2. à:màdú LH[jìwà tà:ndì-ngè wènì-gé] [poss-n-num-a]
A [house three-Pl small-Pl]
'Amadou's three small houses'
g1.à:màdú L[jìwà wènì-gè tà:ndì-ngè] mbó-gè [poss-n-a-num-dem] A [house small-Pl three-Pl] Dem-Pl 'these/those three small houses of Amadou's'
 ..... [poss-n-num-a-dem]
```A [house three-Pl small-Pl] Dem-Pl'these/those three small houses of Amadou's
```

h. jíwá-gé tà:ndì-ŋgé mè:-gé [n-num-poss]
house-Pl three-Pl 1 SgPoss-Pl
'my three houses'
i. jìwà ${ }^{L}$ wéní-gé tà:ndì-ngé mè:-gé [n-a-num-poss]
house small-Pl three-Pl 1SgPoss-Pl
'my three small houses'

1. jíw
```house 1 Sg Dem'this/that house of mine'
```

m. jíwá-gé mè:-gè mbó-gè [n-poss-dem]

```house-Pl 1 SgPoss-Pl Dem-Pl'these/those houses of mine'
```


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

A NP component may (apparently) head the NP if the noun slot is empty. The examples in (93) are shown with definite rì where possible, and can function as NPs in clauses, as in 'give me __!'.
a. bùní rì 'the red one'
b. tá:ndí-ygè rì 'the three'
c. mbó 'that (one)'
d. címà 'all, everything'

Plural -gè and definite rì cannot be used in isolation; they must follow a noun or similar element.

### 6.1.3 Apparent bifurcation of relative-clause head NP

In a relative clause, the head NP is (seemingly) divided into two parts. The core, consisting maximally of Poss-N-Adj-Num, remains internal to the relative clause. Determiners and 'all' quantifiers, as well as any discourse-function markers, are separated from this internal head NP and appear after the verb. See §14.6.

### 6.1.4 Internal bracketing and tone-dropping within an NP

A noun is tone-dropped by $\{\mathrm{L}\}$ overlay before a modifying adjective, see $\S 6.3 .1$ below.

A plural noun or noun-adjective combination (with plural -gè) undergoes no tonal change when followed by a NP-final numeral from '2' up. See §6.4.1 below.

A demonstrative like mbó 'this/that' does not affect the tones of preceding words in the NP (except when combined with a numeral), but the demonstrative itself is tone-dropped (§6.5.2). The definite morpheme rì, which is already L-toned, interacts locally with the tone of the preceding syllable but does not control stem-wide tone overlays (unless combined with a numeral).

Adding a demonstrative or definite marker to a numeral results in constructional tonal changes. The numeral shifts to $\{\mathrm{H}\}$ tone, and an immediately preceding noun shifts to $\{\mathrm{L}\}$-tone.
'All' quantifiers do not interact tonally with preceding words in a NP (§6.6).
Postposed pronominal possessors do not interact tonally with preceding words. However, preposed possessors control an $\{\mathrm{LH}\}$ overlay on the following possessum, as described in the following section.

### 6.2 Possessives

Kin terms and some other inalienablerelationship terms differ from other nouns in requiring that all possessors, including pronouns, be preposed. Alienables may have preposed or postposed possessors. The two series differ in form. The distinction between inalienable and alienable is less rigorous than in other Dogon languages.

There is no genitive morpheme on the possessor, and no genitive linker between possessor and possessed NP.

### 6.2.1 Alienable possession

Nonpronominal alienable possessors are always preposed to the possessum. Pronominal alienable possessors are usually postposed but can be preposed. Preposed but not postposed possessors control $\{\mathrm{LH}\}$ overlay on the possessed NP.

### 6.2.1.1 Nonpronominal NP as preposed alienable possessor

A nonpronominal possessor precedes the possessed NP with no overt genitive morpheme. The possessor has the same form it would have as a self-standing NP. The possessor-controlled tone overlay on the possessum is $\{\mathrm{LH}\}$, erasing the lexical tone melody. Examples with unmodified possessed nouns, singular and plural, are in (94). When the possessum ends in plural -gè, the final H-tone of the $\{\mathrm{LH}\}$ overlay is realized on it (-gé). Forms are from Boui.

$$
\begin{equation*}
\text { noun (X) gloss } \quad \text { 'Amadou's } \mathrm{X} \text { ' 'Amadou's Xs' } \tag{94}
\end{equation*}
$$

a. X has lexical /H/ melody
ná: 'cow' à:màdú ${ }^{\text {LH}}$ nǎ: à:màdú ${ }^{\text {LH}}$ nà:-gé
jíwá 'house' à:màdú ${ }^{\text {LH }}$ jìwá à:màdú ${ }^{\text {LH }}$ jìwà-gé
b. X has lexical/L/melody

gà:nà 'cat' à:màdú ${ }^{\text {LH} g a ̀: n a ́ ~ a ̀: m a ̀ d u ́ ~}{ }^{\text {LH gà:nà-gé }}$
c. X has lexical/HL/ melody
níyè 'bird' à:màdú ${ }^{\text {LH}}$ nìyé à:màdú ${ }^{\text {LH }}$ nìyè-gé
$\begin{array}{lllll}\text { d. X has lexical /LH/ melody } & & & & \\ \text { gàndìré } & \text { 'yoke' } & \text { à:màdú } & & \\ \text { LH gàndìré } & \text { à:màdú } & { }^{\text {LH gàndìrè-gé }} \\ \text { sìja } & \text { 'chicken' } & \text { à:màdú } & { }^{\text {LH}} \text { Sìjá } & \text { à:màdú }\end{array}$

### 6.2.1.2 Postposed pronominal alienable possessor

The postposed pronominal possessor forms for alienables follow the noun along with any modifying adjective and/or numeral. The pronominal possessor forms in (95) occur after unmodified possessed nouns. These possessors do not modify the tone of the preceding word(s). The key morpheme -w $\varepsilon$ (contracted in the 1 Sg form) is related to the noun wè: 'thing'. In other words, X ò-wé 'your-Sg X' was originally an appositional construction, roughly ' X [your thing x ]' with 'thing' a classifier coindexed with noun X .
(95) Postposed alienable pronominal possessors
category basic form tone-dropped

| a. | 1 Sg | mě: | mè: |
| :--- | :--- | :--- | :--- |
|  | 1 Pl | nì-w | nì-w |


c. 3 Sg nè-w $\varepsilon$ n -w

3Pl cè-wé cè-wè

For one speaker, the rising tone of the basic form is always audible in clear pronunciation. For another, the tone-dropped form is usual after a noun that contains a H -tone. For this speaker, the rising tone of the basic form is most clearly audible after an /L/-melody noun. However, there is little doubt that the rising tone pattern is basic in these forms.

If the possessed noun is nonsingular, the plural suffix -gè is added both to the noun and to the possessor ( $96 \mathrm{~b}, \mathrm{~d}$ ), as one would expect in an (originally) appositional structure. After the pronominal possessor, plural -gè always appears as H -toned -gé, confirming the primary tone pattern in (95) with rising tones.
a. gùlùmbá mě:
pigeon 1 SgPoss
'my pigeon'
$\begin{array}{ll}\text { b. gùlùmbà-gé } & \text { mè:-gé } \\ \text { pigeon-Pl } & \text { 'my pigeons' }\end{array}$
c. ìjò mě:
village 1 SgPoss
'my village'
d. ìjò-gè mè:-gé
village-Pl 1SgPoss-Pl
'my villages'

The syntactic distinction between alienable possession (pronominal possessor is postposed) and inalienable possession (pronominal possessor is preposed) is not consistent across all contexts. In elicitation, a speaker allows preposed pronominal possessors for alienables as an alternative to postposed possessors. He appears to favor preposed pronominal possessors when the NP is predicative, i.e. with the 'it is' clitic or the homophonous focus clitic. While he regularly gives (96a) above for 'my pigeon' as an argument in a clause ('my pigeon flew away', 'I found my pigeon'), he regularly shifts to a preposed possessor with the 'it is' or focus clitic, as in (97a), though he also accepts the postposed construction (97b).
a. mbó [mì
Dem [1SgPoss
${ }^{\text {LH }}$ gùlùmbá] $=\grave{\mathrm{w}}^{\mathrm{n}}$
pigeon]=it.is
'That's my pigeon.'
$\begin{array}{lll}\text { b. mbó } & \text { [gùlùmbá } & \text { mと̌] }=\grave{\mathrm{w}}^{\mathrm{n}} \\ \text { Dem } & \text { [pigeon } & 1 \text { SgPoss] }=\text { it.is }\end{array}$
'That's my pigeon.'
6.2.1.3 Tones of modifiers following an alienably possessed noun

This section considers combinations involving an alienable possessor (preposed or proposed) and an adjective, a numeral, or both. Combinations involving a determiner are dealt with in $\S 6.5$ below.

In the sequence Poss-N-Adj(-Pl), the possessor-controlled overlay $\{\mathrm{LH}\}$ is realized on the N -Adj $(-\mathrm{Pl})$ sequence taken as a whole, not just on the noun.
a. nà: ${ }^{\text {L }}$ jémé(-gé)
cow black(-Pl)
'black cow(s)'
b. à:màdú ${ }^{\text {LH }}[$ nà: jèmé $]$

A [cow black]
'Amadou's black cow'

$$
\begin{array}{cll}
\text { c. à:màdú } & \begin{array}{ll}
\text { LH }
\end{array} \text { nà: } & \text { jèmè-gé }] \\
\text { A } & {[\text { cow }} & \text { black-Pl }]
\end{array}
$$

'Amadou's black cows'

Likewise, the possessor-controlled $\{\mathrm{LH}\}$ overlay is realized on the entire sequence N-Pl-Num (99b) or N-Adj-Num-Pl (99d) when a numeral is added to the mix. Observe that the plural morpheme (allomorph ngé) follows the numeral when both a possessor and an adjective are present (99d). This suggests that the bracketing in (99c) breaks down when a possessor is added, fusing the N-Adj and numeral into a more tightly-knit unit, in both linear syntax and tonosyntax. Perhaps related to this fusion is the fact that Adjective-Numeral Inversion optionally applies (99e). In (99e), the full roster of three plural morphemes seems to be the ideal, but in multiple repetitions by a speaker one or both of the nonfinal plural morphemes was sometimes omitted.
a. ná:-gé tà:ndì
cow-Pl three
'three cows'
b.

| à:màdú | LH $[$ nà:-gè <br> A | tà:ndì-ygé $]$ |
| :--- | :--- | :--- |
| $[$ cow-Pl | three-Pl] |  |

'Amadou's three cows'
c. [nà: ${ }^{\text {L }}$ jémé-gé] tà:ndì
[cow black-Pl] three
'three black cows.'
d. à:màdú ${ }^{\text {LH }}[$ nà: jèmè tà:ndì-ŋgé]

A [cow black three-Pl]
'Amadou's three black cows.'
e. à:màdú $\quad{ }^{\text {LH }}[$ nà:(-gè)
A tà:ndì(-ngè) jèmè-gé $]$
$[=(\mathrm{d})]$

A postposed pronominal possessor follows N -Adj and may precede or follow a numeral. The possessor has no effect on the tones of these other words, consistent with its basically appositional nature. However, when a numeral precedes, the presence of a possessor forces the numeral to add an overt plural morpheme; contrast (100b) below with (99a) above. When both an adjective and a numeral are present, the linear order may be N-Adj-Num-Poss (100c) or N-Adj-Poss-Num (100d). Interestingly, a speaker rejected Adjective-Numeral Inversion (100e), regardless of
tones on the words preceding the adjective, though he freely allowed inversion with a preposed nonpronominal possessor, see (99e) above. A possible explanation for the badness of $(100 \mathrm{e})$ is that such a sequence forces the speaker to decide whether to allow the adjective to control tone-dropping on the numeral and (at a distance) on the noun. This issue does not arise with a preposed possessor, which itself controls tones on the following words.
(100)
a. [nà: ${ }^{\text {L }}$ jémé] mě:
[cow black] 1SgPoss
'my black cow'
b. ná:-gé tá:ndí-ggé mè:-gé
cow-Pl three-Pl 1SgPoss-Pl
'my three cows'
c. [nà: ${ }^{\text {L }}$ jémé-gé] mè:-gè tá:ndí [cow black-Pl] 1SgPoss-Pl three 'my three black cows'
d. nà: ${ }^{\text {l }}$ jémé-gé tá:ndí-ygé mè:-gé
cow black-Pl three-Pl 1SgPoss-Pl [=(c)]
e. \#[na:(-ge) ta:ndi(-ŋge) jémé-gé] mè:-gé
\#[cow(-Pl) three(-Pl) black-Pl] 2SgPoss-Pl
[ungrammatical regardless of tones on 'cow' and 'three']

### 6.2.2 Inalienable possession

Kin terms and other inalienables differ from ordinary (alienable) nouns in that a pronominal (as well as nonpronominal) possessor must precede the possessed NP. Alienables allow both preposed and postposed possessors, so it is not clear how sharp the alienability distinction is.

A preposed pronominal possessor controls the same $\{\mathrm{LH}\}$ overlay on the possessed NP as does a preposed nonpronominal possessor: mì ${ }^{\text {LH }}$ kògó 'my head' (alternative to kògò mě:), ò ${ }^{\mathrm{LH}}$ tùmá ‘your-Sg stick' (alternative to túmá j̀-wé).

### 6.2.2.1 Kin terms and similar relationship terms

The basic forms of inalienable relationship terms are in (101) for Boui and (102) for Ningo. The sibling terms are also used for parallel cousins and for siblings-in-law. All
noncomposite kin terms are lexically /L/-toned, and except for the monosyllabic variant for 'mother' (101c) they have $\{\mathrm{LH}\}$ tone overlay when possessed. The terms in (101a) are more or less unsegmentable. In (101b), the possessed form appears to be reduplicative. In (101c), one variant (possessed or not) looks like a frozen reduplication. In (101d), the final -yò is clearly segmentable in nèjì-yò 'nephew/niece', compare nèjì 'mother's brother', and one might extend this by analogy to sèjì-yò 'grandchild' (another descending genealogical category) in spite of the absence of an unsuffixed counterpart. The terms in (101e) are optional composite kin terms, combining 'father' or 'mother' with 'small' (wéní-wè) or páy, cf. báy 'big'. Father's brothers may also be called just 'father', and mother's sisters may also be called just 'mother'.
(101) Kin terms (Boui)
unpossessed 'my X' gloss
a. simple kin terms with $\{\mathrm{LH}\}$ possessum overlay
bò: mì ${ }^{\text {LH}} \mathrm{b}$ ̌̌: 'agemate'
mbò: mì ${ }^{\text {LH }} \mathrm{mb}$ y̌: 'grandfather'
èlà mì ${ }^{\text {LHèlá }}$ 'co-wife'
màmà mì ${ }^{\text {LH }}$ màmá 'grandmother'
nèjì mì ${ }^{\text {LH }}$ nèjí
nènjè mì ${ }^{\text {LH }}$ nènjjé 'father's sister; mother's co-wife'
sìjò mì ${ }^{\text {LH }}$ sìjó $\quad$ 'father's younger brother'
tìyè mì ${ }^{\text {LH }}$ tìyé $\quad$ 'cross-cousin'
wàyà mì ${ }^{\text {LH }}$ wàyé 'friend'
nè:wè mì ${ }^{L H} n \grave{\text { nè: }} \quad \mathrm{\varepsilon} \quad$ 'younger sibling'
àmàlì mì LHàmàlí 'parent-in-law'
nòmòlì mì ${ }^{\text {LH }}$ nòmòlí
'person with the same name'
b. reduplicative in possessum form
bà: mì ${ }^{\text {LH}}$ bàwá
dè: mì ${ }^{\text {LH }}$ dèdé
'father'
'elder sibling'
c. optionally reduplicative
nè: mì ${ }^{L} n \grave{\text { : }}$
nènè mì ${ }^{\text {LH }}$ nèné
'mother'
d. suffix -yò
sèjì-yò mì ${ }^{\text {LH }}$ sèjì-yó $\quad$ 'grandchild'
nèjì-yò mì ${ }^{\text {LH }}$ nèjì-yó 'nephew/niece', cf. nèjì (101a)
e. kin term plus size adjective ('big' or 'small'), cf. báy 'big' bà: páy mì ${ }^{\text {LH }}$ [bà: pǎy] 'father's elder brother' nè: páy mì ${ }^{\text {LH }}$ [nè: pǎy] 'mother's elder sister' nè: wéní-wè mì ${ }^{\text {LH }}[\mathrm{n}$ è: wènì-wé] 'mother's younger sister'
(102) Kin terms (Ningo)
unpossessed 'my X' gloss
a. simple kin terms
\{LH\} possessum overlay as in Boui
bò: mì ${ }^{\text {LH}}$ bǒ: 'agemate, partner' (plural mì ${ }^{\text {LH}}$ bò:-gé)
dè: mì ${ }^{\text {LH }}$ dě: $\quad$ 'elder sibling' (plural mì ${ }^{\text {LH }}$ dè:-gé)
mbó: mì ${ }^{\mathrm{LH}} \mathrm{mb}$ : 'grandfather' (either side)
èlà mì LHèlá 'co-wife'
màmà mì ${ }^{\text {LH }}$ màmá 'grandmother' (either side)
nàlì mì ${ }^{\text {LH }}$ nàlí $\quad$ 'friend' (more common)
nènjè mì ${ }^{\text {LH }}$ nènjjé 'father's sister; mother's co-wife'
nòbè mì ${ }^{\text {LH }}$ nòbé 'younger same-sex sibling'
tìyè mì ${ }^{\text {LHtìyé }}$ 'cross-cousin'
wàyè mì ${ }^{\text {LH }}$ wàyé 'friend' (less common word)
àmàlì mì LHàmàlí 'parent-in-law'
nòmòlì mì ${ }^{\text {LH }}$ nòmòlí 'person with the same name'
pògìyè mì ${ }^{\text {LH}}$ pògìyé 'cross-sex sibling'
$\{L\}$ possessum overlay versus $\{L H\}$ in Boui
nèjì mì Lnèjì 'mother's brother'
sìjò mì Lsìj̀̀ 'father's younger brother'
sèjì mì ${ }^{\text {Lsèjì }} \quad$ 'grandmother' (either side)
b. optionally reduplicative, $\{\mathrm{L}\}$ in unreduplicated possessum
bà: mì Lbà:, 'father' (plural mì ${ }^{\text {LH}}$ bà:-gé)
$\sim$ mì ${ }^{\text {LH }}$ bàbá
c. nì: mì ${ }^{\text {nì̀: }}$ 'mother'
$\sim$ mì ${ }^{\text {LH }}$ nèné
d. sèjì-yò mì ${ }^{\text {LH }}$ sèjì-yó 'grandchild'
nèjì-yò mì ${ }^{\text {LH }}$ nèjì-yó $\quad$ 'nephew/niece'
e. parents siblings (noun plus adjective)
parent term with shortened vowel
bà páy mì ${ }^{\text {LH }}$ [bà pǎy] 'father's elder brother'

```
parent term with long vowel
    nì: páy mì }\mp@subsup{}{}{\mathrm{ LH}[nì: pǎy] 'mother's elder sister'
    nì: ' ség\varepsiloń mì }\mp@subsup{}{}{LH}[nì: s\varepsiloǹg\varepsiloń] 'mother's younger sister'
```

Certain close kin terms may be used as vocatives, in the possessed-noun tonal form but without an overt 1Sg possessor. For 'father' and 'mother', the reduplicative variants are required in this context. '(Hey) Dad!' is bàwá (Boui) or bàbá (Ningo). '(Hey) Mom!' is nèné (Boui = Ningo). Boui also has dèdé 'hey (elder sibling)!' versus unreduplicated Ningo vocative dě: . Other vocatives are mby̌: '(hey) Grandpa!' and màmá '(hey) Grandma!' These forms may also be used to address nonrelatives of the appropriate age relative to the speaker.
bé: 'child', bànà 'man', and yé: 'woman' are basically alienable nouns, but they can take possessors in kin-term contexts, in which case bànà means 'husband' and yé: means 'wife'. In Boui, a pronominal possessor may be preposed (inalienable construction) or postposed (typically the alienable construction), e.g. mì ${ }^{\text {LH }}$ bě: or bé: mě: 'my child', mì ${ }^{\text {LH}}$ bàná 'my husband', mì Hé: 'my wife'.

### 6.2.2.2 Tones of modifiers following an inalienably possessed noun

There is a bracketing difference between Poss- N in alienable and inalienable constructions. The difference has consequences both for tones and for morphology (presence/absence of plural suffix). Consider (103).

|  | sàydú | ${ }^{\text {LH [jìwà-gè }}$ | kùlèy ${ }^{\text {n }}$-ŋgé] |
| :---: | :---: | :---: | :---: |
|  | Seydou | [house-Pl | six-Pl] |
|  | 'Seydou' | ix houses' |  |

b. [sàydú ${ }^{\text {LH }}$ sìj̀̀-gé] kùlèy ${ }^{\text {n }}$
[Seydou uncle-Pl] six
'Seydou's six uncles'

In (103a), [house six] as a whole is subject to the $\{\mathrm{LH}\}$ possessum overlay. Since the numeral is part of the possessor-controlled domain, it has plural suffix -nge. In (103b), only 'uncle' is subject to the $\{\mathrm{LH}\}$ overlay, and the numeral lacks the plural suffix as in simple N -Num combinations like jíwá-gé kùlèy 'six houses'.

There is no bracketing difference between alienable and inalienable when the possessed NP is just an N-Adj combination (104).

[^0]```
b. sàydú [H[sìjò bày-gé]
    Seydou [uncle big-Pl]
    `Seydou's big uncles'
```

There is no overt difference between alienably and inalienably possessed N-Dem sequences. However, the domain of the $\{\mathrm{LH}\}$ overlay is not transparent in these combinations (it could be analysed as ending with the noun, or as including mbó), and a covert bracketing distinction cannot be ruled out.
a. sàydú ${ }^{L H}$ jìwà-gè mbó-gè

Seydou house-Pl Dem-Pl
'these houses of Seydou's'
b. sàydú ${ }^{\text {LH }}$ sìjò-gè mbó-gè

Seydou uncle-Pl Dem-Pl
'these uncles of Seydou's'

### 6.2.3 Recursive possession

Recursive possession of the type [[X's Y]'s Z] is possible. It comes out as [[X ${ }^{\mathrm{LH}} \mathrm{Y}$ ] $\left.{ }^{\mathrm{LH}} \mathrm{Z}\right]$ with both Y and Z marked by the possessor-controlled $\{\mathrm{LH}\}$ overlay, as in (106c). Kin terms have the same structure (106d).
a. í:njé $\quad{ }^{\text {LH }}$ dilló
dog tail
‘(the) dog's tail'
b. à:màdú $\quad{ }^{L H} i ̀: n j e ́ ~$

Amadou dog
'Amadou's dog'
c. [à:màdú $\quad{ }^{\text {LH}} \mathrm{ì}: \mathrm{jnj}$ j́ $\quad$ rì $] \quad{ }^{\text {LH }}$ dìló rì
[Amadou dog Def] tail Def
'Amadou's dog's tail'
d. [sàydú ${ }^{\left.\text {LH }_{\text {Sìjó }}\right]} \quad{ }^{\text {LH }}$ bàwá
[Seydou uncle] father
'Seydou's uncle's father'

However, when Y is indefinite in form, Y and Z are sometimes treated as a unit. In effect, $Y$ behaves like a compound initial in this case (107). Compare the bracketing
difference in English (audible prosodically and visible orthographically even without brackets) between [Henry's girls'] school and Henry's [girls school].

```
(107) à:màdú }\mp@subsup{}{}{\mathrm{ LH}[ì:njè dìló]
    Amadou [dog tail]
    'Amadou's dog's tail'
```


### 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 by $\{\mathrm{L}\}$ overlay before an adjective. The first adjective retains its lexical tones. Plural -gè, if present, follows the adjective only (108b). The tonosyntactic formula ( ${ }^{\mathrm{L}}$ indexes tone-dropping), disregarding the tone of the plural morpheme, is therefore $\left[\mathrm{N}^{\mathrm{L}} \operatorname{Adj}(-\mathrm{Pl})\right]$.
a. í: $\mathrm{nj} \dot{1}$
'dog'
ì:njè̀ ${ }^{L}$ jémé 'black dog'
ì:njè ${ }^{L}$ bíní-bíní $\quad$ 'big dog'
$\begin{array}{ll}\text { b. íi:njé-gé } & \text { 'dogs' } \\ \text { ì:njé }{ }^{\text {Lémé-gé }} & \text { 'black dogs' } \\ \text { ì:njé }{ }^{L} \text { bíní-bíní-gé } & \text { 'big dogs' }\end{array}$

If a second modifying adjective is added, it drops to $\{\mathrm{L}\}$. See §6.3.3.1 below.

### 6.3.2 Numeral-like àmbìlè-gè 'certain (ones)'

This stem occurs in $\{\mathrm{L}\}$-toned form after a lexically-toned noun (or N-Adj combination). The preservation of tonal melodies for the noun is regular for N -Num combinations, so àmbìlè-gè behaves like a numeral rather than an adjective tonosyntactically. Both the noun and àmbìlè have plural suffix -gè. This differs both from true N -Adj combinations (plural -gè only on the adjective) and from true N -Num combinations (plural -gè only on the noun, in the absence of a determiner). Definite rì is frequently added to the quantifier (rather than to the noun) as in (109).
àmbilì̀-gè commonly occurs in parallel paired clauses. The two NPs with àmbìlè-gè carve up a large set into two subsets, usually exhausting the larger set, with different properties. The noun denoting the set need not be repeated in the second clause. The first clause may end with higher than modal pitch (intonational mark of noncompletion), the second in distinctly low pitch (completion), symbols $\nearrow$ and $\searrow$.

| [yé:-gé | àmbì̀è-gé | rì] | ùn-ìyè $\nearrow$, |
| :--- | :--- | :--- | :--- |
| [woman-Pl | certain-Pl | Def] | go.Pfv-3PlSbj, |
| [àmbìlè-gé | rì] | ànj-ìyè $\downarrow$ |  |
| $[$ certain-Pl | Def] | remain.Pfv-3PlSbj |  |

'Some women went away, some (i.e. the others) stayed.'

My speakers rejected singular NPs with \#àmbìlè 'a certain (one)'.
For the Ningo speaker, àmbìlè-gè is in free variation with àmbìlè-gé-r-gè.
Etymologically, this consists of definite àmbìlè-gé rì, reanalysed as an unsegmentable stem without morpheme boundaries, plus another occurrence of plural -gè.

### 6.3.3 Expansions of adjective

### 6.3.3.1 Adjective sequences

§6.3.1 presented the basic noun-adjective construction, i.e. [ $\left.\mathrm{N}^{\mathrm{L}} \operatorname{Adj}(\mathrm{Pl})\right]$. When a second adjective is added, it is tone-dropped, leaving the first adjective as the only tonosyntactically free word (unless we take its H-tones as due to an overlay). The plural morpheme, if present, follows each adjective (110b), so the formula (omitting tones of the plural morphemes) is $\left[\mathrm{N}^{\mathrm{L}} \operatorname{Adj}(-\mathrm{Pl})^{\mathrm{L}} \operatorname{Adj}(-\mathrm{Pl})\right]$.
a. ì:njè ${ }^{L}$ (bíní)-bíní ${ }^{L}$ jèmè
dog (Rdp)-big black
'big black dog'
b. ì:njè ${ }^{L}$ (bíní)-bíní-gé ${ }^{\text {Ljèmè̀-gè }}$
dog (Rdp)-big-Pl black-Pl
'big black dogs'
c. jìwà ${ }^{\mathrm{L}}$ báy ${ }^{\mathrm{L}}$ pùl̀̀
house big white 'a big white house'
d. bòndò ${ }^{\mathrm{L}}$ kúnjú-gé ${ }^{\text {Lbày-gé rì }}$ deep.pond.bed old-Pl big-Pl Def 'the large old pond beds' (T7 @ 16:28)

An iterated adjective does not count as two separate adjectives for this purpose. The two parts of the iteration have the same tone.

```
(111) bò:L bíní-bíní
dike Rdp-big
    'big dike(s)' (T7 @ 16:31)
```


### 6.3.3.2 Adjectival intensifiers

Adjectival intensifiers are a subset of expressive adverbials that are associated with adjectival senses and may co-occur with an adjective. See §8.4.5.

### 6.3.3.3 'Good to eat'

A verbal noun of the relevant verb (here exemplified by 'eat') is preposed to an adjectival predicate. The construction is therefore of the literal type '[eating X] is good'. For positive 'be good', the predicative form used here is ( 3 Sg ) mò:-wn bó-Ø rather than the usual mò:- $\varnothing$ 'it is good' (§11.4.1.3).


### 6.4 NPs containing a numeral

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

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

Examples of nouns with numerals are in (113). Plural -gè is required by numerals greater than ' 1 '. In these nonsingular combinations, the noun retains its lexical tone and the numeral is $\{\mathrm{L}\}$-toned.
a. í: $\mathrm{njé}$
${ }^{\text {L tò:mà }}$
dog one
'one dog'
 dog-Pl two / three / five / ten 'two/three/five/ten dogs'

Singular demonstrative mbó (Boui) or énì (Ningo) retains its lexical H-tone after tò:mà ' 1 ' ( $114 \mathrm{a}-\mathrm{b})$. The usual raising of a final L -tone to H before definite rì is observed (114c-d).

| a. | í:njé | tò:mà |
| :--- | :--- | :--- |
| dog | mbó |  |
|  | one | Dem |
|  | 'this/that one dog' | (Boui) |

b. í:クgé tò:mà énì
dog one Dem.Near
'this/that one dog' (Ningo)
c. í:ŋgǵ tò:má rì
dog one Def
'the one dog' (Ningo)
d. í:njé tò:má rì
dog one Def 'the one dog' (Boui)

The tonally most complex case is when a noun combines with a nonsingular numeral plus a determiner (demonstrative or definite). The numeral now requires plural -yge. In Boui, addition of definite rì or plural rì-gè additionally triggers tonal changes in the noun, with $\{\mathrm{L}\}$ overlay, and the numeral, with $\{\mathrm{H}\}$ overlay, resulting in $\mathrm{N}^{\mathrm{L}}{ }^{\mathrm{H}} \mathrm{Num}$ Def omitting plural suffixes (115a). Addition of plural demonstrative mbó-gè results in a different tonal pattern, preserving the lexical tones of the noun and numeral, raising -yge on the numeral to -ŋgé, and dropping the tones of the demonstrative to mbò-gè. The formula for the result is $\mathrm{N}-\mathrm{Pl}{ }^{\mathrm{L}} \mathrm{Num}-\mathrm{Pl}^{\mathrm{H}}{ }^{\mathrm{L}}$ Dem- Pl including plural suffixes (115b).

$$
\begin{array}{llll}
\text { a. } & \text { ì:njè-gè }{ }^{L} & \text { Hní:ngá-ygè } & \text { rì(-gè) }  \tag{115}\\
& \text { dog-Pl } & \text { two-Pl } & \operatorname{Def}(-\mathrm{Pl}) \\
& \text { 'the two dogs' (Boui) } &
\end{array}
$$


dog-Pl two- $\mathrm{Pl} /$ three- $\mathrm{Pl} /$ five- $\mathrm{Pl} /$ ten- Pl Dem-Pl
'these two/three/five/ten dogs' (Boui)

In Ningo, addition of either the definite or demonstrative (hence N -Num-Def or N-Num-Dem) triggers the same tonal pattern found in the Boui N-Num-Def in (115a) above. Thus $\mathrm{N}^{\mathrm{L}}{ }^{\mathrm{H}} \mathrm{Num} \operatorname{Def}$ (116a) and $\mathrm{N}^{\mathrm{L}}{ }^{\mathrm{H}} \mathrm{Num} \operatorname{Dem}$ (116b), omitting plural suffixes. In this dialect, the demonstrative in (116b) keeps its lexical tones.
a. ì:ngè-gè ${ }^{L}$ Hní:ygá-ygé rì(-gè)
dog-Pl two-Pl $\quad \operatorname{Def}(-\mathrm{Pl})$
'the two dogs' (Ningo)


Patterns beginning $\mathrm{N}^{\mathrm{L}}{ }^{\mathrm{H}}$ Num, followed (in Boui) with a tone-dropped demonstrative, are reminiscent of the $\mathrm{N}^{\mathrm{L}}$-Adj1- ${ }^{\mathrm{L}}$ Adj2 pattern, where the first of two adjectives shows lexical tones (or possibly an $\{\mathrm{H}\}$ overlay) while both the noun and the second adjective are tone-dropped. In other words, the pitch peak is in the middle. This is a Tiranige specialty, whereas other Dogon languages favor a right-headed tonal pattern for unpossessed NPs where only the final word has an H-tone, or a left-headed tonal pattern for possessed NPs where only the initial possessor has an H-tone.

The regular N -Adj tone pattern is $\mathrm{N}^{\mathrm{L}} \operatorname{Adj}$ (117a) If a second adjective is added, it is tone-dropped, hence $\mathrm{N}^{\mathrm{L}} \operatorname{Adj} 1{ }^{\mathrm{L}}$ Adj2. The combination of N -Adj with ' 1 ', is consistent with this pattern, although tò:mà is already lexically L-toned (117b). If N -Adj is followed by a nonsingular numeral. the N -Adj has its regular tone pattern, and the numeral retains its lexical tones ( $117 \mathrm{c}-\mathrm{d}$ ).

$$
\begin{array}{lll}
\text { a. } & \text { ì:njè } \varepsilon^{L} & \text { bíní }  \tag{117}\\
& \text { dog } & \text { big } \\
& \text { 'a big dog' } & \text { (Boui) }
\end{array}
$$

b. ì:njè é $^{L} \quad$ bíní $\quad$ tò:mà
$\operatorname{dog} \quad$ big one
'one big dog' $($ (Boui $)$
$\begin{array}{lll}\text { c. ì:nj⿺辶 }{ }^{L} & \text { bíní-gé } & \text { nì:ygà } \\ \text { dog } & \text { big-Pl } & \text { two } \\ \text { 'two big dogs' (Boui) }\end{array}$
d. ì: $\mathrm{gg} \grave{\varepsilon ̃}^{\mathrm{L}}$ bíní-gé nì:ngà / tá:ndí dog big-Pl two / three 'two/three big dogs' (Ningo)

When a definite marker or demonstrative is added to a nonsingular N-Adj-Num, the resulting tone pattern is what we would expect by piecing together the regular tone patterns for N -Adj and (separately) Num-Def/Dem. In Boui, the N-Adj portion takes its regular $\mathrm{N}^{\mathrm{L}}$ Adj form. The numeral and determiner take the same tonal forms as they do without the adjective (118a-b).
a.

| ì:njè ${ }^{L}$ | bíní-gé | ${ }^{\text {Lnì:ngà-ngé }}{ }^{H}$ | ${ }^{\text {L }}$ mbò-gè |
| :--- | :--- | :--- | :--- |
| dog | big-Pl | two-Pl | Dem-Pl |
| 'these two big dogs' (Boui) |  |  |  |

'these two big dogs' (Boui)

dog big-Pl two-Pl Def 'the two big dogs' (Boui)

Ningo counterparts are in (119). Again the N-Adj string has its regular tonal pattern, and again the numeral-determiner string has the same tones it would have (in this dialect) without the adjective.

|  | $\begin{align*} & \text { ì:ngè }{ }^{L}  \tag{119}\\ & \operatorname{dog} \end{align*}$ | $\begin{aligned} & \text { bíní-gé } \\ & \text { big-Pl } \end{aligned}$ | $\begin{aligned} & \text { Híi:ggá-ngé } \\ & \text { two-Pl } \end{aligned}$ | Énì-gè <br> Dem.Near-Pl |
| :---: | :---: | :---: | :---: | :---: |
|  | 'these two big dogs' (Ningo) |  |  |  |
|  | ì:njè ${ }^{\text {L }}$ | bíní-gé | ${ }^{\text {Hiní: }}$ gá-ıgé | rì |
|  | dog | big-Pl | two-P1 | Def |
|  | the tw | big dogs' | ingo) |  |

When a N -(Adj-)Num sequence functions as internal head NP in a relative, it undergoes no further tonal changes. For example, (118b) above reappears as relative head in (120). (Determiners do not occur in internal head NPs.)

| (120) | $\left[\begin{array}{lll}\text { ì:njè } \\ & \text { bíní-gé } & \text { nì:ygà }\end{array}\right.$ | mì-gí | cèrè-gé | rì |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| [dog | big-Pl | two | 1Sg-Acc | bite.PfvRel-Pl | Def |
|  | 'the two big dogs that bit me' (Boui) |  |  |  |  |

The form of numerals and their effects on other words in unpossessed NPs can be summarized as (121) for the Boui dialect. The various numerals are lexically either $/ \mathrm{L} /$ or $/ \mathrm{H} /$-toned, but in all combinations discussed in this section the lexical tones are overridden by tonosyntactic overlays.
(121) a. Numerals greater than ' 1 ' end in plural -yge only when followed within the NP by a determiner (demonstrative or definite).
b. Numerals greater than ' 1 ' require plural marking on the preceding $\mathrm{N}(-\mathrm{Adj})$.
c. In the absence of a determiner, a numeral has no tonal effect on a preceding $\mathrm{N}(-A d j)$ combination, and the numeral itself shows $\{\mathrm{L}\}$ overlay if not already lexically /L/-toned.
d. In a Num-Dem sequence, if the numeral is tò:mà ' 1 ' the demonstrative retains its H -tone (mbó); if the numeral is nonsingular, the demonstrative drops to $\{\mathrm{L}\}$ and the numeral is subject to $\{\mathrm{LH}\}$ with the H-tone on the plural suffix.
e. In a Num-Def sequence, nonsingular numerals show $\{\mathrm{H}\}$ overlay if not already lexically $/ \mathrm{H} /$, and the tonal changes on the final syllable of the numeral (singular or nonsingular) are those that are regular before definite rì.

### 6.4.2 Adjective-Numeral Inversion

In the presence of a possessor or demonstrative, the sequence N -Adj-Num is optionally reordered as $\mathrm{N}-\mathrm{Num}-\mathrm{Adj}$. Examples involving a possessor ('Amadou') were given as ( $92 \mathrm{f} 1 / \mathrm{f} 2$ ) and ( $92 \mathrm{~g} 1 / \mathrm{g} 2$ ) in $\S 6.1 .1$ above.

A speaker rejected this inversion in relative-clause heads. He accepted (122a) but not (122b). \# means ungrammatical.
$\begin{array}{lll}\text { a. } & \left.\begin{array}{lll}{[j i ̀ w a ̀ ~} \\ & \text { wéní(-wè)-gé } & \text { nì: } \mathrm{ygà}] \\ & \text { [house } & \text { small(-Dim)-Pl } \\ \text { 'two] }\end{array}\right]\end{array}$
${ }^{\text {LH }}$ dùmbè-sà-gé rì 'the two small houses that fell' (Boui)


He likewise rejected inversion in N-Adj-Num combinations with a following demonstrative. (123a) cannot be inverted to (123b).
a


| b. \#jìwà ${ }^{\text {L }}$ house | ní:ngá-ŋgé | wéní-(wè-)gé | ${ }^{\text {L}} \text { mbò-gè }$ |
| :---: | :---: | :---: | :---: |
|  | two-Pl | small-(Dim-)Pl | Dem-Pl |
|  |  |  |  |

While grammaticality judgements in elicitation sessions need checking, the present data suggest that inversion is associated with possessed NPs for the Boui speaker.

The Ningo speaker allowed inversion in the combination with a demonstrative. Both uninverted N-Adj-Num and inverted N-Num-Adj have $\{\mathrm{L}\}$-toned noun, H-toned first modifier (arguably this is lexical /H/ melody), and $\{\mathrm{L}\}$-toned second modifier before the demonstrative (124a-b).


### 6.5 NP including a determiner

### 6.5.1 Prenominal demonstratives

For the Ningo speaker (at least), a discourse-definite demonstrative é can precede a noun (or a noun-like postposition). It occurs in the common phrase [é ${ }^{\text {LH }}$ tùnú] gì 'behind/after that', hence 'in addition to that, moreover'. é is treated as a possessor (hence the $\{\mathrm{LH}\}$ overlay on the noun), so there is no additional prenominal slot aside from possessor.

Discourse-definite érì ~ érí can also precede a noun, as a kind of possessor 'the X of that' = 'that X '. Again the latter has $\{\mathrm{LH}\}$ overlay: érí ${ }^{\text {LH }}$ jùgú '(at) that time' (T3, (544)) (< jùgù 'week; time'). Except in lexicalized phrases like this, the noun is often definite-marked: [érí ${ }^{\mathrm{LH}}$ gìbá rì] gì (Ningo) 'in that house' (< gíbá), érí LHànìyá rì 'that intention, the intention (=plan) of (doing) that' (T7 @ 20:39).

### 6.5.2 Noun plus demonstrative

For demonstratives including mbó 'this' and its plural mbó-gè, see §4.4.1.2. This demonstrative may follow a noun, $\mathrm{N}-\mathrm{Adj}$, or N -(Adj-)Num. It drops tones to ${ }^{\mathrm{L}} \mathrm{mbò}$ (plural ${ }^{\text {L mbò-gè) in these combinations, and it has no tonal effect on the preceding }}$ elements. It does, however, force a preceding numeral to add plural suffix -ngé
(125c). This suffix is H-toned whether the numeral stem itself is L-toned (i.e. after a noun or $\mathrm{N}-\mathrm{Adj}$ ) or H -toned (absolute function).
a. í:njé ${ }^{\text {L }}$ mbò
b. [ì:njè ${ }^{L}$ jémé ${ }^{L} m b o ̀$
[ì:njě ${ }^{\mathrm{L}}$ jémé-gé] ${ }^{\text {L }}$ mbò-gè
c. [í:njé-gé tà:ndì-ngé] ${ }^{\text {L mbò-gè 'these/those three dogs' }}$

In (125a-b), mbò has no tonal or other effect on the preceding NP-internal string. In (125c), it again has no tonal effect, but it does require the additional plural morpheme (here -ngé) after the numeral, compare í:njé-gé tà:ndì 'three dogs'.

When the noun is possessed (alienably or inalienably), mbó recovers its lexical H-tone (126). 'Dog' in (126a) and 'uncles' in (126b) have possessum \{LH\} overlay but their final H is lost by tone sandhi before the H -toned mbó.
$\begin{array}{lcr}\text { a. à:màdú } & { }^{\text {LH}} \mathrm{i}: \text { :njè } & \text { mbó } \\ \text { A } & \operatorname{dog} & \text { Dem } \\ & \text { 'this/that } & \text { dog of Amadou's' }\end{array}$
$\begin{array}{ccc}\text { b. à:màdú } & \text { LH }_{\text {Sìjò-gè }} & \text { mbó-gè } \\ \text { A } & \text { uncle-Pl } & \text { Dem-Pl }\end{array}$
'these/those uncles of Amadou's'
One could alternatively attempt to account for H -toned singular mbó in (126a) as bearing the H -tone component of the $\{\mathrm{LH}\}$ overlay controlled by the possessor. In this analysis, the tonosyntactic bracketing of (126a) would be à:màdú ${ }^{\text {LH }}[\mathrm{i}: n j$ jè mbó]. However, this reasoning would lead us to expect the incorrect plural \#mbò-gé instead of the observed plural mbó-gè in (126b). This confirms that the demonstrative is external to the domain of the $\{\mathrm{LH}\}$ possessum overlay. Therefore 'dog' in (126a) and 'uncles' in (126b) must constitute the domains of the $\{\mathrm{LH}\}$ overlay. As indicated above, the final H-tone is then lost by tone sandhi. Contrast (126b) above with (127a) below, where plural -gè on the adjective does become H -toned, and is therefore clearly within the domain of the $\{\mathrm{LH}\}$ overlay controlled by the possessor. Again the final H -tone is lost by tone sandhi in (127b).

[^1]```
b. à:màdú \({ }^{\text {LH }}[\mathrm{ìj:njè} \mathrm{jèmè-gè]} \mathrm{mbó-gè}\)
Amadou [dog black-Pl] Dem-Pl
'these/those black dogs of Amadou's'
```

A noun may also be followed by a composite demonstrative, near-distant é-wò rì or far-distant yá-wò rì (\$4.4.1.2). These are specialized, slightly irregular relative clauses and include definite rì. The definite morpheme is not used after mbó.


### 6.5.3 Noun plus definite rì

Definite rì (§4.4.1.1) can be added to a singular or plural noun, $\mathrm{N}-\mathrm{Adj}$, or N -(Adj-)Num combination. Tap $r$ is not normally allowed word-initially, suggesting that rì is an enclitic. Consistently with this, rì cannot be used absolutely (i.e. as one-word pronoun-like NP). It is always itself L-toned. It does not control a stem-wide tone overlay on a preceding noun or N -Adj combination, but it can modify the tone of the immediately preceding syllable. For example, when rì follows an /L/-melody noun (129a) or a N-Adj1-Adj2 combination where the second adjective has $\{\mathrm{L}\}$ melody (129b), the syllable preceding rì is raised to H. Less consistently, in Boui dialect a preceding all-H-toned singular stem may drop its final syllable to L before rì (129c).

| a. nà:ngé | rì |
| :--- | :--- |
| meal | Def |
| 'the meal' | (nà:ygè) |

b. ì:nje ${ }^{\mathrm{L}}$ wéní-wè ${ }^{\mathrm{L}} \mathrm{j}$ èmé rì
dog small-Dim black Def
'the small black dog' (<ì:nj $\tilde{\varepsilon}^{\mathrm{L}}$ wéní-wè ${ }^{\mathrm{L}_{\mathrm{j}}}{ }^{\text {èmè }}$ )
c. í:njé rì (variant í:jjè rì)
dog Def
'the dog' (< í:njé)
d. í:njé-gé rì
dog-Pl Def
'the dogs'
e. ì̀:jjè $\varepsilon^{L}$ wéní-wè rì
dog small-Dim Def
'the small dog'
f. sàydú ${ }^{\text {LH }}$ jìwá rà

Seydou house Def
'Seydou's house (definite)'
The high-frequency ontological noun gélé 'place' (plural gélé-gé) has /H/ melody, but it has $\{\mathrm{LH}\}$ overlay before the definite marker: [ ${ }^{\mathrm{LH}} \mathrm{g}$ èlé r] gì 'in the place', plural [ ${ }^{\text {LH }}$ gèlغ̀-gé r] gì 'in the places'. In effect, there is a covert possessor that triggers the $\{\mathrm{LH}\}$ possessum overlay. [ ${ }^{\mathrm{LH}} \mathrm{g}$ èlè-gé r] gì 'in the places' is frequent in the pragmatic sense 'in our country/zone'. See T7 @ 09:34 and @ 14:36.

Like demonstratives, definite rì forces plural suffix -ngé on a preceding numeral. Unlike demonstrative, definite rì also forces $\{\mathrm{H}\}$ overlay on the numeral stem, not just on the plural suffix.

```
(130) ì:nj\varepsiloň }\mp@subsup{}{}{L}\mathrm{ jémé-gé cé:jó-\géH
dog black-Pl four-Pl Def
'the four black dogs'(<ì:njè }\mp@subsup{}{}{L}\mathrm{ jémé-gé cè:jò)
```

Definite rì is not added to demonstrative mbó, but it is a fixed part of the alternative, relative-clause-like demonstratives é-wò rì and yá-wò rì.

Definite rì is common after the verb-participle in relative clauses ( $\$ 14.6 .1$ ).

### 6.5.4 ní following definite

In a single textual passage, ní of uncertain function follows a definite noun. See T7 @ 17:23. Efforts to elicit further examples of ní were unsuccessful.

### 6.6 Universal and distributive quantifiers

### 6.6.1 'All' or 'each' (címà, póy ~ pós)

The universal quantifier címà (Boui) or póy ~ pós (Ningo) 'all' occurs at the end of a NP, following even definite rì. When the quantifier occurs at the end of an NP, it is often ${ }^{\text {L }}$ cìmà, with the same tone-dropping that affects numerals. The NP is generally
determined (definite or demonstrative). If the quantified-over NP is countable, plural -gè is present. When címà remains HL-toned after an NP as in (131b), it is arguably appositional.

| a. [sàgàdàlà-gé [young.person-Pl |  | ] | jer | , |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Def | all] | [travel(n) | Lo | (PFv-3PISbj |
|  |  |  |  |  |  |

b. [nà:-gè ${ }^{\mathrm{L}}$ tá:ndí-ngé mè:-gé rì] címà túlé-y ${ }^{\mathrm{n}}$ [cow-Pl three-Pl 1SgPoss-Pl Def] all sell.Pfv-1SgSbj 'I sold all three of my cows.' (Boui) [cf. Ningo nà:-ŋgè̀ tá:ndí-ngé mè:-ŋgé rì]
c. [séngé mě: rì cìmà] túĺ́-ỳn [millet 1SgPoss Def all] sell.Pfv-1 SgSbj 'I sold all my millet.' (Boui)
címà can occur in absolute function (i.e. as a one-word NP). In (132) it appears as H-toned címá, probably due to Rightward H-Spreading (§3.6.3.4).

| sàydù címá | nè:-Ø |  |
| :--- | :--- | :--- |
| Seydou | all | eat.meal.Pfv-3SgSbj |

'Seydou ate everything.' (Boui)

For Ningo, póy is the usual 'all' quantifier, but pós is common in emphatic contexts. Both can be used under negation in the sense '(not) any' (póy) or '(not) any at all' (pós).
(133) [tòrrà póy] órâ-Ø
[interference all] not.be-3SgSbj
'There is no interference.' (T7 @ 20:22, < tòrrá)
In addition to summative 'all', the universal quantifiers can also function as distributive 'each' (after a singular noun). An example is ndà: póy 'each person' in T7 ( 03:15.

### 6.7 Accusative (gì)

Accusative gì occurs with pronouns and NPs that function as direct or (for ditransitives) indirect objects. There is a single occurrence of gì at the end of the NP, so it behaves as a postposition.

Accusative marking is systematic for pronouns, including 3 Sg and 3 Pl with nonhuman as well as human reference. For example, 3Sg accusative nà-gí in T7 @ 16:40 refers to weeds. For nonpronominal NPs, accusative marking is regular if the referent is human. If the referent or a nonpronominal NP is nonhuman, accusative marking is usually omitted, but it can appear, for example in comparatives with adjectival predicates, see (353) in §12.1.4.

The form is L-toned gì after a word (or compound final) that contains an H-tone, including $\{\mathrm{LH}\}$ toned nouns. However, it is raised to H-toned gí after an all-L-toned word, such as a noun with lexical/L/melody (134c) or the second adjective in N -Adj1-Adj2 (135). For pronominal accusatives like 1 Sg mì-gí, see (50) in §4.3.1.

$$
\begin{equation*}
\text { noun } \quad \text { with gì } \quad \text { gloss } \tag{134}
\end{equation*}
$$

a. $\{\mathrm{H}\}$-toned
dú: dú: gì '(a/the) blacksmith'
ndà-yé: ndà-yé: gì '(a/the) woman'
b. $\{\mathrm{LH}\}$-toned à:màdú à:màdú gì 'Amadou' (man's name)
c. $\{\mathrm{HL}\}$-toned bó:wò bó:wò gì 'Bobo (ethnic group) person'
d. $\{\mathrm{L}\}$-toned bùnì bùnì gí '(a/the) white person'
(135) [bè: ${ }^{\text {L }}$ bíní-bíní ${ }^{\text {L}} \mathrm{j}$ èmè gí] mì ${ }^{{ }^{\text {LH}}{ }_{t} \text { èwé }}$ [child fat-fat black Acc] $1 \mathrm{Sg} \operatorname{Sbj}$ hit.Pfv 'I hit-Past the fat black child [focus].'

The accusative marker cannot be combined with the focus clitic (which is identical to the 'it is' clitic). When the object is focalized, one but not both may occur.
gì is the accusative marker in both dialects, but in Ningo it is also the basic spatial postposition 'in, at', corresponding to Boui dialect gà (§8.2.3.2).

## 7 Coordination

### 7.1 NP coordination

### 7.1.1 NP conjunction ( X yà Y yà $)$

The conjunction particle yà 'and' is added to both left and right conjuncts.
a. [bànà-gè yà] [yé:-gé yà] [man-Pl and] [woman-Pl and] 'men and women'
b. [à:màdú yà] [nà ${ }^{\text {LH }}$ bàwá yà $]$ [Amadou and] [3SgPoss father and] 'Amadou and his father'

This construction can be used to conjoin NPs (including pronouns) and adverbial phrases (including PPs).
(137) [bòmòkó yà yà] [sègù yá yà] ${ }^{\text {Lb }}$-à:
[Bamako Loc and] [Segou Loc and] be-3PlSbj
'They are in Bamako and Segou (cities).'

### 7.1.1.1 Ordering of conjuncts

The order of the conjuncts is usually free. In cases like 'Amadou and his father' just given, where one referent is defined with respect to the other, the central referent normally precedes the other.

When both conjuncts are pronouns, a speaker preferred ordering based on 1st $>2 \mathrm{nd}>3 \mathrm{rd}$ (138), but the order is not rigid.
a. [mì yà] [ò
[1Sg and] [2Sg and]
'you-Sg and me'
b. [ò yà] [nà yà]
[2Sg and] [3Sg and] 'you-Sg and him/her'

### 7.1.1.2 ' X and Y ' with internally complex conjuncts

NP-internal modifiers that have scope over both conjuncts are normally repeated to form parallelistic NPs. For example, 'fat men and women' is expressed as 'fat men and fat women' (if that is the sense intended). Likewise, 'my sheep and goats' is expressed as 'my sheep and my goats' (139). Even a nonpronominal possessor NP can be repeated, though it can alternatively be replaced by a resumptive third person possessor pronoun (139).

(139) [sàydú $\quad$ LHàmbá yà] | [sàydú / nà | ${ }^{\text {LH }}$ ùná | yà $]$ |
| :--- | :--- | :--- | :--- |

[Seydou sheep and] [Seydou/3SgPoss goat and]
'Seydou's sheep and (his) goat'
Example (139) also shows that yà is external to the domain of the possessorcontrolled $\{\mathrm{LH}\}$ overlay.

Accusative gì and postpositions are added once, after the entire conjoined NP.

| (140) | $[$ [yé:-gé yà $]$ | $[$ bànà-gè yá $]$ | gì $]$ | bálí-yé-ỳn |
| :--- | :--- | :--- | :--- | :--- |
| [[woman-Pl and $]$ | $[$ man-Pl and $]$ | Acc $]$ | see-MP.Pfv- $1 \operatorname{SgSbj}$ |  |
| 'I saw (the) women and (the) men.' |  |  |  |  |

yà is basically L-toned. However, it is raised to H-tone before accusative gì (140), even though lexically /L/-toned nouns remain low-toned before gì, as in bànà gì '(a) man (accusative). In addition, the left conjunct optionally has an intonational pitch rise on the final syllable, i.e. on yà, so it may sound H -toned.

For conjoined NPs as relative heads, see §14.2.4.
7.1.1.3 List "intonation" with yâ: in longer conjoined NPs

Extended conjunctions with three or more conjuncts may be treated prosodically as open-ended lists. The 'and' conjunction occurs after each conjunct, but now takes the form yâ: with prolonged vowel and $\langle\mathrm{HL}>$ tone (or falling pitch). One can argue that this is a special intonational modification of yà, but it is distinct from the simple terminal pitch rise typical of "incompleteness" intonation, as in simple two-part [X yà] [ Y yà] conjunctions (preceding subsection).
(141)
nà:-ygè-gír-gé
cow-Pl-herder-Pl à:nà-gír-gé
$\begin{array}{ll}\text { yâ:, ùnà-gír-gé } \\ \text { and, } & \text { goat-tend.Agent-Pl }\end{array}$ yâ:, and, yâ:, kàlmà-kání-gé yâ:, sheep-tend.Agent-Pl and, clear.field-do.Agent-Pl and, tòn-tómí-gé yâ:, é-rò nì ${ }^{\text {LH}}$ bǒ: planting(n)-plant(v).Agent-Pl and, thus 1 Pl be '(They are) cowherds, and goatherds, and sheep-herds, and field clearers, and planters. That [focus] is how we are.' (Ningo, T7 @ 09:52)

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

The rough equivalent of conjunction for verbs, VPs, and clauses (including subjects) is direct or loose chaining, see chapter 15 . Verbs, VPs, and clauses are not conjoined by yà. However, terminal high pitch (symbol $\nearrow$ ), marking incompletion, can function somewhat like conjunction ('and' or 'then').
a. nǎ: bèjè $\nearrow$, kè-lá àlàndì-yè, 3SgSbj.Fut store(v).Pfv, 3PlSbj-Fut rest(v)-MP.Pfv, 'He will store it (=clothing) away, (then) they (=novices) will rest.'
(Ningo T7@ 08:56)
b. nǎ: ùnjùgè $\nearrow$, nǎ: pángá dènè $\searrow$

3Sg.Fut get.up.Pfv, 3 SgSbj .Fut granary take.out.ration.Pfv
'He will get up and he will take out the daily ration from the granary.'
(Ningo T7 @ 12:01)

### 7.2 Disjunction

### 7.2.1 'Or' particles

'Or' disjunctive particles are unrelated in Tiranige to the polar interrogative clitic lè and its variants (§13.2.1).

### 7.2.1.1 mà $\rightarrow$ 'or' preceding second disjunct in indicative context

mà $\rightarrow$ 'or' is added before the second NP coordinand in (143). The 'or' phrase is added after a complete clause, in the fashion of an afterthought.
(143) [dèw ${ }^{\mathrm{n}}$ címà] [ámbá nì sé:m-bò] [mà $\rightarrow$ ùnà] [day all] [sheep 1 PlSbj slaughter-Ipfv] [or goat] 'Every day we slaughter a sheep or a goat.'

### 7.2.1.2 wá after each disjunct in interrogative context

In interrogative contexts, wá 'or' is added at the end of both disjuncts if they are clause-internal constituents (NPs, adverbial phrases).

```
(144) [ámbá wá] [ùnà wá] \({ }^{\text {LH}}\) sè:m-bò-Ẃ [sheep or] [goat or] slaughter-Ipfv- 2 Sg 'Will you-Sg slaughter a sheep or a goat [focus]?'
```


### 7.2.1.3 wô: ‘whether' after each disjunct in dubitative context

This clause-final particle occurs in 'whether X or Y ' contexts, where either choice is possible. A good example is T7 @ 04:47-04:53 where three alternatives are presented for the naming of a newborn child.

### 7.2.1.4 Numerical range (e.g. 'one or two')

When the "disjunction" is really a range from a low number to a slightly higher number, there is no disjunctive particle. In textual excerpt (145), the lower value comes first, and is marked by nonterminal intonation (final pitch rise).
(145) [yà:gú tò:mà $\nearrow$ ] [yà:g-gé nì:ngà] kè-lá nàyè [night one] [night-Pl two] 3PlSbj-Fut spend.night.Pfv 'They will spend one or two nights (there).' (Ningo T7 @ 09:17)

### 7.2.2 Clause-level disjunction

If the choice is between two entire propositions, wá is added once, after the first alternative. In this position it is intonationally prolonged (146).
(146) [bòmòkó yà] ${ }^{\text {LH }}$ ùm-bò-w wá $\rightarrow$,
[Bamako Loc] go-Ipfv-2Sg or,
[sègù yá] ${ }^{\text {LH }}$ ùm-bò-ẃ
[Segou Loc] go-Ipfv-2Sg
'Is it to Bamako [focus] that you-Sg will go, or is it to Segou [focus] that youSg will go?'

## 8 Postpositions and adverbials

Tiranige has postpositions for spatiotemporal relations, and for instrumental and purposive. Accusative gì can also be considered to be a postposition since it follows complete NPs.

### 8.1 Dative and instrumental

### 8.1.1 Dative absent

No dative postposition occurs with ditransitives like 'give' and 'say'. Such verbs use the regular accusative marker on NPs that denote indirect objects (147a-b). The same ditransitive syntax is used with benefactive derivatives (§9.4.2.1) like ká:n-dó- ‘do (sth) for (sb)', which replaces kán(ú) 'do (sth)' when a beneficiary is expressed (147c).
a. [à: gí] céléngé Lndè-w
[who? Acc] money give.Pfv-2SgSbj
'To who(m) did you-Sg give the money?' (Boui)
b. mì-gí wé:-wè gúná-nú-ẁ

1 Sg-Acc anything say-PfvNeg-2SgSbj
'You didn't say anything to me.' (Boui)
c. [hàl wé:-wè] mì-gì ká:n-dá-nù-w
[even anything] 1Sg-Acc do-for-PfvNeg-2SgSbj
'You-Sg didn't do anything for me.' (Boui)
A speaker rephrased some French cues with possessives instead of dative PPs with simple transitives wherever this made sense, e.g. 'I will cook [your meals]' instead of 'I will cook meals [for you]'. Where this does not work, a purposive PP can be used (§8.3).

### 8.1.2 Instrumental and comitative (yà)

Examples (148a-c) illustrate instrumental sense; (148d) is comitative (i.e. accompaniment). yà does not control a tone overlay on the complement NP. yà is Ltoned but is sometimes raised to yá before a defocalized perfective verb (148c).
a. [íjílí yà] ìjìlè-Ø
[broom Inst] sweep.Pfv-3SgSbj
'He/She swept with a broom.' (Boui)
b. [tànà yà] tèlà [námá rì]
[knife Inst] cut.Imprt [meat Def]
'Cut-2Sg the meat with a knife!' (Boui)
c. [[dúwá mě:] yá] ${ }^{\text {Lkùb-bò-Ø }}$
[[daba 1SgPoss] Inst] do.farming-Ipfv-3SgSbj
'He/She will farm with my daba (=hoe).' (Boui)
d. yò:gè ${ }^{{ }^{L H}}$ sǎ:, [[nà $\quad{ }^{\text {LH }}$ yò:gé $]$ yà $] \quad{ }^{\text {LH }}$ yògò-bó-Ø millet haveRel, [[3SgPoss millet] Inst] come-Ipfv-3SgSbj '(Any-)one who has millet, he comes with his millet.' (T7 @ 04:30)
'By force' is sèmbè yà.
érí yà 'with that (definite)' in a narrative can mean 'at that point', referring to a preceding event that sets the stage for a foregrounded event, as in T7 @ 09:24.
yà is also the 'and' conjunction, conjoining two NPs ( X yà Y yà), see §7.1.1.

### 8.2 Locational postpositions

### 8.2.1 Locative, allative, and ablative functions

As in other languages of the zone, the burden of expressing direction of motion, i.e. allative 'to' and ablative 'from', falls on verbs rather than on postpositions. For example, ablative sense is expressed by gó:- 'exit (v), leave', perhaps chained with another verb. Therefore all adverbial phrases, including PPs, that denote locations or positions can be used in (static) locative, allative, or ablative contexts.

### 8.2.2 Simple and composite PPs

In addition to simple, unsegmentable postpositions, there are several composite postpositions. These are generally transparent combinations of the general locative postposition (for Boui, ŋa) with a possessed [X's Y], where Y is a body part term or similar noun with spatial reference. The Y noun has the usual possessor-controlled $\{\mathrm{LH}\}$ tone overlay in this construction. It is therefore followed by L-toned yà 'in', though this is raised to ŋá before a L-toned syllable.

A difference between such composite postpositions and simple PPs that happen to have a possessed noun as complement is that pronominal possessors are always preposed to the Y noun in composite postpositions. Thus [mì ${ }^{\text {LH }}$ dànà] yá 'on me' (composite postposition), but usually [dànà mě:] yà 'in/on my head'.

### 8.2.3 Locative 'in, at, on’

### 8.2.3.1 Locative suffix -à

There are a handful of lexicalized locative forms of high-frequency bisyllabic nouns that likely represent contraction from a PP with postposition *Cà (such as *nà). Known examples from Ningo are in (149).
noun gloss
a. gíbá 'house' gíbà-à 'at home, at the house'
b. gúló 'the bush, the outback' gúlà-à 'out in the bush'
c. èbà ( è̀wà) 'market' èbà-à 'in/at the market'

This is not productive. For example, ìjò 'village' has locative ìjò yá or ìjò gí.
Boui has jíwá 'house', locative jíwá-à with final <HL>-toned syllable, contrast Ningo (149a). However, Boui ‘out in the bush’ was recorded as regular locative góló yà. Jamsay and Togo Kan "tonal locatives" expressed by changing a final H-tone to $<\mathrm{HL}>$ (with lengthening as needed) likely originated in the same way, but independently of Tiranige.

### 8.2.3.2 Locative postposition (yà, yà, gì)

For the Boui speaker, the primary locative postposition 'in, at' (occasionally 'on') is yà (for other variants see below).

The postposition is common with place names as well as with common nouns denoting objects or spaces. It is H -toned after an L-toned word, and L-toned (in isolation or before H -tone) after words that include an H-tone.
noun locative gloss
a. H-toned yá (cf. Ningo dialect gí)
ìjò ijò ná 'in the village'
òmò òmò ŋá 'in the mouth'
èwà èwà yá 'in/at the market'

| b. L-toned yà (cf. Ningo dialect gì) |  |  |
| :---: | :---: | :---: |
| bòmòkó | bòmòkó yà | 'in Bamako (city)' |
| pà:ndé | pà:ndé yà | 'in the trap' |
| né:ndè | né:ndè yà | 'in the tongue' |
| yálá | yálá yà | 'in the field(s)' |
| órí | órí yà | 'in the waterjar' |
| góló | góló yà | 'in the bush (outback)' |
| mí: | mí: yà | 'in the water' |
| númá | númá yà | 'on/in the arm' |
| c. possessed nouns |  |  |
| yálá mè: | [yálá mě:] yà | 'in my field' |
| X yàáá | [ X yàlá] yà | 'in X's field' |
| d. determined and quantified nouns |  |  |
| ìjó rì | [ìjó rì] yà | 'in the village' (definite) |
| ìjò mbó | [ijò mbó] yà | 'in this/that village' |
| ìjò-gé rì címà | [ijò-gé rì címà] | 'in all (the) villages' |

The H-toned variant gá in (150a) reverts to L-toned yà by tone sandhi when followed by an H-tone. See Rightward L-Spreading (§3.6.3.3).
yà is not common with temporal NPs, which are used adverbially without overt locative marking (151).
a. yà:gù wàlè kán-dá-y ${ }^{\text {n }}$
night work(n) do-IpfvNeg-1SgSbj
'I do not work at night.'

'In the rainy season, I go to the village.'
yà is also part of some complex postpositions described below.
A variant yà is used with many local place names: mótí yà 'in Mopti', sèwàré yà 'in Sevare', kárí yá 'in Konna', bùrì yà 'in Boui'. More distant communities (Bamako, Segou, Outer Mongolia) have yà.

The older Ningo speaker used gì as the common locative postposition, along with yà after some place names as in Boui. He stated that gì is used by leatherworkers versus yà for ordinary Dogon. gì is also the accusative morpheme in all dialects.

### 8.2.3.3 'Chez X' (X yâ: or X yà:)

With a human complement, this postposition means 'at the place of, chez' or more broadly 'around (someone)'. Textual examples are T7 @ 02:08-02:14.

The tone is $<\mathrm{HL}>$ after an L-toned syllable (152a-b), and L after an H-toned syllable (152c).
(152)
a. L-toned pronouns (Ningo)
mì yâ: 'at my place, chez moi'
nì yâ: 'at our place, chez nous'
ò yâ: 'at your place, chez toi'
è yâ: 'at your-Pl place, chez vous'
nà $\mathfrak{\eta}$ : $\quad$ 'at his/her place, chez lui/elle'
kè $}$
b. NPs ending in L-tone (Ningo)
[mí bà:] yâ: 'at my father's place'
[mí nèjì] yâ: 'at my uncle's place'
c. NPs ending in H-tone (Ningo)
sé:dú yà: 'at Seydou's place'
[mì nàlí] yà: 'at my friend's place'
8.2.4 'Inside $\mathrm{X}^{\prime}$ or 'under $\mathrm{X}^{\prime}$ ([X ${ }^{\text {LH }}$ kùlyé] yà )

From noun kùlyè 'interior' (or 'bottom') and PP kùlyè yá 'in the interior, on the inside', we get complex postposition [ $\mathrm{X}^{\text {LH}}$ kùlyé] yà 'inside $\mathrm{X}^{\prime}$, literally 'in [X's interior]'. Prototypically, X is 'house'.
$\begin{array}{llllll}\text { a. } \begin{array}{ll}{[\text { té: }} & \text { rì }]\end{array} & {[[\text { jíwá }} & \left.{ }^{\text {LH} k u ̀ l y e ́ ~}\right] & \text { yá }] & \text { bǒ:-Ø } \\ {[\text { [tea }} & \text { Def }] & \text { [house } & \text { interior] } & \text { Loc }] & \text { be-3SgSbj }\end{array}$
'The tea is in(side) the house.'
b. [kúné rì] [[[té:nì rì] $\left.{ }^{\text {LH} k u ̀ l y e ́ ~}\right]$ yá]
[calabash Def] [[[well Def] interior] Loc] dùmbè $\quad{ }^{\text {LH }}$ sìgé- $\varnothing$
fall.Pfv descend.Pfv-3SgSbj
'The calabash fell to the bottom of the well.'

This postposition is also used in the sense 'under X ' if X more or less completely encloses the trajector.
(154) [kílé rì] [[[bbǐ: rì] ${ }^{\text {LH}} k$ kùlyé $]$ yá] ${ }^{\text {LH}}$ tùná-Ø [key Def] [[[mat Def] interior] Loc] be.laid.Stat-3SgSbj 'The key is under the mat.'

The Ningo speaker pronounced kùlìyè as a trisyllabic, and used gì rather than yà. A textual example is in (563). When X is not a containing structure, a dedicated 'under X' expression (§8.2.10) is used.

### 8.2.5 'At the bottom/base of $\mathrm{X}^{\prime}\left(\left[\mathrm{X}^{\mathrm{LH}_{s}}{ }_{\text {sigí }}\right.\right.$ yà $\left.]\right)$

This expression denotes a position just next to the base of an entity (tree, mountain), but not directly under it.

| (155) | $[$ ìjó | rì $]$ | $[[[$ cé:mbè | rì $]$ | LH $\left._{\text {Sìgí }}\right]$ | yá $]$ | bǒ:- $\varnothing$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | [village | Def $]$ | $[[[$ stone | Def $]$ | base $]$ | Loc $]$ | be- 3 SgSbj |
|  | 'The village is at the base of the mountain.' |  |  |  |  |  |  |

Adverb sígí-yá means 'at the base'.
8.2.6 'On (the head of) X ', 'over X ' ([[X ${ }^{\text {LH }}$ dàná $]$ yà $)$

The postposition 'on (a more or less horizontal surface)' or 'over, above' is [ X dàná] yà. It consists of a possessed form of noun dànà '(crown of) head' (cf. kògò 'head') plus locative yà. In the sense 'on X ', [[X dàná] yà ] may be followed by the simple predicate bò 'be' or, for inanimates, by a form (e.g. stative) of ságí-yó- '(object) be on (a surface)'.

b. [[tèmbè ${ }^{\text {LH }}$ dàná] yá] bò-y [[roof head] Loc] be-1SgSbj
'I am on the roof.' (Boui)
c. [mì ${ }^{\text {LH }}$ dàná] yá] ${ }^{\text {LH }}$ dùmbé-Ø
[1SgPoss head] Loc] fall.Pfv- 3 SgSbj 'It fell on me (=on my head).' (Boui)
d. [níyè gé rì] [nì ${ }^{\text {LH }}$ dàná] yá] pìlì-yò:m bà-â: [bird Pl Def] [1PlPoss head] Loc] fly-MP.Dur Prog-3PlSbj 'The birds are flying above us (=over our heads).' (Boui) (§8.2.10)

Other verbs that make reference to position on surfaces, dáygí-yó- 'be on (horizontal or vertical surface)' and bí-yó- 'lie down', take simple locative PPs with yà (157).
a. [bóló rì] [[jíwá ${ }^{\text {LH}} \mathrm{b}$ bàygá] yà] ${ }^{\text {LH }}$ dà̀ggá-Ø
[agama Def] [[house wall] Loc] be.on.Stat-3SgSbj
'The agama lizard is on the wall.' (Boui)
b. [bì: yá] ${ }^{\text {LH}}$ bì-y-â:
[mat Loc] lie.down-MP.Stat-3P1Sbj
'They are lying down on a mat.' (Boui)
Without a possessor, the simple PP dànà yá means 'on top, above, overhead'.

## 

When a person is the reference point, 'next to/beside X ' is expressed by a composite


From noun jéĺદ 'place' (Boui), a composite postposition [ $\mathrm{X}^{\mathrm{LH}_{\mathrm{j}} \mathrm{l}} \mathrm{l}$ ] $]$ yà is formed. Ningo has gélé 'place' and postposition [ $\mathrm{X}^{\mathrm{LH}} \mathrm{g}$ èlé $\left.\mathrm{r}(\mathrm{i})\right]$ gì including the definite marker. The composite postposition can mean 'next to, in the vicinity of', with reference to e.g. a landmark (158b). Close proximity to the landmark is not required as long as the zone in question is defined in some sense by the landmark.
a. [[mì $\left.{ }^{\text {LHè: }: 1 ́}\right] \quad$ yà $] \quad$ bò-Ø
[[1SgPoss side] Loc] be-3SgSbj
'He/She is beside (=next to) me.' (Boui)
b.

| [[[mínjílì | rì | ${ }^{\text {LH }} \mathrm{j}$ ¢̀ 1 ¢́] $]$ | yà] |
| :---: | :---: | :---: | :---: |
| [[[mosque | Def] | place] | Loc] |
| mì-gí | sìgò-m |  |  |
| $1 \mathrm{Sg}-\mathrm{Acc}$ | descend-Caus.Imprt |  |  |

'Let-2Sg me off (this vehicle) next to (=in the area of) the mosque!' (Boui)
Without an NP complement, jèlè yá (perhaps originally 'in/to a place', but if so with irregular tones from jéĺ 'place') combines with 'go' to mean 'go on a trip, travel' or 'go to another city/country (for work)'. An example is in (169b) below.

غ̀:ŋgó 'proximity, vicinity', locative è::ggó yà 'nearby, in the vicinity', can also form a composite postposition when distance as such is relevant: [[X ${ }^{\text {LH }}$ è:ygó yà ] 'in the vicinity of $X$ '.

### 8.2.8 'In front of’ ([X jíró] yà)

From jíró yà 'in front, forward, ahead' comes the composite PP [ X jíró] yà 'in front of X' (Boui). The Ningo counterpart is [X gíró] gì. The tones diverge from the usual [ [ $\mathrm{X}{ }^{\mathrm{LH}}$ noun $]$ yà $]$ composite postposition type with possessum $\{\mathrm{LH}\}$ overlay. 'In front of X ' has the same spatial parameters as in English. Noun jíró (Boui) means 'eye'.
a. [[nì jíró] yá] bò-Ø
[[1Pl front] Loc] be-3SgSbj
'He/She is in front of us.' (Boui)
b. [[tílggó rì] jíró] yá] Lbì-y-ìyè
[[tree Def] front] Loc] lie.down-MP.Pfv-3P1Sbj
'They lay down in front of the tree.' (Boui)
c. àmìrí [[[[jàmá rì ] címà $]$ jíró] yá]
chief [[[[community Def] all] front] Loc]
${ }^{\text {LH }}$ dàmí-Ø speak.Pfv-3SgSbj
'The chief spoke in front of the (whole) community.' (< jàmá) (Boui)

### 8.2.9 'Behind/after $\mathrm{X}^{\prime}$ ([X $\left.{ }^{\mathrm{LH}}{ }^{\text {tǔ: }}{ }^{\mathrm{n}}\right]$ yà or [X ${ }^{\text {LH}}$ tùnú $]$ gì)

 older Ningo speaker. Its core sense is spatial (160a), but it can also be used in temporal senses ( $160 \mathrm{~b}-\mathrm{c}$ ). The related noun is tú: ${ }^{\text {n }} \sim$ túnú 'rear (of sth)'. In [ $\left.\mathrm{X}^{\mathrm{LH}}{ }^{\text {tǔ: }}{ }^{\text {n }}\right]$ yà, the nasalization of ${ }^{\mathrm{LH}} \mathrm{tǔu:}^{\mathrm{n}}$ is difficult (perhaps impossible) to hear separately because of the following $\mathfrak{y}$.
a. [[mì bǒ $\left.{ }^{\text {LH }}{ }^{\text {tǔ: }}{ }^{\text {º }}\right]$ yá]
[[1Sg behind] Loc] be-3SgSbj
' $\mathrm{He} /$ She is behind me.' (Boui)
b. [sà:ní $\left.\quad{ }^{\text {LH}}{ }_{\text {tǔ: }}{ }^{\text {n }}\right] \quad$ yá] $\quad{ }^{\text {LH }}$ yògò-wò - y $^{n}$
[[holy.day behind] Loc] come-Ipfv- 1 SgSbj
'I will come (back) after the holy day.' (Boui)
c. [[jíwá rì] [[nì $\left.{ }^{\text {LH }}{ }_{\text {tǔ: }}{ }^{\text {n }}\right]$ yá] ${ }^{\text {LHìmbò-w-â: }}$ [[house Def] [[1Pl behind] Loc] close-Ipfv-3PlSbj 'They will close up the house after us (=after we leave).' (Boui)
[é ${ }^{\text {LH }}$ tùnú] gì (Boui) or [é ${ }^{\text {LH}}$ tùnú] gì (Ningo) means 'thereafter, afterwards, after that', with reference to a contextually understood event. The full form is [érí ${ }^{\text {LH}}{ }^{\text {tùnú] }}$ gì (Ningo) with definite demonstrative érì ~ érí.

### 8.2.10 'Under $\mathrm{X}^{\prime}$ ([X ${ }^{\text {LH }}$ dùyó] yà $)$

'Under X ' is conflated with 'inside X ' when X is a house or ether containing structure that is closed on the top and sides (§8.2.4). If X does not contain the trajector, the pure 'under X ' construction is [ $\mathrm{X}^{\text {LH}}$ dùyó] yà based on the noun dúyó 'bottom, below', or with a pronominal complement e.g. [dúyó mě:] yà 'under me'.
(161) [[tílygó ${ }^{\text {LH }}$ dùyó] yà] nì ${ }^{\text {LHòw-yò-wó }}$
[[tree under] Loc] 1PlSbj sit-MP-Ipfv
'We will sit under (the) tree [focus].' (Boui)

### 8.2.11 'Between' ([[X Y] ${ }^{\text {LH }}$ bèná $]$ yà

'Between X and Y ' or 'between X -Pl' is expressed with the composite postposition [ $\mathrm{X}^{\text {LH}}$ bèná] yà, cf. noun béná-ngá '(the) middle'.
a. bùrù [[[[sèwàré yá] [dwánzá yà ]] ${ }^{\text {LH}} \mathrm{bèn}$ ná $]$ yá] bǒ:-Ø Boui [[[[S and] [D and]] middle] Loc] be-3SgSbj 'Boui (village) is located between Sevare and Douentza.' (Boui)
b. [nì ${ }^{\text {LH }}$ bèná] yà
[1Pl middle] in
'between us' (Boui)

### 8.2.12 'From X to Y'

'All the way to X ' or 'until X ' is expressed with hàlí before the locational phrase. It becomes hàlì before a H -tone by tone sandhi, and the final i is subject to apocope. The verb of the 'until' clause has $\{\mathrm{LH}\}$ overlay.

```
(163) dù:rù-yò-w \({ }^{n}\) [hàl [mótí yà] \({ }^{\left.\text {LHùnì-y } \text { n }^{n}\right]}\) run-MP-while [until [Mopti Loc] go.Pfv-1SgSbj]
'I ran all the way to Mopti.' (Boui)
(lit. "I went all the way to Mopti while running.")
```

The starting point can also be expressed. This is done using a subordinated clause with gó:- 'exit (v), leave, depart'.
(164) [mbé: gwè:-sà-w ${ }^{n}$ ] [hàl yá: ${ }^{\left.\text {LHùnì- }{ }^{n} \text { n }\right] ~}$
[here exit(v)-Reslt-while] [until there.Def go.Pfv-1 SgSbj ]
'I walked all the way from here to there.' (Boui)
(lit. "After going from here, I went all the way to there.")

### 8.3 Purposive-causal 'for' (dàgá)

[ $\mathrm{X}^{\text {LH }}$ dàgá] means 'for X ', in a prospective sense (e.g. 'in order to get X '), as in (165).
(165) [í:gé ${ }^{\text {LH dàgá] }{ }^{\text {LH }} \text { yògè-s-â: }}$
[honey for] come-Reslt-3PISbj
'They have come for honey.' (Boui)
The sense can also be retrospective ('because of, due to, as a result of'), as in (166a), or abstract 'on account of', as in (166b-c).
a. [á:mì
${ }^{\text {LH }}$ dàgá]
jíwá-à
nì ${ }^{\text {LH}}$ nwè:-sá
[rain(n) for] house-Loc 1 PlSbj enter-Reslt
'We went into the house because of the rain (outside).' (Boui)
b. [mì ${ }^{\text {LHdàgá] }}{ }^{\text {LH yògè-s-â: }}$
[1Sg for] come-Reslt-3PiSbj
'They have come for (i.e. to visit) me.' (Boui)
c. [á: ${ }^{\text {LH }}$ dàgá] ò-gí $\quad{ }^{\text {LH }}$ bàrò-wò- ${ }^{\text {n }}$
[God for] 2Sg-Acc help-Ipfv-1SgSbj
'I will help you-Sg on account of God (i.e. as a charitable act).' (Boui)

### 8.4 Other adverbs (or equivalents)

### 8.4.1 Similarity ( ${ }^{\text {LH} t \grave{r}}$ ŕ 'like')

'Like (similar to) $\mathrm{X}^{\prime}$ ' is [ $\mathrm{X}^{\mathrm{LH}}{ }^{\text {tòró }}$ ]. The final H -tone of ${ }^{\mathrm{LH}}{ }^{\text {tòró }}$ drops to L by regular tone sandhi before an H-tone. Compare tòr̀̀ 'around, somewhere near' with demonstrative adverbs (§4.4.2.2).
(167)
$\begin{array}{ll}\text { a. } & {\left[\begin{array}{ll}{[\mathrm{mì}} & { }^{\mathrm{LH}} \text { tòró }\end{array}\right]} \\ & {[1 \mathrm{Sg}} \\ \text { like }]\end{array}$
bǒ:-Ø
be-3SgSbj
'He/She is like me.' (Boui)

[child like] weep-Ipfv-2SgSbj
'You-Sg weep like a child.' (Boui)

The ending -rò is more obviously segmentable in demonstrative manner adverbs such as mbó-rò 'like this/that' (§4.4.2.3), cf. mbó 'this/that'.

### 8.4.2 Extent (kùnú $\rightarrow$ 'a lot', céẁ 'n ‘a little’)

kùnú $\rightarrow$ 'a lot' can function as a NP argument (168a), or as an adverb (168b).
(168)
a. mì-gí kùnú $\rightarrow$ ndè-Ø
1Sg-Acc a.lot give.Pfv-3SgSbj
'He/She gave me a lot.' (Boui)
$\begin{array}{llll}\text { b. } \begin{array}{lll}{[j \text { cilc̀ }} & \text { yá } \\ \text { [travel(n) } & \text { Loc }] & \text { kùnú } \rightarrow\end{array} & \begin{array}{l}\text { LH }{ }^{\text {ùm-bǒ-y }} \\ \text { a.lot }\end{array} & \text { go- } 1 \mathrm{SgSbj}\end{array}$
The antonym is céẁ ' 'a little'.
a. mì-gì céẁ n ndè-Ø
1Sg-Acc a.little give.Pfv-3SgSbj
'He/She gave me a little.' (Boui)


### 8.4.3 Specificity

### 8.4.3.1 'Approximately' (bélé-wò)

To indicate that a number is approximate, imperfective bélé-wò (Boui) or bélé-bò (Ningo) 'is as much as, equals (sth)' is added.
(170) ámbá dé: bélć-wò-Ø
sheep 40 equal(v)-Ipfv-3SgSbj
'approximately forty sheep' (Boui)
The imperfective negative is bél-dà (Ningo).

### 8.4.3.2 'Exactly' (kák, nénèy ${ }^{\text {n }}$, já:tì)

With numbers, kák can be used (171). This is an interjection-like form whose final stop violates ordinary phonotactic constraints.

| (171) | ámbá | dé: | kák |
| :--- | :--- | :--- | :--- |
|  | sheep | 40 | exactly |

To emphasize identity, nénèy ${ }^{\mathrm{n}}$ can be used. In (172) the speaker points at an object in a context where it might not be obvious to the addressee which object is intended. nénèy ${ }^{n}$ follows the focal constituent.
(172)
a. Énì = yò nénèy ${ }^{n}$

Dem.Near=it.is exactly
'It's precisely that (over there)' (Ningo)
b. [ $\varepsilon$-ror̀ nénèy $\left.{ }^{\mathrm{n}}\right] \quad{ }^{\text {LH}}$ bì-yò-bó-Ø
[thus exactly] remain-MP-Ipfv-3SgSbj
'It may (=should) be exactly like that.' (Ningo)
To confirm that what the addressee has just said is exactly correct, the widespread (e.g. Fulfulde) já:ì̀ occurs, either alone (cf. English precisely!) or clause-finally.

દ́-rò ${ }^{\text {LH} b i ̀-y o ̀-b o ̀-\varnothing ~ j a ́: t i ̀, ~}$
thus remain-MP-Ipfv- $\varnothing-3 \mathrm{SgSbj}$ indeed
'That is exactly how it still is!' (Ningo, T7 @ 09:40)

### 8.4.4 Spatiotemporal adverbials

### 8.4.4.1 Temporal adverbs

Some of the major temporal adverbs are in (174).
(174)
a. yò:
kòndè
níná
nìnà-mólí
ájá
táfô $w^{n} \sim$ tápò $^{\text {n }}{ }^{\text {n }}$
ájá là
b. á:gá (Boui), ágá (Ningo)
à:gà ${ }^{L}$ déné
à:gà ${ }^{\text {d }}$ déné yàlàngé
'today'
'later'
'yesterday'
'day before yesterday'
'now' (often topicalized ájá kày)
'now, as of now' or 'first(ly)'
'again'
à:gà ${ }^{L}$ déné yàlàngé-yàlàygé
'tomorrow; in the future'
'day after tomorrow'
'second day after tomorrow' (third from today)
à:gàL déné yàlàygé-yàlàngé 'third day after tomorrow' (fourth from
today)
c. gólí
wáyé 'next year'
nò: 'this year'

As in other languages of the zone, 'today' and 'yesterday' can expand to 'nowadays' and 'in the past, formerly'.

### 8.4.4.2 'First(ly)' (tápòw ${ }^{\text {n }}$ )

tápòw ' 'at first, firstly, to begin with' is illustrated in (175).
(175) tápòw ${ }^{\mathrm{n}}$ [sègù ŋá] ${ }^{\text {LH }}$ ùm-bǒ-y, firstly [Segou Loc] go-Ipfv-1SgSbj mè: [tú: ${ }^{\text {n }}$ yà̀] [ [jèlè ${ }^{\text {L }}$ tó:] yà] ${ }^{\text {LHùm-bǒ-y }}$ but [behind Loc] [[place other] Loc] go-Ipfv-1 SgSbj '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 of them contain locative postposition ya.
a. dànà yá
sígíyá
'above, on top, overhead'
'(down) below, underneath'
b. à:-dúyó
'east'
à:-sélé
'west'
bàlèrí
'south'
kòròm-báná 'north'
$\begin{array}{ll}\text { c. tú: }{ }^{\text {n yà }} & \text { 'in the rear; afterward' } \\ \text { jíró yà } & \text { 'forward; in front' }\end{array}$
jíró yà 'forward; in front'

For demonstrative spatial adverbs, see §4.4.2.1.
'Left' (nó:ndó) and 'right' (nó:) are adjectives that modify e.g. 'hand' and 'foot'. nó: may be related to nó:- 'eat/drink'.

### 8.4.5 Expressive adverbials (EAs)

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

EAs are often marked phonologically. Some have intonational prolongation (177a), others are iterative in form (177b), and others look more like normal stems (177c).
a. dúrù $\rightarrow \quad$ 'sticking out'
b. téy ${ }^{\mathrm{n}}$-téy ${ }^{\mathrm{n}} \quad$ '(looking) straight at'
tè:-tè: 'silent'
dínà $w^{n}$-díyà $w^{\mathrm{n}} \quad$ '(walking) awkwardly'
yélí-yélí $\quad$ 'flapping (in the wind)'
áyálá-ánálá '(walking) with legs widely separated'
c. dóróy 'wide-eyed, gaping'

Some expressive adverbials function as adjectival intensifiers. They combine with ordinary adjectives, cf. English jet black and snow white, but these Tiranige intensifiers do not denote exemplars (for actual examples of the latter, see §4.5.3). The EA intensifier can function like a compound final following the adjective, which appears with $\{\mathrm{L}\}$ tone overlay (the superscript ${ }^{\mathrm{L}}$ is omitted in the transcription used here). The known EA intensifiers are iterative in form, and may be H - or L-toned.

| (178) | adjective | gloss | intensifier |
| :---: | :---: | :---: | :---: |
|  | jémé | 'black' | jèmè-[kàrì-kàrì] |
|  | púlé | 'white' | pùlè-[tàw-tàw] |
|  | búní | 'red' | bùnì-[dźy ${ }^{\text {n }}$-d $\mathrm{c}^{\mathrm{n}}$ ] |

### 8.4.5.1 ‘Apart, separate’ (tồw ${ }^{\mathrm{n}} \sim$ tồ:)

tồw ${ }^{\mathrm{n}}$ (Boui) and tồ: (Ningo) are expressive adverbials (EAs) that function as predicates in paired, parallel clauses (with different subjects). Among monosyllabic nouns and other non-EA stems, bell-shaped <LHL> syllables do not occur (see beginning of §3.6). In (179), incompleteness is marked intonationally by higher than modal terminal pitch on the first phrase, and completion by terminal low pitch on the second phrase. In either case the 'apart' EA can be prolonged.
(179) [ámbá-gè rì] tồ ${ }^{\mathrm{n}} \nearrow$, [ùnà-gé rì] tồw ${ }^{\mathrm{n}}$, [sheep-Pl Def] apart, [goat-Pl Def] apart
'The sheep apart (e.g. on one side), the goats apart (e.g. on the other side).' (Boui)

When not spelled out in this parallelistic fashion, the sense can be expressed by the iteration tǒw ${ }^{\text {n }}$-tǒw ${ }^{\mathrm{n}}$ (Ningo tô:-tồ:)'separately, apart (in distinct locations)'

### 8.4.5.2 'Always’ (wàkàtì címà), 'never’ (àbádá)

'Always' is the unremarkable collocation wàkàtì címà '(at) all times'.
Emphatic 'never!' is àbádá, a ubiquitous Arabic loanword. It can be used as a one-word expression with a pragmatic sense similar to 'not on your life!'. As part of a clause, 'never' can often be translated by using the experiential perfect negative ('have never VPed'), see §10.2.3.2.

### 8.4.6 'Together' (bó:gù ~ bó: gì)

Adverb bó:gù (Boui) 'together' is illustrated in (180a). The Ningo counterpart is bó:gì, which can be segmented into noun bó: and accusative or locative gì (180b). Cf. noun bò: ‘agemate, partner’.
(180) a. [nì címà] bó:gù wàlè nì ${ }^{\text {LH }}$ kàm-bó [1Pl all] together work(n) 1PlSbj do-IpfvRel 'We will all work together.' (Boui)
b. kè-là [bó: gì] bìyè

3PlSbj-Fut [together Loc] remain.Pfv
'They will remain together.' (Ningo, T7 @ 09:06)

### 8.4.6.1 'All, entirely’ (címà)

címà 'all’ (Boui. §6.6.1) can be made into an adverb-like phrase by following a pronoun. In (181), 3Sg nà is resumptive for 'vehicle'.
(181) [mówélì rì] [nà címà] yàmì-Ø
[vehicle Def] [3SgPoss all] be.ruined.Pfv-3SgSbj
'The vehicle was completely ruined.' (Boui)
Ningo has póy 'all', as in nì póy 'all of us'.

## 9 Verbal derivation

The suffixal derivations in Tiranige verbal morphology that are shared with many other Dogon languages are: reversive 'un-...', §9.1, causative ( $\S 9.2$ ), paired mediopassive and transitive (§9.4), and deadjectival inchoative ' X become ADJ' and factitive 'Y make X ADJ' (§9.6). In addition, Tiranige has a repetition derivative with three basic motion verbs (§9.3.1), for one verb a suffix (identical to the reversive suffix) marking multiplicity (§9.7). The benefactive (§9.4.2) and reciprocal (§9.5), which most Dogon languages lack, are arguably extensions of the transitive and mediopassive formations, respectively.

The suffixal derivatives behave morphologically like unsegmentable verb stems, i.e. they are freely followed by TAMP inflectional suffixes and by pronominalsubject suffixes.

The passive stative $\left(-y \varepsilon ́=\grave{\mathrm{w}}^{\mathrm{n}}\right.$ and variants) is morphologically distinctive and is covered elsewhere (§10.4.1.2).

### 9.1 Reversive verbs (-ló- ~ - 1ó-)

The reversive suffix is -lv- , specifically in the O-stem -lo- or -ló- depending on the ATR value of the stem. The majority of reversives are from bisyllabic inputs. The medial syllabic nucleus in CvCv-ló- is weakened to a high vowel, appearing as i or u depending on adjacent consonants and on flanking syllable vowels (including inflectional suffix vowels). Front vowels and palatoalveolars favor i. The citation form (the O-stem) generally has medial u unless the preceding syllable has $\{\mathrm{i}\}\}$, but the E/I-stem (perfective), not shown here, often has i.

A preceding action (e.g. 'tie') that produces a resulting state is presupposed. The reversive action brings back the original state. The range of senses can be observed in the data in (182).

The medial vowel is not syncopated after an obstruent or m, or after a CC cluster (182a), but it does syncopate after unclustered y, 1, and (usually) w (182b).

For verbs that normally occur with a mediopassive or transitive suffix, the reversive suffix replaces these suffixes (182c).
input gloss reversive gloss
a. simple inputs, no syncope

| béjó | 'bury' | béjíló | 'disinter' |
| :--- | :--- | :--- | :--- |
| dágó | 'attach blade' | dágú-ló | 'remove blade' |


| págó | 'tie (up)' | págú-ló | 'untie' |
| :--- | :--- | :--- | :--- |
| pégó | 'button' | pégú-ló | 'unbutton' |
| dúngó | 'bury' | dúngú-ló | 'disinter' |
| púndó | 'roll up (mat)' | púndú-ló | 'unroll (mat)' |
| yámbó | 'cover (object)' | yámbú-ló | 'uncover (object)' |
| ímbó | 'shut (door)' | ímbí-ló | 'open (door)' |
| púndó | 'tangle' | púndú-ló | 'untangle' |
| kóngó | 'roll up (pants)' | kóngú-ló | 'unroll (pants)' |
| dángó | 'affix, post' | dáygú-ló | 'un-post' |

b. syncope after $\{y$ w l\}

| tíyó | 'lock' | tíy-ló | 'unlock' |
| :--- | :--- | :--- | :--- |
| óyó | 'braid (rope)' | óy-ló | 'unbraid (rope)' |
| tóyó | 'step on' | tóy-ló | 'remove foot from' |
| gúwó | 'hook, hang' | gúw-ló | 'unhook' |
| péló | 'fold' | pźl-ló | 'unfold' |

c. mediopassive and/or transitive inputs, no syncope
mediopassive, from Cv-
dú-yó 'carry on head' dú:-ló 'take (load) off head'
mediopassive, from bisyllabic
dómí-yó 'put on (hat)' dómú-ló 'take off (hat)'
kúmí-yó 'shut (eye)' kúmú-ló 'open (eye)'
págí-yó 'get dressed' págú-ló 'get undressed'
kúmbí-yó 'clench (fist)' kúmbú-ló 'unclench (fist)'
transitive
tímbí-ró 'put lid on' tímbí-ló 'take lid off’
kóndú-ró 'bend' kóndí-ló 'unbend'
d. no syncope after w (in some cases)
íwí-yó 'put on (wrap)' íwí-ló 'take off (wrap)'

Transitive reversives can be combined with a following gó-m(ú) 'remove', causative of 'exit (v)'. The nonfinal verb takes perfective form (§15.1.1), as in tùnì-lè gó-m(ú) 'get undressed'. Intransitive reversives can be chained to gó: 'exit (v)', as in màngì-lè gó: ‘(sth) unfold (itself)'.

In one case the reversive suffix follows a transparently segmentable causative suffix -m(ú). In (183), X denotes a group. The key form is máygá-m-ló. Elsewhere the reversive does not follow other derivational suffixes.
a. máygó
' X assemble, X come together'
máygá-m(ú) 'Y assemble X , Y have X assemble'
b. mángí-ló 'X break up (after assembling)'
mángá-m-ló 'Y break up X (after assembling them)'

Some synchronically unsegmentable trisyllabic stems ending in -lv- may have originated as reversives.

### 9.2 Deverbal causative verbs

### 9.2.1 Productive causative with suffix $-\mathrm{m}(\mathfrak{u})$ -

The productive causative suffix added to verb inputs is $-\mathrm{m}(\mathrm{u})$-. It can be added to a wide variety of verbs, including transitives, in causal senses ranging from coercion to permission ('force X to VP', 'have X VP', 'let X VP').

Partial paradigms of sígó-m(ú) 'take down’ and of yégá-m(ú) 'cause to fall', with tones based on 3Sg forms, are in (184). The final /u/ of the O-stem is regularly syncopated/apocopated except before $r$. The verb takes the A/O-stem of the input verb. However, stem-final o in nonmonosyllabics often shifts to e in the perfective before -mì-, as in sìgè-mì-. It is difficult to tell whether this is low-level assimilation (to the i in -mì-) or a morphologically significant ablaut-like alternation.

| category | 'take down' | 'cause to fall' |
| :--- | :--- | :--- |
|  |  |  |
| perfective | sìgè-mì- | yègà-mì- |
| imperfective | sígó-m-bò- | yégá-m-bò- |
| imperfective neg | sígó-mú-râ- | yégá-mú-râ- |
| capacitative | sígó-m-mâ- | yégá-m-mâ- |
| imperative | sìgò-m | yègà-m |

Further examples of causatives are in (185). Note in particular the -ATR input stems in (185b).
input gloss causative gloss
a. monosyllabic

| nó: | 'eat, drink' | ná:-m(ú) | 'give drink to' |
| :--- | :--- | :--- | :--- |
| nó: | 'enter' | nó:-m(ú) | 'make enter, take in' |
| yó: | '(sth) fill up' | yó:-m(ú) | 'fill (sth)' |
| ndó | 'give' | ndá:-m(ú) | 'cause to give' |

$\left.\begin{array}{clll}\begin{array}{c}\text { irregular } \\ \text { gó: }\end{array} & \text { 'exit (v)', } & \begin{array}{l}\text { gó-m(ú) } \\ \sim\end{array} & \text { gó:-gó-m(ú) }\end{array}\right)$
c. input already has derivational suffix

```
reversive
    ímbí-ló 'open (door)' ímbílá-m(ú) 'have (sb) open (door)'
mediopassive
        ów-yó 'sit' ów-yó-m(ú) 'cause to sit'
        dú:rú-yó 'run' dú:rú-yó-m(ú) 'cause to run’
        bándílí-yó 'go back` bándílí-yá-m(ú) 'take/send back’
    transitive
        ígí-ró 'stop (sth)' ígí-rá-m(ú) 'have (sb) stop (sth)'
    causative -gó-
        pájá-gó 'tear, rip' pájá-gá-m(ú) 'have (sb) rip (sth)'
causative -mú-
    sígó-m(ú) 'take down` sígó-má-m(ú) 'have (sb) take down (sth)'
```

To my knowledge, causative -m(ú)- cannot be followed by other derivational suffixes except itself and the reciprocal.

### 9.2.2 Minor causative suffix -gó-

Several causative-like action verbs, generally involving destructive impact, have a suffix -gó- added to that A/O-stem. The causative is often as common as, or more common than, the intransitive counterpart.
input gloss causative gloss
a. nonhigh vowel before suffix
yám(ú) 'malfunction' yámá-gó 'ruin (sth)'
páró '(sth) snap' párá-gó 'snap, break (sth)'
pájó 'be torn’ pájá-gó 'tear, rip'
pújó 'expode’ pújó-gó 'detonate'
káwó 'be cut open’ káwá-gó 'cut open (belly)'
cémbó 'be broken up' cémbó-gó 'break up (bread)'
with overt ATR alternation
pójó 'be crumbled' pójá-gó 'crumble (sth)'
b. mediopassive suffix dropped
téwí-yó 'be shattered' téwá-gó 'shatter (sth)'
c. high vowel or syncope before suffix
múró 'be punctured' múrú-gó 'puncture'
ním(ú) '(fire) go out' ním-gó 'extinguish (fire)'
púnjó 'lump break up’ púnjú-gó 'break up (lump of flour)'
d. -ggó- variant
jínó 'hide (self)’ jíná-ygó 'hide (sth)'
In some other cases, like píyágó 'chase away, drive out, expel', we may suspect that the same suffix is present etymologically, but there is no unsuffixed counterpart, so segmentation is synchronically questionable.

### 9.3 Basic motion verbs

### 9.3.1 Repetition suffix -go- with motion verbs

'Enter, go/come in' has two variants, nó: and nó:-gó. Similarly, 'exit, go/come out' has two variants, gó: and gó:-gó, and 'ascend’ has variants íló and ílé-gó (Ningo) or élé-gó (Boui). The short forms are semantically as well as morphologically unmarked, typically denoting single events (187a). The suffixed forms shift the stem to +ATR. They suggest repetitive entry and exit, including re-entry after an exit or re-exit after an entry (187b).
a. nwà:
enter.Imprt
'Come/Go in!'
$\begin{array}{ll}\text { b. } \begin{array}{ll}\text { [gwè: } & \text { yá] } \\ {[\operatorname{exit(v).Pfv~}} & \text { and.Nonpast.SS] }\end{array} & \begin{array}{l}\text { nò:-gò-bó- } \mathrm{y}^{\text {n }} \\ \text { enter-Repet-Ipfv-1SgSbj }\end{array}\end{array}$ 'I'll go out and come/go (back) in.'

A similar go syllable occurs as a fixed part of some other motion verbs: yógó 'come', sígó ‘descend’, sé:gó ‘come down', and únjúgó ‘get up, arise’, but not ún(ú) 'go’. For 'arrive’ the dialects differ: áyó (Boui) or á:gó (Ningo). The go syllable is etymologically just part of the stem in sígó ‘descend’ as shown by multiple bisyllabic cognates, but in the other cases it might reflect an original suffix that is now fused.

It is possible that the suffix was originally related to gó: 'exit' in a reversive ('un-') rather than directional sense. The exit verb often combines with other verbs in reversive contexts in in Jamsay and other eastern Dogon languages.

### 9.3.2 'Come', 'go', bring', 'convey’

The two most basic motion verbs ('go', 'come') and their transitive counterparts ('bring', 'convey') are in (188).
a. yógó
'come'
ún(ú) 'go'
bóló 'go' (archaic word, Boui)
$\begin{array}{ll}\text { b. } \begin{array}{ll}\text { sógó } & \text { 'bring' } \\ \sin (u \hat{)}\end{array} & \begin{array}{l}\text { 'convey, take (sth, sw) }\end{array},\end{array}$

In addition to the final gó shared by 'come' and 'bring' (cf. the preceding subsection), there is a hint of an initial formative ${ }^{*} \mathrm{~s}(\mathrm{v})$ in the two transitives.

### 9.4 Mediopassive and transitive

### 9.4.1 Mediopassive -yó- ~ -yó- and transitive -ró- ~ -ró- (-dó- ~ -dó-)

There is a fairly productive alternation of mediopassive -yó- ~-yó- and transitive -ró-$\sim$-ró-. The latter becomes -dó- ~ -dó- after certain consonants following syncope (§3.4.3.5). The ATR value is based on that of the stem. The mediopassive denotes an internally experienced event (voluntary or not), while the corresponding transitive
requires an external agent. The transitive is therefore in effect the causative of the mediopassive.

Unusually for Dogon languages, the verb 'see' is mediopassive in form (bálí-yó).

Transitive -ró- ~ -ró- is clearly distinct phonologically from reversive -ló- ~ -l'́-, which can occur with some of the same verb stems. However, mediopassive -yó- ~-yó- is arguably the same intransitivizing morpheme as reciprocal -yó-~-yó- (§9.5).


Phonologically, bí:-ró from bí-yó in (189a) and dú:-ró from dú-ý in (189c-d) suggest lengthening of Cv - to Cv :- before the transitive but not mediopassive suffix. The phonology is obscure but one possibility is contraction from *Cv́-yv́-rv́. On the other
hand, tú:n-dó from túní-yó in (189b) requires syncope of a medial-syllable short high vowel and lengthening of the initial-syllable vowel (§3.4.2.1), but see also §9.4.2.2 below.

From underived nóyó 'sleep’ is derived transitive nóyú-ró ‘cause (sb) to sleep, put (sb) to sleep'.

### 9.4.2 Benefactive function of transitive derivative

### 9.4.2.1 Benefactive -ró- ~ -ró- (-dó- ~ -dó-)

As shown above, in most cases the transitive derivative with suffix -ró- ~ -ró- adds an agent who creates, or helps to create, the state denoted by the mediopassive.

What appears to be the same transitive suffix can be added to verbs to promote a benefactive to direct-object status. Again there is an increase in valency, but this time the addition is of a kind of indirect object rather than causal agent.

Simple intransitive (190a) becomes transitive with accusative-marked but semantically benefactive object in (190b).
a. íló-bò- $\mathrm{y}^{\mathrm{n}}$
ascend-Ipfv-1SgSbj
'I will go up.'
b. [sé:dù gì] ${ }^{\text {LHill-dò-bò-ýn }}$
[S Acc] ascend-Benef-Ipfv-1SgSbj 'I will go up for Seydou [focus].' (Ningo)

The verb in (191a) is already transitive. In (191b) a semantically benefactive accusative-marked argument is added. The construction is therefore ditransitive (§11.1.3.3).
(191)
$\begin{array}{ll}\text { a. á:ná } \quad \text { sémé-y }{ }^{\text {n }} \\ \text { sheep } & \text { slaughter.Pfv- } 1 \operatorname{SgSbj} \\ \text { 'I slaughtered a sheep.' }\end{array}$
$\begin{array}{lll}\text { b. á:ná } & \text { [sé:dú } & \text { gì }]\end{array} \begin{aligned} & \text { sémí-ré-ỳn } \\ & \text { sheep }\end{aligned} \quad \begin{array}{lll}{\left[\begin{array}{lll}\text { n } & \text { Acc }\end{array}\right.} & \begin{array}{l}\text { slaughter-Benef.Pfv-1 } \\ \text { sgSbj }\end{array} \\ & \text { 'I slaughtered a sheep for Seydou.' (Ningo) }\end{array}$
With 'bring' and 'convey', what is expressed as a dative in English is preferentially phrased as possessor of the theme (entity transferred).
a. [ò $\quad{ }^{\mathrm{LH}} \mathrm{w}$ w̌i:] sógó-wò- $\mathrm{y}^{\mathrm{n}}$
[2SgPoss Poss] bring-Ipfv-1SgSbj
'I have brought it for you.' (lit. "I have brought yours.")
b. [ò ${ }^{\text {LH}}$ tě: : sógó-wò- ${ }^{\text {n }}$
[2SgPoss tea] bring-Ipfv- 1 SgSbj
'I have brought your tea.' (= 'I have brought some tea for you.')

### 9.4.2.2 Cv́:n-dó/ó and Cv́:l-dó/ó benefactive or transitive verbs

A number of benefactives and transitives have the shape Cv́:n-dó/ó. Some of these can be derived by phonological rules, but the Cv́:n-dó/ó shape is arguably a templatic target. A common benefactive is ká:n-dó ‘do (sth) for (sb)' from kánú 'do'. For the vowel lengthening (not productive) see §3.4.2.1 and for $\mathrm{r} \rightarrow \mathrm{d}$ after alveolar see §3.4.3.5. A similar example is dó:n-dó 'buy (sth) for (sb)’ from dónó ‘buy'. tú:n-dó 'put (clothes) on (sb)' is the transitive counterpart of mediopassive túní-yó 'put on (clothes)'. The phonology is even more opaque (and the morphology more templatic) in the case of dá:n-dó ‘speak to (sb)’ from dám(ú) ‘speak’ (T7 @ 21:50). Other verbs with this shape like só:ndó ' pay tribute (in song, to animist idols)' and nú:ndó 'hear' may have originated as benefactives.

Parallel to dó:n-dó ‘buy (sth) for (sb)' from dónó ‘buy’ is tú:l-dó ‘sell (sth) for (sb)' from túló 'sell'.

### 9.5 Reciprocal (-yó- ~ -yó-)

A derivation identical in form to the mediopassive in -yó- ~-yó- can be used as a reciprocal derivative when added to a lexically transitive verb stem.
a. nì tèwì-yè

1PISbj hit-Recip.Pfv
'we hit-Past each other'
b. á:gá nì téwí-yó-wò
tomorrow 1PlSbj hit
'Tomorrow we will hit each other'

Some verbs have identical mediopassive and reciprocal derivatives. An example is bálí-yó which can mean 'see' (mediopassive form) or 'see each other'. Since verbs that can take the reciprocal are necessarily transitive, one can usually distinguish mediopassive from reciprocal. This is because the mediopassive remains syntactically transitive while the reciprocal intransitivizes the verb.

### 9.6 Deadjectival inchoative and factitive verbs

An adjective X usually corresponds to an intransitive verb 'become X ', here called inchoative. Morphologically, it is not always clear that the verb is derived from the adjective, so "deadjectival" should be taken loosely. Comparative glosses like 'become smaller, shrink' are also possible in context.

In one type, attested with mono- and bisyllabic adjectives, the inchoative verb has essentially the same shape as the adjective (194a). The vocalism, especially the final vowel of the verb, depends on the vocalism stem (the O-stem is the cituation form). In another type, a syllabic suffix -ndó- is added to the adjective (194b). The three adjectives with diminutive -wè belong to this class. The -wè of the adjective is dropped. The only case of -ndó- with a -ATR stem is méní-ndó 'become thin' from adjective ménjí-wè (194b). It may be that the deleted -wè covertly determines the ATR value of -ndó-. íló '(meat) be done (=cooked)' (194a) is distinct from íl(í)-yó 'ripen' from the same modifying adjective íló (195b).

> modifying inchoative gloss of inchoative
a. zero derivational suffix

| dúmbú | dúmbó | 'become blunt (blade)' |
| :--- | :--- | :--- |
| íló | íló | '(meat) be done (=cooked)' |
| kúnjú | kúnjó | 'get old, age (v)' |
| mò: | mò: | 'become good' (inchoative also móy-yó) |
| né:ngó: | né:ygó | 'become heavy' |
| yángá | yángó | 'become lean (emaciated)' |

b. suffix -ndó- ~ -ndó-
báy báy-ndó 'become big, wide'
nímí nímí-ndó 'become deep'
yágá yágá-ndó 'become pretty'
yálá yálá-ndó 'become long, tall'
$\mathrm{nj} \sim \mathrm{n}$, diminutive -wè dropped
ménjí-wè méní-ndó 'become thin'
syncopated
bíní bín-dó 'become fat'
diminutive -wè dropped
déní-wè déní-ndó 'become short'
wéní-wè wén-dó 'become small' (syncopated)
Many inchoatives have mediopassive morphology, with suffix -yó- ~ -yó-. The suffixal stem vowel is weakened to $i$ and may syncopate. Mediopassive inchoatives
are usual for trisyllabic adjectives but there are also some bisyllabics. 'Become white' shifts the stem from bi- to trisyllabic by reduplicating a syllable (195e).

> modifying inchoative gloss of inchoative
a. phonologically regular
númá númí-yó 'become hot; become fast, accelerate'
jémé jémí-yó 'turn black'
ní:Mjí ní:njí-yó 'become sweet, delicious; become sharp'
má:gá má:gí-yó 'become difficult or expensive'
búrádá búrádí-yó 'become smooth, sleek (surface)'
yágárá yágárí-yó 'become coarse (surface)'
gálágá gálágí-yó 'become bitter (taste)'
ámámú ámámí-yó 'become sour, acrid'
kújájá kújájí-yó 'rot, become rotten (meat, fruit)'
b. syncopated optionally after alveolar
íló íl(í)-yó 'ripen’
búní bún(í)-yó 'turn red, become brown'
c. C-final adjective adds a vowel
témúm témémí-yó 'become cold, cool (water); slow-moving'
d. switch in ATR harmonic class
yógóró yógárí-yó- 'become damaged, kaput'
e. irregular
mó: móy-yó 'become good, improve’ (verb also mò:)
púlé púlá-lí-yó 'turn white'
máy ${ }^{n}$ mání-yó 'become dry, dry out; harden'

Factitive (transitive) versions, as in ' X whitened Y , X made Y white', are the regularly formed causatives in $-\mathrm{m}(\mathrm{u})$ - of these inchoatives: púlá-lí-yá-m(ú) 'whiten (something)'. Examples are yálá-ndá-m(ú) 'lengthen (sth)', nímí-ndó-m(ú) 'deepen (sth)'. In méní-ndó-m(ú) 'make slender', we see that inchoative -ndó- protects the adjectival stem from conversion to +ATR (otherwise required by the causative suffix).

Adjectives that do not correspond to an inchoative verb can be verbalized by adding bíló 'become' to the form in - $\grave{\mathrm{w}}^{\mathrm{n}}$, which is usually pronounced -m before b . This construction can also be used as an alternative to any of the inchoative verbs listed above.

| ع́w ${ }^{\text {n }}$ | ¢́- win $^{\mathrm{n}}$ bíló | 'wet' |
| :---: | :---: | :---: |
| ijígó | ijígó-w ${ }^{\text {n }}$ bíló | 'become empty' |
| kándá | kándá- ${ }^{\text {n }}$ bíló | 'become new' |
| kóló | kóló-w ${ }^{\text {n }}$ bíló | 'fresh (milk); unripe; raw (meat)' |
| málá-ní | málá-ní- ${ }^{\text {n }}$ bíló | 'soft' |

## 9.7 -lv́- for multiplicity (mángá-lí-yó)

The forms in (197) show a derivational suffix -lv́-, semantically unrelated to the reversive, in contexts involving multiple subjects (or, in the causative, objects). The form without -lv́- denotes what is conceptualized as a single event of coming together or unifying. It is therefore normal with groups of two or a few individuals, or with a mass noun. The forms with -lv́- suggests multiple co-events, for example people coming together one by one. In the non-causative form, -lv́- requires the reciprocal suffix. There are no other word-families with this alternation.
a. máygó '(two entities) unite'
mángá-lí-yó '(several entities) come together, assemble’
b. mángá-m(ú) 'put (two entities) together, assemble (two entities)' mángá-lá-m(ú) 'put (several entities) together, assemble (several entities)'

### 9.8 Verb-stem iteration

Aspectually-marked verb stems may be iterated. The iterated verb is not directly conjugated for pronominal subject. Instead, it is followed by a second verb that takes the full inflection. The default is kán(ú) 'do', but motion verbs and durative auxiliaries are also possible. The iterated verb may be perfective (198a) or durative (198b).
a. sòjè-sj̀jè nì kànì
(iteration)-pay.Pfv 1 Pl do.Pfv
'We have paid up (for everything).' (cf. T7 @ 19:59)
b. é-rò [màngà-mà:"]-màngà-mà: ${ }^{\text {n }}$ nì ${ }^{\text {LH }}$ sìyò-bó
thus (iteration)-gather-Caus.Dur 1PlSbj keep.having-Ipfv 'thus we keep collecting it' (T7 @ 11:31)

## 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). Verbs have a similar structure in deontic modal categories such as imperative and hortative, with imperative (singular) being unmarked.

The aspect-negation system is effectively doubled by superimposing a pasttime marker (with characteristic vowel $\varepsilon$ ) on the regular aspect-negation forms.

The pronominal-subject category for indicative categories is marked by suffixes for $1 \mathrm{Sg}, 2 \mathrm{Sg}$, and 3 Pl , by proclitics for 1 Pl and 2 Pl , and by zero for 3 Sg (represented as -Ø). For the deontic moods, plural addressee is marked suffixally.

Verbs in relative clauses undergo some tonal and morphological changes; see §14.4.

### 10.1.1 Overview of indicative (aspect-negation) categories

The main indicative inflectional categories (other than pronominal subject) marked on verbs in indicative clauses are those in (199), which is organized into four groups based on aspect and polarity.
a. perfective positive system perfective experiential perfect E/I-stem, no other aspect-negation suffix
E/I-stem plus -tèy ~ -tê-
recent perfect
E/I-stem plus -sé-
resultative
E/I-stem plus sâ: 'have'
b. imperfective positive system
imperfective
progressive
O-stem plus -wò ~ -bò
$\mathrm{A} / \mathrm{O}$-stem durative plus aux -bó
c. perfective negative system
perfective negative
experiential perfect negative
recent perfect negative
d. imperfective negative system
imperfective negative progressive negative

O-stem plus -râ-
A/O-stem plus aux órâ-

Other indicative categories 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-.The recent perfect is morphologically the past form (with vocalic mutation to $\varepsilon$ ) of the perfective. The other categories listed above, including stative and imperfective, also have past-time forms with final $\varepsilon$.

### 10.1.2 Verb stem shapes

Since some aspects of inflectional morphology depend on the syllabic shape (as well as vocalism) of the stem, the syllabic shapes themselves are presented first.

### 10.1.2.1 Cv: verb stems

The known monosyllabic verb stems are listed in (200) in the most important vocalic stem forms. Tones are omitted. All known examples have $\{\mathrm{e} \varepsilon\}$ rather than i in the $\mathrm{E} / \mathrm{I}$-stem; i.e. there are no final-high-vowel Cv : stems. I know of no $\mathrm{Cv}{ }^{\text {: }}$ stems with nasalized vowel. I know of no irregular Cv : stems. The consonantal onset of the $\mathrm{E} / \mathrm{I}$-stem for -ATR verbs (Cwe: versus Ce:) depends on the point of articulation of the initial C, palatoalveolar $\{\mathrm{y} \mathrm{n}\}$ versus other. For +ATR stems, even y does not prevent the following w, see 'fill up' in (200b), where yw is pronounced as IPA [ 4 w ] with front rounded semivowel [ u$]$.
(200) Monosyllabic with final vowel
stems
O A/O E/I
a. Cv : with long oral vowel, -ATR
$\checkmark$ in $A / O$-stem

| do: | do: | dwe: | 'pound' or 'insult' |
| :---: | :---: | :---: | :---: |
| so: | so: | SWع: | 'douse (fire)' |
| to: | to: | twe: | 'pour' or 'tell lie' or 'make bunches' |
| no: | no: | nwe: | 'sing' or 'enter' |
| a in $\mathrm{A} / \mathrm{O}$-stem |  |  |  |
| yo: | ya: | ye: | 'pick up' or '(day) break' |
| по: | ла: | ne: | 'eat (meal)' or 'drink' |

b. Cv:- with long oral vowel, +ATR o in A/O-stem

| go: | go: | gwe: | 'exit (v)' |
| :--- | :--- | :--- | :--- |
| so: | so: | swe: | 'dip' |
| wo: | wo: | we: | 'sip' |
| yo: | yo: | ywe: | '(sth) fill up' |

c. Cv : ${ }^{\mathrm{n}}$ with long nasal vowel [none]
d. Ci: in E/I-stem [none]

A number of Ca: verbs in other Dogon languages have bisyllabic Tiranige cognates of the shape Cayo (e.g. nayo 'spend the night', kayo 'shave').

### 10.1.2.2 CvC verb stems

No lexically CvC stems have been observed. The surface shape CvC - can appear due to syncope (§3.4.2.2) of a short high vowel in $/ \mathrm{CvCi}-/$ or $/ \mathrm{CvCu}-/$ befire a suffix.

### 10.1.2.3 NCv verb (ndó 'give’)

There is one lexically NCv verb ('give'). It is irregular in having both -ATR and + ATR variants of the O-stem. The A/O-stem (with a: rather than o :) and the E/I-stem (with $\varepsilon$ :) are -ATR features.
(201) NCv stem

|  |  |  |  |
| :--- | ---: | :--- | :--- |
| O | stems |  | gloss |
| ndo $\sim$ ndo | nda: | E/I |  |
|  |  | nd $:$ | 'give' |

The paradigm is (202). The two variants of the O-stem are seen in (202a-b). The forms in (202a) are +ATR. Those in (202b-d) point to lexical -ATR.
(202)
a. O-stem (+ATR version), omitting variants with $\rho$
ndó-râ imperfective negative ndó-má- capacitative ndó-lâ prohibitive ndó-wà verbal noun
b. O-stem (-ATR version) ndó-wò imperfective
c. A/O-stem ndà: imperative
d. E/I-stem
ndè: perfective nì ndé-ỳ ${ }^{\text {n }} \quad$ hortative
e. I-stem
ndí: quoted imperative
This verb is ditransitive (§11.1.3.3). The recipient is marked accusative (§11.1.3.3-4).

### 10.1.2.4 Regular bisyllabic stems

Bisyllabic stems may be $\mathrm{CvCv}, \mathrm{CvCCv}, \mathrm{Cv}: \mathrm{Cv}$, or rarely $\mathrm{Cv}: \mathrm{NCv}$ (with nasal consonant N ). The initial C position is unfilled for vowel-initial stems. It is necessary to distinguish final-high-vowel from final-nonhigh-vowel types.

Final-nonhigh-vowel stems are illustrated in (203). The $\{\mathrm{H}\}$-toned O-stem is the citation form. One example of each attested vowel sequence is given. Not all vowel sequences are attested for any given syllabic shape, but this is likely due to accidental gaps. For example, e...o is attested in sé:gó (203c), but no CéCó or CéCCó stems have turned up (203a-b). For stems with high vowel $\{\mathrm{u} i\}$ in the penult, the ATR value must be calculated from the final 0 or o in the O-stem. Stems with a in the penult are + ATR.
(203) Final-nonhigh-vowel class (one example per vowel sequence)
stem gloss
a. CvCv
yégó 'fall'
tógó 'lift, pick up'
yógó 'come’
nájó 'have fun'
cíjó 'reply'
dú-yó 'bathe'
bí-yó 'lie down’
gújó 'dig’
b. CvCCv
Émbó 'winnow in wind'
dónjó 'throw'
tómbó 'jump'
dámbó 'push'
ímbó 'blow nose'
ímbó 'stretch out' or 'shut'
búngó 'bump'
c. $\mathrm{Cv}: \mathrm{Cv}$
sé:gó 'come down’
á:gó 'reach'
d. (uncommon) $\mathrm{Cv}: \mathrm{NCv}$
yú:ndó 'find (a situation)'

The major vocalically defined stem types are illustrated for representative CvCv verbs in (204). CvCCv and Cv:Cv verbs follow the same vocalic pattern.
(204) Final-nonhigh-vowel CvCv vocalism stems

|  | stems |  | gloss |
| :--- | :--- | :--- | :--- |
| O | $\mathrm{A} / \mathrm{O}$ | $\mathrm{E} / \mathrm{I}$ |  |

a. -ATR

| dono | dona | don $\varepsilon$ | 'buy' |
| :--- | :--- | :--- | :--- |
| cijo | cija | cije | 'reply' |

b. +ATR (vowel other than a in penult)

| yogo | yogo | yoge | 'come' |
| :--- | :--- | :--- | :--- |
| bi-yo | bi-yo | bi-ye | 'lie down' |

c. +ATR (a in penult)
najo naja naje 'have fun'
For discussion of the vocalism stems, see §3.3.6.
Underived stems with final high vowel (i in the $\mathrm{E} / \mathrm{I}$-stem, u in the O -stem) are illustrated in (205). Except for causatives, only a few CvCv stems belong to this type, but they are high-frequency verbs. The final ú in the O-stem is parenthesized, since it is normally syncopated.
(205) Final-high-vowel class (excluding causatives)
stem gloss
a. $\operatorname{CvC}(\mathrm{u})$, all known examples
with high-vowel in penult
ún(ú) 'go'
ním(ú) '(fire) die out'
sín(ú) 'convey, take away'
tún(ú) 'put (object) in'
túm(ú) '(sun) rise'
with a in penult
gán(ú) 'put (grain, liquid) in'
kán(ú) 'do'
ám(ú) 'sprinkle'
dám(ú) 'speak'
bám(ú) 'beat (tomtom)'
kám(ú) 'steal'
nán(ú) 'lay across’
b. CvCCu
[none]
c. $\mathrm{Cv}: \mathrm{Cu}$
[none]
d. $\mathrm{Cv}: \mathrm{NCu}$ [none]

Causative -m(ú)- combines with Cv: stems to create bisyllabic verbs, e.g. ná:-m(ú) (perfective) 'cause to eat, feed'.

The vocalism stems for final-high-vowel verbs are illustrated in (206).
(206) Final-high-vowel CvCv vocalism stems

|  | stems |  |  |
| :--- | :--- | :--- | :--- |
| O | $\mathrm{A} / \mathrm{O}$ | $\mathrm{E} / \mathrm{I}$ | gloss |

a. with high vowel in penult
ún(ú) únó uni 'go'
b. with a in penult
kán(ú) káná kani 'do'

In the imperative, verbs like ún(ú) with high-vowel penult use the O-stem rather than the $\mathrm{A} / \mathrm{O}$-stem: ùnù 'go!', sìnù 'take (away)!', tùnù 'put (object) in!'. For these few verbs, the main-clause imperative is identical in form to the quoted imperative (§10.7.3.1). By contrast, those like kán(ú) with a in the penult join the majority final-nonhigh-vowel verb class in using the $\mathrm{A} / \mathrm{O}$-stem in the imperative: kànà 'do!', gànà 'put (grain/liquid) in!'.

### 10.1.2.5 Syncopating bisyllabics with medial labial (Cvw/m/bv)

CvCv stems with medial $\{\mathrm{wm}\}$ syncopate the stem-final vowel in the O-stem before another labial $\{\mathrm{w} \mathrm{m}\}$. The Boui speaker appears to have no Cvbv or Cvfv verb stems, and no nonalternating -bv or -fv verbal suffixes, so the generalization for his dialect is that syncope occurs between labials. Under very limited conditions these stems simultaneously lengthen the first vowel. Syncope produces consonant clusters that must then undergo various assimilation and fortition processes.

Ningo dialect has medial $b$ for the known cognates of Boui bisyllabics with medial w (207a). The Ningo perfectives are kùbè, tìbè, gùbè, yèbè, ìbè, sùbìyè, àbè, tàbè). Where Boui has medial m (207b), the Ningo forms are similar, except that Ningo does not lengthen vowels in the imperfective (Ningo tém-bò-, etc.).
(207) Pfv Imprt IpfvNeg Ipfv Capac gloss
a. Cvwv- (Boui)

| w | kùwà | kúwó-râ | kúb-bò | kúm-mâ- | g' |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | tìwà | tíwó-râ | tíb-bò | m-m | 'die' |
| wè | gùwà | gúwó-râ | gúb-bò | gúm-mâ | hang' |
| wè | yèwà | yéwó-râ | yźb-bò | yém-mâ- | 'dance' |
| Wè | tèwà | téwó-râ | téb-bò | ́m-mâ- | 'hit' |
| ìwè- | ìwò | íwó-râ | íb-bò | -m | 'catch' |
| sùwè- | sùwò | súwó-râ | súb-bò | úm-mâ- | 'point at' (B |
| àwè- | àwà | áwó-rà | áb-bò | ám-mâ | 'accept' (Boui) |
| tàwè- | tàwà | táwó-râ | táb-bò | tám-mâ- | 'touch' (Boui) |

b. Cvmv- (Boui)
èmè èmà émó-râ é:m-bò ém-mâ- 'milk (cow)'
tèmè tèmà témó-râ té:m-bò tém-mâ- 'eat (meat)'
sèmè sèmà sémó-râ sé:m-bò sém-mâ- 'cut off; slaughter'

The O-stem forms in (207) are the imperfective negative (-râ-), the imperfective, and the capacitative. No syncope occurs in the imperfective negative. There is likewise no syncope before prohibitive -lâ (yéwó-lâ ‘don’t dance!’, témó-lâ ‘don’t eat [meat]!’). However, the imperfective and capacitative suffixes begin with labials and induce syncope. For all other verbs the imperfective (Boui dialect) has suffix -wò-, and the capacitative suffix is -mâ-. Given a $\mathrm{w} \sim \mathrm{b}$ alternation in the imperfective suffix, the analytic choice is between underlying w subject to fortition (hardening), and underlying b subject to lenition (§3.4.3.2). Taking w as underlying, the consonantal adjustments for Boui dialect following syncope are those in (208).

$$
\begin{array}{llll}
\mathrm{w}-\mathrm{w} & \rightarrow & \mathrm{~b}-\mathrm{b} & \text { double fortition }  \tag{208}\\
\mathrm{w}-\mathrm{m} & \rightarrow & \mathrm{~m}-\mathrm{m} & \text { assimilation } \\
\mathrm{m}-\mathrm{w} & \rightarrow & \mathrm{~m}-\mathrm{b} & \text { fortition of } \mathrm{w} \text { to } \mathrm{b} \text { after nasal }
\end{array}
$$

In addition to syncope and subsequent consonantal adjustments, Boui lengthens the first vowel in the imperfective (but not capacitative) of Cvmv- stems only, as in ع́:m-bò- 'will milk' in (207b). Cvwv- stems do not lengthen: kúb-bò- 'will do farming'. This lengthening is somewhat irregular synchronically, but there are some other examples where original * CvNCv (with * NC a homorganic nasal plus voiced stop sequence like *mb) has lengthened to $\mathrm{Cv}: \mathrm{NCv}$ (§3.4.2.1).

The verbal noun suffix -wà (Boui) behaves phonologically like imperfective -wò, including vowel-lengthening, as in $\varepsilon$ :́m-bà 'milking cows'. Again Ningo has nonalternating -bà.

### 10.1.2.6 Syncopating bisyllabics with medial alveolar (Cvn/l/rv-)

Parallel to syncope between labial consonants (preceding section), syncope occurs between stem and suffixal alveolars. The attested examples involve Cvnv-, Cvlv-, and Cvrv- stems preceding imperfective negative -râ-. No Cvdv-, Cvsv-, or Cvtv- verb stems are known, so the generalization can be made that syncope occurs between alveolars.

Data are in (209). Syncope occurs in the imperfective negative column. There is no vowel-lengthening.

$$
\begin{array}{llllll}
\text { Pfv } & \text { Imprt } & \text { IpfvNeg } & \text { Ipfv } & \text { Capac } & \text { gloss } \tag{209}
\end{array}
$$

a. Cvnv

| dònè | dònà | dón-dâ <br> tònè | dónó-wò <br> tònà | dónó-mâ- <br> tón-dâ | 'buy' <br> tónó-wò |
| :--- | :--- | :--- | :--- | :--- | :--- |
| tónó-mâ- |  |  |  |  |  |$\quad$| 'skin and butcher' |
| :--- |


| b. Cvlv |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ìlè | ìlà | íl-dâ | íló-wò | íló-mâ- | 'ascend' |
| tùlı̀ | tùlà | túl-dâ | túló-wò | túló-mâ- | 'sell' |
| nàlè | nàlà | nál-dâ | náló-wò | náló-mâ- | 'give birth' |
| yòlè | yòlà | yól-dâ | yóló-wò | yóló-mâ- | 'look for' (Boui) |
| tèlè | tèlà | tél-dâ | téló-wò | téló-mâ- | 'cut' |
| c. Cvrv |  |  |  |  |  |
| bàrè | bàrà | bár-dâ | báró-wò | báró-mâ- | 'increase' |
| pòrè | pòrà | ~ bád-dâ pór-dâ | póró-wò | póró-mâ- |  |
|  |  | $\sim$ pód-dâ |  |  | 'throw' |
| ว̀rè | òrà | ór-dâ | óró-wò | óró-mâ- | 'draw water' |
|  |  | $\sim$ ód-dâ |  |  |  |
| ìrè | ìrà | ír-dâ | író-wò | író-mâ- | 'get' |
|  |  | $\sim$ íd-dâ |  |  |  |

The main consonant-cluster adjustment is that the suffixal/r/ hardens to $d$ after $\{\mathrm{n} 1 \mathrm{r}\}$ (§3.4.3.5). The combination r-d in (209c) is then optionally assimilated to d-d (§3.4.3.6).

### 10.1.2.7 Syncopating final-high-vowel bisyllabics (Cvnv, Cvmv)

There are several Cvnv and a few Cvmv verb stems of the final high-vowel class. I know of no Cvwv stems in this class. The Cvnv stems syncopate not only before alveolar-initial suffixes, but also before labial-initial suffixes. The Cvmv verbs undergo syncope before labial-initial suffixes, but only one of them lengthens its vowel. Overall, then, final-high-vowel verbs differ considerably in their phonology from the final-nonhigh-vowel verbs covered in the preceding sections.

The irregular verb 'say', which has a final nonhigh vowel in the perfective (gùnè), is treated as a final-high-vowel verb in the O-stem and therefore syncopates in the relevant inflections.

Pfv Imprt IpfvNeg Ipfv
Capac gloss

## a. Cvnv

kànì kànà kán-dâ kám-bò kám-mâ- 'do'
gànì gànà gán-dâ gám-bò gám-mâ- 'put in'
tùnì tùnò tún-dâ túm-bò túm-mâ- 'put in'
ùnì ùnù ún-dâ úm-bò úm-mâ- 'go' sìnì sìnù sín-dâ sím-bò sím-mâ- 'take, convey'

```
irregular
    gùnc̀- gùnà gún-dâ gúm-bò gúm-mâ- 'say'
b. Cvmv
lengthen vowel in imperfective
    dàmì dàmà dámú-râ dá:m-bò dám-mâ- 'speak'
no lengthening imperfective
    kàmì kàmà kámú-râ kám-bò kám-mâ- 'steal'
    bàmì bàmà bámú-râ bám-bò bám-mâ- 'beat tomtom'
```

For the Cvnv stems (210a), syncope occurs in the imperfective negative before an alveolar, and in the imperfective and capacitative before a labial. The n assimilates to the labial point of articulation of the imperfective and capacitative suffixes. Suffix -râ- hardens to -dâ- as usual after n. The Cvmv- stems (210b) syncopate only before labial-initial suffixes. for Boui, imperfective -wò- hardens to -bò- after the nasal in both (210a) and (210b). The consonantal adjustments for Boui are therefore those in (211).

| $\mathrm{n}-\mathrm{w}$ | $\rightarrow$ | $\mathrm{m}-\mathrm{b}$ | fortition and assimilation |
| :--- | :--- | :--- | :--- |
| $\mathrm{n}-\mathrm{m}$ | $\rightarrow$ | $\mathrm{m}-\mathrm{m}$ | assimilation |
| $\mathrm{m}-\mathrm{w}$ | $\rightarrow$ | $\mathrm{m}-\mathrm{b}$ | fortition of w to b after nasal |

In (210b) the first vowel is lengthened in one verb ('speak'), but not in 'steal' or 'beat (tomtom)'. In the case of 'steal' (210b), the failure of first-vowel lengthening to occur results in homophony with 'do' (210a) in the imperfective and capacitative.

Ningo has invariant suffix-initial b rather than w in the imperfective, so it needs fewer post-syncope consonantal adjustments. 'Do' (210a) in Ningo has perfective kànì, imperfective kám-bò, and capacitative kám-mà.

### 10.1.2.8 Trisyllabic stems

Causatives in -m(ú) and -gó are treated separately below. For other trisyllabic stems, including other suffixal derivatives, the medial syllable (which is in a weak metrical position, $\S 3.1 .2$ ) is realized as $i$ or $u$, and the final vowel is nonhigh. The lexically variable vowels are the initial and the final. (212) gives one example for each attested vowel sequence.
(212) Trisyllabic stems (excluding causatives)
stem gloss
a. initial high vowel
tímbí-ró 'close (mouth)'
ígí-yó 'stand, stop'
kúmí-yó 'shut (eye)'
b. initial mid-height vowel
bégíĺ 'winnow by shaking'
jélí- yó 'hold'
kóndú-ró 'crumple'
c. initial a (treated as +ATR)
bálí-yó 'see'
págú-ló 'untie' (reversive)
Trisyllabic causatives with suffix -m(ú) or -gó have different vocalism, frequently with a nonhigh vowel in the medial syllable: yógó-m(ú) 'cause to come', téwá-gó 'shatter (sth)'. See §9.2.1-2 for discussion.

### 10.2 Positive indicative TAMP categories

10.2.1 Perfective positive system (including perfect)

Perfective positive categories are associated with the E/I-stem (§3.3.6).

### 10.2.1.1 Simple perfective (E/I-stem)

The simple perfective stem is unsuffixed. It is characterized by $\{\mathrm{e} \varepsilon\}$ replacing the stem-final $\{00\}$ for most verbs, and by final i replacing $u$ (or zero after apocope or syncope) for the remaining minority. In the 3Pl, the stem-final vowel is i even for verbs with $\mathrm{E} / \mathrm{I}$-stem perfectives in the other categories. (213) illustrates the paradigms for a -ATR stem ('fall'), a +ATR stem ('come'), and an i-final stem ('rob'), all of CvCv - shape, and one monosyllabic stem.
(213) category form 'fall' 'come' 'rob' 'enter'

| 1 Sg | $\{\mathrm{H}\}-\mathrm{y}^{\text {n }}$ | yégé-y ${ }^{\text {n }}$ | yógé-ỳ ${ }^{\text {n }}$ | kámí-ỳ ${ }^{\text {n }}$ | $n w \varepsilon$ - ${ }^{\text {y }}{ }^{\text {n }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1Pl | nì $\{\mathrm{L}\}$ | nì yègè | nì yògè | nì kàmì | nì nwè: |
| 2 Sg | $\{\mathrm{H}\}$-ẁ | yégé-ẁ | yógé-ẁ | kámí-ẁ | nwé-ẁ |
| 2 Pl | è $\{\mathrm{L}\}$ | è yègè | è yògè | è kàmì | è nwè: |
| 3 Sg | $\{\mathrm{L}\}-\varnothing$ | yègè-Ø | yògè-Ø | kàmì-Ø | nwè:-Ø |
| 3P1 | $\{\mathrm{L}\}$-ìyè/-ìyè | yèg-ìyè | yòg-ìyè | kàm-ìyè | nùy-દ̀: |
|  | $\{\mathrm{LH}\}$-íyè/-íyè | yèg-íyè | yòg-íyè | kàm-íyè | nǔy-yè: |

The 3Pl is L-toned for Boui (a). For Ningo, this form is LHL-toned (b), but it drops to $\{\mathrm{L}\}$ before mè-nと̀ 'if', and optionally in main clauses.

For monosyllabic stems, the stem vowel is long in the zero-suffix form, and short before nonzero suffixes ( $1 \mathrm{Sg}-\mathrm{y}^{\mathrm{n}}, 2 \mathrm{Sg}-\mathrm{w}$ ). For example, the perfective of gó: 'exit (v)' is gwè:-Ø or suffixed gwé-ỳn $(1 \mathrm{Sg})$, gwé-ẁ $(2 \mathrm{Sg})$. The 3 Pl form gw-íyè $\sim$ gǔy-yè also has short vowels.

A sample of verbs with -e or $-\varepsilon$ (depending on ATR type of the stem) is given in (214). The 3 Sg form is given. Verbs of this type are the majority. They include all monosyllabics, all trisyllabic and longer stems, all heavy bisyllabics $(\mathrm{CvCC}-, \mathrm{Cv}: \mathrm{Cv}$, $\mathrm{Cv}: \mathrm{CCv})$, all light bisyllabics $(\mathrm{CvCv})$ that have a mid-height vowel $\{\varepsilon \mathrm{e} 00$ o in the first syllable, and some light bisyllabics that have a high or low vowel $\{\mathrm{i} u$ a $\}$ in the first syllable. Monosyllabics are shown in the long-voweled form (used with zero suffix).
(214) Simple perfective in $-\varepsilon /-e$

$$
\text { stem } \quad \text { Perfective } \quad \text { gloss }
$$

a. monosyllabic Cv:-
-ATR stems, initial C not palatoalveolar

| dó: | dwè: | 'pound' or 'insult' (3Pl dwǐy-yè) |
| :---: | :---: | :--- |
| tó: | twè: | 'pour' |
| nó: | nwè: | 'sing' or 'enter' |
| só: | swè: | 'douse (fire)' |
| -ATR stems, initial C palatoalveolar |  |  |
| nó: | nè: | 'eat, drink' (3Pl jı̌y-yè) |
| yó: | yè: | 'pick up' (Boui) |
| jó: | jè: | 'pick up' (Ningo) (3Pl j1̌y-yè) |


| +ATR stems |  |  |
| :---: | :---: | :---: |
| gó: | gwè: | 'exit (v)' (3Pl gwǐy-yè) |
| só: | swè: | 'dip' |
| yó: | ywè: | '(sth) fill up' |
| wó: | wè: | 'sip' |
| b. $\mathrm{NCv}(:)-$ |  |  |
| -ATR stems |  |  |
| ndó- | ndè: | 'give' (Boui) |
| ndó- | ndè: | 'give' (Ningo) (ndǐy-yè) |
| c. bisyllabic |  |  |
| -ATR stems |  |  |
| cíjó | cijjè | 'reply' |
| ímbó | ìmbè | 'pull' or 'shut' |
| gúwó | gùwè | 'hang up' |
| tógó | tògè | 'lift, pick up' |
| jéyó | jèyè | 'kill' |
| mínó | mìnè | 'swallow' |
| +ATR stems |  |  |
| áwó | àwè | 'accept' (Boui) |
| ábó | àbè | 'accept' (Ningo) |
| gújó | gùjè | 'dig' |
| bí-yó | bì-yè | 'lie down' |
| sé:gó | sè:gè | 'come down' |
| dámbó | dàmbè | 'push' |
| d. trisyllabic and longer |  |  |
| -ATR stems |  |  |
| +ATR stems |  |  |
| bálí-yó | bàlì-yè | 'see' (3P1 bàlì-ý-yè) |
| bángílí-yó | bàngìì-yè | 'go back' |

Stems with perfective ...i- are in (215). Again the 3 Sg form is shown. The verbs in question have the shapes Cámú, Cán(ú), Cín(ú), and Cún(ú).
(215) Simple perfective in ...i

| stem | Perfective | gloss |
| :---: | :--- | :--- |
| bisyllabic |  |  |
| CaCv- |  |  |
| dám(ú) | dàmì | 'speak' (3Pl dàmí-yè) |
| kám(û) | kàmì | 'steal' |
| bám(ú) | bàmì | 'beat (tomtom)' |
| gán(ú) | gànì | 'put (grain, liquid) in' |
| kan(ú) | kànì | 'do' |
| CuCv-, CiCv- |  |  |
| ún(ú) | ùnì | 'go' (3Pl ùní-yè) |
| sín(ú) | sì̀̀̀ | 'take (convey)' |
| tunn(ù) | tùnì | 'put (sth) in (sth)' |

The perfective can occur with or without preceding constituents (i.e. it does not require defocalization of the verb). It does not change form before clause-final particles such as mè 'if/when' (216b) and interrogative lè (216d,f).
(216)
a. dwè:-Ø
pound.Pfv-3SgSbj
'She pounded.'
b. [dwè:-Ø mè] kándíyó-wò-Ø
[pound.Pfv-3SgSbj if] cook-Ipfv-3SgSbj
'When she has pounded (the grain), she will cook.'
c. ndà-yé: dwè:-Ø
woman pound.Pfv-3SgSbj
'A woman pounded.'
d. dwè:-Ø lé
pound.Pfv-3SgSbj Q
‘Did he/she pound?’ (§13.2.1)
e. yò: dwè:-Ø
today pound.Pfv-3SgSbj
'He/She pounded today.'

```
f. yò: dwè:-Ø lé
today pound.Pfv-3SgSbj Q
```

'Did he/she pound today?'

### 10.2.1.2 Perfective-1a and -1 b absent

Several eastern Dogon languages, and Tebul Ure in western Dogon, have a distinction between two main perfective positive suffixes, e.g. Jamsay -ti (perfective-1a) and -â: $\sim-y a ̀ ~(p e r f e c t i v e-1 b), ~ e a c h ~ a s s o c i a t e d ~ w i t h ~ s p e c i f i c ~ s e m a n t i c ~ t y p e s ~ o f ~ v e r b, ~ e . g . ~ 1 a ~ f o r ~$ most transitive and for non-motion active intransitives versus 1 b for intransitive motion and change of state verbs. These suffixal categories are absent from Tiranige as they are from most western Dogon languages.

### 10.2.1.3 Experiential perfect 'have ever' (-tèy ~ -té-)

This form is used in contexts like 'have you ever (been to Paris, seen an elephant, etc.)?' -tèy ~ -té- is added to the E/I-stem of the verb. The shortened form -tépresumably reflects loss of $/ \mathrm{y} /$ before a suffixal semivowel. The paradigm is (217).
(217) Experiential perfect

| category | form | 'see' | 'go' |
| :---: | :---: | :---: | :---: |
| 1Sg | $\{\mathrm{L}\}$-té-y ${ }^{\text {n }}$ | bàlì-yè-té-y ${ }^{\text {n }}$ | ùnì-té-y ${ }^{\text {n }}$ |
| 1P1 | nì $\{\mathrm{L}\}$-tèy | nì bàlì-yè-tèy | nì ùnì-tèy |
| 2 Sg | \{L\}-té-w | bàlì-yè-té-w | ùnì-té-w |
| 2 Pl | è $\{\mathrm{L}\}$-tèy | è bàlì-yè-tèy | è ùnì-tèy |
| 3 Sg | \{L\}-tèy-Ø | bàlì-yè-tèy-Ø | ùnì-tèy-Ø |
| 3 Pl | \{L\}-tèy-â: | bàlì-yè-tèy-â: | ùnì-tèy-â: |

The low tone of the 3Sg form is confirmed by the interrogative combination -tèl-Ø lé, contrast 2 Sg -té-1 lè. The past-time counterpart is likewise -tèy-yé-Ø (§10.6.1.5).

The negative experiential perfect ( $\$ 10.2 .3 .2$ ) is common in the sense 'have never VPed'.

### 10.2.1.4 Recent perfect (-sé-)

This category has suffix -ś́- ~ -sと̌-, added to an $\{\mathrm{L}\}$-toned form of the E/I-stem of the verb. -sé- can be analysed morphologically as the past-time form (with its
characteristic vocalic mutation to $\varepsilon, \S 10.6 .1$ ) of resultative -sà- (next subsection). Another way to formulate this is to connect -sś- directly with $s \hat{\varepsilon}$ : 'had' (§10.6.1.3), past form of sâ: 'have'. Since resultative -sà- functions in some contexts (notably relative clauses) as a suffixally marked equivalent of the simple perfective, one could expand on this by analysing -s $\varepsilon$ - $\sim-s \check{\varepsilon}-$ as the past-time form of the simple perfective itself. The simple perfective (E/I-stem, no suffix) has no other past-time counterpart. Further support for this idea comes from the recent perfect negative, which is morphologically the past-time form of the perfective negative (§10.2.3.3).

The paradigm is (218).
(218) Recent perfect

| category | form | 'has gone |
| :---: | :---: | :---: |
| 1Sg | $\{\mathrm{L}\}$-sè- $\mathrm{y}^{\text {n }}$ | ùnì-sċ-y ${ }^{\text {n }}$ |
| 1Pl | nì $\{\mathrm{L}\}$-sś | nì ùnì-ś́ |
| 2Sg | $\{\mathrm{L}\}$-sı̀-w | ùnì-sc̀-ẃ |
| 2 Pl | è $\{\mathrm{L}\}$-śs | è ùnì-sć |
| 3 Sg | $\{\mathrm{L}\}$-sé | ùnì-s¢́ |
| 3 Pl | $\{\mathrm{L}\}$-s- $\hat{\varepsilon}$ : | ùnì-s-¢̂: |

The tone pattern of the forms is $\{\mathrm{LH}\}$, with just the final mora H-toned, except that 3Pl ends with falling HL. Accordingly, there is no distinction between regular and defocalized forms of this inflectional category. When polar interrogative lè (§13.2.1) is added, the H -tone is realized on this particle: 3 Sg -sè lé, 2 Sg -sè-1 lé, 1 Sg -sè-n ní.

A sample of 3 Sg recent perfect forms for stems with final nonhigh vowels is in (219). There is no special phonology (syncope does not occur).
(219) Recent perfect (final-nonhigh-vowel class)

$$
\text { stem } \quad \text { recent perfect } 3 \mathrm{Sg} \text { gloss }
$$

a. Cv :
nó:
gó:
nwè:-ś́
'enter'
gwè:-sモ́
'exit (v)'
nó:
nè:-sย́
'eat, drink'
b. $\mathrm{NCv}(:)$
ndó
ndè:-sと́
'give'
c. CvCv
gújó gùjè-sé 'dig'
cíjó cìjè-sé 'reply'
dú-yó dù-yè-sé 'carry on head'
táwó tàwè-sé 'touch'
témó tèmè-sé 'eat (meat)'
tónó tònò-sé 'skin and butcher'
túló tùlè-sé 'sell'
d. CvCCv

દ́mbó èmbò-sé 'winnow in wind'
tómbó tòmbè-ś́ 'jump'
e. $\mathrm{Cv}: \mathrm{Cv}$
sé:gó sè:gè-ś $\quad$ 'come down'
f. trisyllabic yígíjó
yìgìjè-s $\varepsilon \quad$ 'shake'
ígí-yó
ìgì-yè-sદ́
'stand, stop'
g. irregular
gún(ú) gùnè-sé 'say'
Forms for verbs ending in a high vowel are in (220).
(220) Recent perfect (final-high-vowel class)
stem recent perfect 3 Sg gloss

| a. $\mathrm{CaC}(\mathrm{u})$ |  |  |
| :---: | :---: | :---: |
| Cám(ú) |  |  |
| dám(ú) | dàmì-s¢́ | 'speak' |
| kám(ú) | kàmì-ś́ | 'steal' |
| Cán(ú) |  |  |
| kán(u) | kànì-s¢́ | 'do' |

$\begin{array}{lll}\text { b. CíC(ú), CúC(ú) } & \\ \begin{array}{l}C v n(u ̂) \\ \text { unn(û) }\end{array} \text { ùnì-sé } & \\ & & \text { go' }\end{array}$
This inflectional category adds a recent perfect nuance ('has already VPed') if it is not embedded in a narrative. A speaker regularly produced yògè- $\varnothing$ 'he/she came' as the
perfective form in unmarked contexts, but suggested that yògè-ś́ 'he/she has come' might be used when the person in question has recently come and gone. He likewise suggested that nè:-sé 'he/she has eaten' could be used in the context of having recently eaten (and therefore not being hungry).

In narrative contexts where a non-present reference time is the baseline, the recent perfect can function as a past perfect (e.g. 'they had gone', 'I had eaten').

No special past-time form of the recent perfect could be elicited, supporting the claim that it is already morphologically marked for past time.

For a 'have just VPed' construction with a bare perfective verb plus a conjugated perfective form of verb gímó, see (243b) in §10.2.3.3.

### 10.2.1.5 Resultative (-sà-)

This forms contains an $\{H\}$-toned $E / I$ form of the verb stem (segmentally equivalent to the 3 Sg simple perfective), plus -sà-, which is undoubtedly related to the 'have' quasi-verb sâ: (§11.5.1).

The sense is resultative, i.e. denoting both an event and the resulting state or situation. For stance verbs, it competes to some extent with the stative inflection, e.g. resultative ígí-yé-sà- $\emptyset$ 'he/she has stood up (and is standing)' versus the more purely stative ígà- $\emptyset$ 'he/she is standing' (French debout). However, the resultative can be used with a wider range of verbs than the stative, and it may describe a general situation. For example, a visitor asks 'is Amadou there?', and the answer is 'he has gone out' (gwé:-sà-Ø), the point being that he is not present. Statives are not used in such situations and are not formed from motion verbs.

The paradigm is (221).
Resultative

| category | form | 'exit (v)' | 'fall' |
| :---: | :---: | :---: | :---: |
| 1Sg | \{ H$\}$-sà-y | gwé:-sà-y ${ }^{\text {n }}$ | yégé-sà-y ${ }^{\text {n }}$ |
| 1Pl | nì $\{\mathrm{H}\}$-sà | nì gwé:-sà | nì yégé-sà |
| 2Sg | \{ H$\}$-sà-w | gwé:-sà-w | yégé-sà-w |
| 2 Pl | è $\{\mathrm{H}\}$-sà | è gwé:-sà | è yégé-sà |
| 3 Sg | \{ H$\}$-sà-Ø | gwé:-sà-Ø | yégé-sà-Ø |
| 3 Pl | \{ H$\}$-s-â: | gwé:-s-â: | yégé-s-â: |
|  | $\{\mathrm{H}\}$-s-à: | gwé:-s-à: | yégé-s-à: |

The (a) pattern for 3 Pl was from the Boui speaker, the (b) pattern was from the Ningo speaker. Representative 3 Sg forms for stems ending in a nonhigh vowel are in (222).
(222) Resultative (final-nonhigh-vowel type)
stem Resultative 3Sg gloss
a. Cv :
nó: nwé:-sà-Ø 'enter'
gó: gwé:-sà-Ø 'exit (v)'
nó: né:-sà-Ø 'eat, drink'
b. $\mathrm{NCv}(:)$
ndó ndé:-sà-Ø 'give'
c. bisyllabic

| gújó | gújé-sà-Ø | 'dig' |
| :--- | :--- | :--- |
| túló | túlç-sà-Ø | 'sell' |
| sé:gó | sé:gé-sà-Ø | 'come down' |

d. trisyllabic

| yígíjó | yígíjé-sà-Ø | 'shake' |
| :--- | :--- | :--- |
| ígí-yó | ígí-yé-sà-Ø | 'stand, stop' |

e. irregular
gún(u)- gúné-sà-Ø 'say'
Forms for verbs ending in a high vowel are in (223).
(223) Resultative (final-high-vowel type)
stem Resultative 3Sg gloss
a. $\mathrm{CaC}(\mathrm{u})$
dám(ú) dámí-sà-Ø 'speak'
kám(ú) kámí-sà-Ø 'steal'
Cán(ú-)
kán(ú) kání-sà-Ø 'do'
b. CíC(ú), CúC(ú)

Cvn(ú)
ún(ú) úní-sà-Ø 'go'

A speaker rejected a negative version, i.e. with sà:-nà- 'not have'. Depending on the verb type, the stative negative ('is not standing') or the ordinary perfective negative ('did not go out' = 'has not gone out') may be used to convey the intended sense.

The resultative often replaces the simple perfective in relative clauses (§14.4.1).

### 10.2.1.6 Cv-reduplicated perfective absent

Perfectives with initial reduplicative Cv-, like those found in several eastern Dogon languages to mark verb focalization, have not been observed. However, entire perfective verbs may be iterated in full (§9.8).

### 10.2.2 Imperfective positive system

### 10.2.2.1 Imperfective (-wò-~ -bò-)

The basic imperfective (positive) verb form has suffix -wò- ~ -bò- (Boui) or invariant -bò- (Ningo) added to an $\{\mathrm{H}\}$-toned $\mathbf{O}$-stem. The imperfective paradigm is (224).

Imperfective paradigm (Boui)

| category | form | $\begin{align*} & \text { 'enter' }  \tag{224}\\ & \text { (< nó:) } \end{align*}$ | 'dance' <br> (< yéwó) | $\begin{aligned} & \text { 'exit (v)' } \\ & \text { (< gó:) } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | $\{\mathrm{H}\}$-wò-y ${ }^{\text {n }}$ | nó:-wò-y ${ }^{\text {n }}$ | yéb-bò-y ${ }^{\text {n }}$ | gó:-wò-y ${ }^{\text {n }}$ |
| 1Pl | nì $\{\mathrm{H}\}$-wò | nì nó:-wò | nì yćb-bò | nì gó:-wò |
| 2Sg | $\{\mathrm{H}\}$-wò-w | nó:-wò-w | yéb-bò-w | gó:-wò-w |
| 2Pl | è $\{\mathrm{H}\}$-wò | è nó:-wò | è yćb-bò | è gó:-wò |
| 3Sg | $\{\mathrm{H}\}$-wò-Ø | nó:-wò-Ø | yéb-bò-Ø | gó:-wò-Ø |
| 3 Pl | $\{\mathrm{H}\}$-w-à: | nó:-w-à: | yéb-b-à: | gó:-w-à: |

For the older speaker from Boui, the form is invariant -bò- after vowels as well as after consonants, e.g. nó:-bò-Ø 'he/she will go in', gó:-bò-Ø 'he/she will go out'.

The imperfective undergoes syncope (§3.4.2.2) of stem-final vowels after $\{\mathrm{wm}\}$ and in one case ('say') after n , in CvCv stems. For the younger speaker from Boui, after syncope /ww/ surfaces as bb and /mw/ surfaces as mb. The older speaker from Ningo has $b$ rather than $w$ in the relevant verbs (tábó, tíbé, etc.) as well as in the imperfective morpheme -bò-, and the imperfective forms have bb and mb as for the

Boui speaker. Cvmv stems lengthen the first vowel in connection with syncope in Boui, resulting in Cv:m-bò-.
(225) Imperfective (final-nonhigh-vowel class)
stem imperfective gloss
a. Cv :
nó: nó:-wò 'enter'
gó: gó:-wò 'exit (v)'
nó: jó:-wò 'eat, drink'
b. $\mathrm{NCv}(:)$
ndó ndó-wò 'give’
c. CvCv
gújó gújó-wò 'dig'
cíjó cíjó-wò 'reply’
dú-yó dú-yówò 'carry on head'

Cvwv (Boui, cf. Ningo dialect Cvbv)

| táwó | táb-bò | 'touch' |
| :--- | :--- | :--- |
| tíwó | tíb-bò | 'die' |
| áwó | áb-bò | 'accept' |
| yéwó | yéb-bò | 'dance' |
| kúwó | kúb-bò | 'do farming' |
| súwó | súb-bò | 'point at' |

Cvmv (imperfectives short-voweled in Ningo: tém-bò, sém-bò)
témó té:m-bò 'eat (meat)'
sémó sé:m-bò 'slaughter'
Cvnv, nonsyncopating

| tónó | tónó-wò | 'butcher' |
| :--- | :--- | :--- |
| dónó | dónó-wò | 'buy' |
| mínó | mínó-wò | 'swallow' |

d. CvCCv

Émbó Émbó-wò 'winnow in wind' tómbó tómbó-wò 'jump'
e. $\mathrm{Cv}: \mathrm{Cv}$ sé:gó sé:gó-wò 'come down'

| f. trisyllabic |  |  |
| :---: | :--- | :--- |
| yígíjó | yígíjó-wò | 'shake' |
| ígí-yó | ígí-yó-wò | 'stand, stop' |

Stems with final high vowel are in (226). Cvnu stems syncopate, unlike Cvno/o stems. After syncope, $/ \mathrm{n} /$ assimilates in position, producing mb . This assimilation creates accidental homophonies. For example, kám(ú) 'steal' and kán(ú) 'do' both have imperfective kám-bò (226a). Vowel-lengthening occurs idiosyncratically after syncope in imperfective dá:m-bò from dám(ú) 'speak' in Boui dialect. Other verbs of Cvm(u) shape do not lengthen (226a).
(226) Imperfective (final-high-vowel class)
a. $\mathrm{CaC}(\mathrm{u})$

| dám(ú) <br> kám(ú) | dá:m-bò- <br> kám-bò- | 'speak' (Ningo dám-bò-) <br> Cán(ú) <br> kán(ú) |
| :---: | :--- | :--- |
|  | kám-bò- | 'do' |

b. CíC(ú), CúC(ú)

Cvn(ú)

| gún(ú) | gúm-bò- | 'say |
| :--- | :--- | :--- |
| ún(ú) | úm-bò- | 'go' |

c. causatives yógó-mú yógó-ḿ-bò- 'send here' málá-mú málá-m-bò- 'squeeze'

This is a broad imperfective that translates in different contexts as a habitual present ('I work here') or as a future ('I will go there tomorrow'). With reference to eventualities whose time interval spans the moment of speaking, its use is circumscribed by the stative ('I am sitting'), the resultative ('I am sitting, I have sat' or 'he is gone'), and the progressive ('I am sweeping').

Imperfectives with suffix -wá or -bá are participial in form and occur prototypically in relative clauses.

### 10.2.2.2 Cv-reduplicated imperfective absent

Reduplicated imperfectives like the Cv - reduplicatives in other Dogon languages, marking verb focus, do not occur.

### 10.2.2.3 Progressive (...m bǒ:)

The progressive ('be VP-ing') is expressed by adding an auxiliary verb bǒ: to the durative form of the stem. The latter is an $\{\mathrm{L}\}$-toned A/O-stem whose final vowel is lengthened and nasalized. The nasalization is realized as a homorganic nasal before a stop. Before a vowel the durative ends in $\grave{a}^{\mathrm{n}} \sim \grave{o}^{\mathrm{n}}$ or sometimes àwn $\sim \mathrm{o}^{\mathrm{w}}$. There is no variant with \#wǒ: instead of bǒ: .

The durative stem, without bǒ:-, also occurs in some other constructions, notably with auxiliaries derived from 'be' and 'have’ (§9.8, §15.2.1.6-7). Except for the lengthened final vowel, it is similar in form and function to the 'while' subordinator (§15.2.1.2).

The progressive paradigm for Boui is (227). Forms shown with à: ${ }^{\text {n }} \sim$ ò: ${ }^{\text {n }}$ before 1 Pl nì or 2 Pl è have variants with àw ${ }^{\mathrm{n}} \sim$ òw $^{\mathrm{n}}$.
(227) Progressive paradigm

| category | form | 'eat' | 'do' | 'dig (small hole)' |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | $\{\mathrm{L}\}$ bò- ${ }^{\text {n }}$ | jà:m bò-ýn | kànà:m bò-ýn ${ }^{\text {n }}$ | gùlò:m bò-ýn |
| 1Pl | $\{\mathrm{L}\}$ nì bǒ: | nà: ${ }^{\text {n }}$ nì bǒ: | kànà: ${ }^{\text {n }}$ nì bǒ: | gùlò: ${ }^{\text {n }}$ nì bǒ: |
| 2Sg | \{L\} bò-ẃ | nà:m bò-w | kànà:m bò-ẃ | gùlò:m bò-ẃ |
| 2 Pl | $\{\mathrm{L}\}$ è bǒ: | nà: ${ }^{\text {n è }}$ bǒ: | kànà: ${ }^{\text {n è bǒ: }}$ | gùlò: ${ }^{\text {n }}$ è bǒ: |
| 3 Sg | \{L\} bǒ:-Ø | jà:m bǒ:-Ø | kànà:m bǒ:-Ø | gùlò:m bǒ:-Ø |
| 3 Pl | $\{\mathrm{L}\}$ bà-â: | nà:m bà-â: | kànà:m bà-â: | gùlò:m bà-â: |

Representative 3 Sg forms for verbs ending in nonhigh vowel are displayed in (228).
(228) Progressive (final-nonhigh-vowel class)
stem Progressive gloss
a. Cv :
with o :
gó: gò:m bǒ: 'exit (v)'
with a:
nó: nà:m bǒ: 'eat, drink'
nó: nwà:m bǒ: 'enter'
b. NCv:
with a : ndó ndà:m bǒ: 'give'
c. CvCv
with o gújó gùjò:m bǒ: 'dig' (Boui)
with a from $\mathrm{CaCv}-$ náló nàlà:m bǒ: 'give birth'
with a from -ATR stem dú-yó dù-yà:m bǒ: 'carry on head'
tíwó tìwà:m bǒ: 'die’
yéwó yèwà:m bǒ: 'dance'
kúwó kùwà:m bǒ: 'do farming'
témó tèmà:m bǒ: 'eat (meat)'
dónó dònà: $\mathrm{m}^{\mathrm{n}}$ bǒ: 'buy’
c. CvCCv
with o
tómbó tòmbò:m bǒ: 'jump'
with a from $\mathrm{CaCCv}-$
dámbó dàmbà:m bǒ: 'push'
with a from -ATR stem ع́mbó èmbà:m bǒ: 'winnow in wind'
d. $\mathrm{Cv}: \mathrm{Cv}$
with o
sé:gó sè:gò:m bǒ: 'come down'
with a from $\mathrm{Ca}: \mathrm{Cv}-$ já:ló jà:là:m bǒ: 'build' or 'look'
e. trisyllabic
with o yígíjó yìgìjò:m bǒ: 'shake'
with a from -ATR stem ígí-yó ìgì-yà:m bǒ: 'stand, stop'
f. irregular
gún(u) gùnà:m bǒ: 'say'
Forms from verbs with final high vowel are in (229).
(229) Progressive (final-high-vowel class)
stem Progressive gloss
a. CáC(ú)-
dám(ú) dàmà:m bǒ: 'speak'
kám(ú) kàmà:m bǒ: 'steal'
b. $\mathrm{C}^{\prime} \mathrm{C}(\mathrm{u})-, \mathrm{CúC(ú)-}$
ún(u) ùnà:m bǒ: 'go'
kán(u) kànà:m bǒ: 'do'
c. causatives
ná:-m(ú) jà:-mà:m bǒ: 'let/make (sb) drink'
yógó-m(ú) yògò-mò:m bǒ: 'send here'
málá-m(ú) màlà-mà:m bǒ: 'squeeze'

Examples are in (230).
(230)
a. nà:ygè nà:m bò-ýn
meal eat.Dur Prog-1SgSbj
'I am eating.'
b. wàlè kànà: ${ }^{\text {n }}$ nì bǒ:
work(n) do.Dur 1PlSbj Prog
'We are working.'
c. sà:ní kànà:m bǒ:-Ø
prayer do.Dur Prog-3SgSbj
'He/She is praying.'

For the past progressive with b̌̌:, see §10.6.1.4.
10.2.2.4 Future-habitual with Pronoun-lá and perfective

A future or habitual construction that occurs repeatedly in the Ningo texts consists of a subject pronoun with suffix -lá, followed by an unconjugated $\{\mathrm{L}\}$-toned simple perfective verb, with or without intervening constituents such as object NPs. For 3 Sg , contracted nǎ: is more common than uncontracted nà-lá. The contraction is likely favored by the identical flanking a-vowels. The paradigm is therefore (231).
(231) 1 Sg mì-lá

1 Pl nì-lá
2Sg ò-lá
2 Pl è-lá
3 Sg nǎ: (less often nà-lá)
3P1 kè-lá

Before an H-tone, the combinations in (231) flatten to L-tone by regular tone sandhi. This happens when -lá precedes an object NP beginning with H. Flattening cannot happen when these forms are immediately followed by the perfective verb, since the latter is L-toned.

If the subject is expressed as a nonpronominal NP , it is obligatorily resumed as a 3 Sg or 3 Pl pronoun plus -lá.
(232) [kéléngé rì] nǎ: tàngè
[marriage Def] 3SgSbj.Fut pass.Pfv
'the marriage ceremony will pass (=be over)' (Ningo, T7 @ 02:37)
This construction occurs frequently in texts like T2 and T3 that describe habitual activities. However, the Ningo speaker states that the primary sense is future time, and this is clearly the case in e.g. (545) 'I will tell about ...'.

In habitual contexts, each succeeding new event is typically first presented in this construction, then it is echoed in a conditional antecedent clause with a conjugated perfective verb in the sense 'when/after ...', setting up the next event For example, (232) above was immediately followed by (233).
(233) kéléngé tàngè- $\varnothing$ mè-nદ̀, $\ldots$
marriage pass.Pfv if, ...
'When the marriage ceremony has passed, ...' (Ningo, T7 @ 02:40)
The Ningo speaker sometimes adds a clause-final ó to the lá construction. He glosses this construction with 'now' or 'first(ly)'.
a. nì-lá jè: ó
1PlSbj-Fut eat.Pfv first
'We/I will eat first.' (Ningo)
$\begin{array}{lllll}\text { b. } & \text { sěydù } & \text { nà-lá } & \text { nè: } & \text { ó } \\ & \text { Seydou } & \text { 3SgSbj-Fut } & \text { eat.Pfv } & \text { first } \\ & \text { 'Seydou will eat first.' (Ningo) } & \end{array}$

### 10.2.3 Negation of indicative verbs

### 10.2.3.1 Perfective negative (-nì)

The perfective negative suffix is -nì. The verb is in the A/O-stem, which requires + ATR vocalism. The stem is $\{\mathrm{L}\}$-toned in the $3 \mathrm{Sg}, 1 \mathrm{Pl}$, and $2 \mathrm{Pl},\{\mathrm{H}\}$-toned in the 1 Sg and 2 Sg , and $\{\mathrm{HL}\}$-toned in the 3 Pl . The $\{\mathrm{HL}\}$ stem in the 3 Pl helps avoid confusion between the segmentally similar 3 Pl and 1 Sg . The stem-final vowel is lengthened in the 3 Pl form if not already long. The paradigm is (235).
(235) Paradigm of perfective negative

| category | PfvNeg form | 'enter' | 'dance" | 'exit (v)' |
| :---: | :---: | :---: | :---: | :---: |
| 1Sg | $\{\mathrm{H}\}$-ní- ${ }^{\text {n }}$ | nó:-ní-y ${ }^{\text {n }}$ | yéwá-ní-ỳ ${ }^{\text {n }}$ | gó:-ní-ỳ ${ }^{\text {n }}$ |
| 1P1 | nì $\{\mathrm{L}\}$-nì | nì nò:-nì | nì yèwà-nì | nì gò:-nì |
| 2Sg | $\{\mathrm{H}\}$-ní-ẁ ~ -nú-ẁ | nó:-nú-ẁ | yéwá-nú-ẁ | gó:-nú-ẁ |
| 2P1 | è $\{\mathrm{L}\}$-nì | è nò:-nì | è yèwà-nì | è gò:-nì |
| 3 Sg | \{L \}-nì-Ø | nò:-nì-Ø | yèwà-nì-Ø | gò:-nì-Ø |
| 3 Pl | $\{\mathrm{HL}\}$ :-n-î: | nô:-n-î: | yéwà:-n-1̂: | gô:-n-î: |

Examples of stems with final nonhigh vowel in the 3 Sg perfective negative are in (236) for Boui dialect.
(236) Perfective negative (final-nonhigh-vowel class)
stem PfvNeg 3Sg gloss
a. Cv :
with ò:
nó: nò:-nì-Ø 'enter'
with ò:
gó: gò:-nì-Ø 'exit (v)'
with à: jó: nà:-nì-Ø 'eat, drink'
b. $\mathrm{NCv}(:)$
with à: ndó ndà:-nì-Ø 'give'

| c. CvCv |  |  |
| :---: | :---: | :---: |
| with stem-final 0 |  |  |
| yógó | yògò-nì-Ø | 'come' |
| súwó | sùwò-nì-Ø | 'point at' |
| ÍWó | ìwò-nì-Ø | 'catch' |
| with stem-final a, CaCv- |  |  |
| áwó | àwà-nì-Ø | 'accept' (Boui) |
| táwó | tàwà-nì-Ø | 'touch' (Boui) |
| náló | nàlà-nì-Ø | 'give birth' |
| with stem-final a from-ATR stem |  |  |
| tíwó | tìwà-nì-Ø | 'die' (Boui) |
| yégó | yègà-nì-Ø | 'fall' |
| íló | ìlà-nì-Ø | 'ascend' |
| gúwó | gùwà-nì-Ø | 'hang up' |
| póró | pòrà-nì-Ø | 'throw' |
| d. CvCCv |  |  |
| with stem-final o |  |  |
| ów-yó | òw-yò-nì-Ø | 'sit' (Boui) |
| with stem-final $\mathrm{a}, \mathrm{CaCCv}-$ |  |  |
| dámbó | dàmbà-nì-Ø | 'push' |
| with stem-final a from -ATR stem |  |  |
| ímbó | ìmbà-nì-Ø | 'pull' or 'shut' |
| ع́mbó | èmbà-nì-Ø | 'winnow in wind' |
| dónjó | dònjà̀-nì-Ø | 'throw' |
| e. $\mathrm{Cv}: \mathrm{Cv}$ |  |  |
| with stem-final o |  |  |
| sé:gó | sè:gò-nì-Ø | 'come down' |
| with stem-final $\mathrm{a}, \mathrm{Ca}: \mathrm{Cv}$ - |  |  |
| já:ló | jà:là-nì-Ø | 'build' or 'look' |
| f. trisyllabic |  |  |
| with stem-final o |  |  |
| yígíjó | yìgìjò-nì-Ø | 'shake' |
| with stem-final $\mathrm{a}, \mathrm{CvCaCv}-$ |  |  |
| téwá-gó | tèwà-gà-nì-Ø | 'shatter' |
| with stem-final a from -ATR stem |  |  |
| ígí-yó | ìgì-yà-nì-Ø | 'stand, stop' |
| bégíló | bègìlà-nì-Ø | 'winnow by shaking' |

The class of verbs with stem-final high vowel has final a if the penult has a, and $u$ if the penult has $i / i$, before -nì ( $237 \mathrm{a}-\mathrm{b}$ ). In causatives, which do not raise the stem-final vowel before causative $-m(u$ ), the vowel of the causative suffix preceding perfective negative -nì is a copy of the stem-final vowel (237c).
(237) Perfective negative (final-high-vowel class)
bare stem PfvNeg 3Sg gloss
a. CáC(ú)

| kán(ú) | kànà-nì-Ø | 'do' |
| :--- | :--- | :--- |
| bám(ú) | bàmà-nì-Ø | 'beat (tomtom)' |

b. $\mathrm{Cíc}^{C}(\mathrm{u}), \mathrm{CúC}($ ú $)$

| ún(ú) | ùnù-nì-Ø | 'go' |
| :--- | :--- | :--- |
| sín(ú) | sìnù-nì-Ø | 'convey' |

c. causatives
yógó-m(ú) yògò-mò-nì-Ø 'send here'
málá-m(ú) màlà-mà-nì-Ø 'squeeze'

### 10.2.3.2 Experiential perfect negative (-tè:-nì)

Experiential perfect -tèy is negated as -tè:-nì-, which includes the familiar perfective negative -nì-. The stem preceding -tè:-nì- is $\{\mathrm{L}\}$-toned, but the suffix complex shifts to -té:-ní- in the $1 \mathrm{st} / 2$ nd person forms. The paradigm is (238). The 3 Pl form ends in -n-â:, not -n-î: as in the regular 3Pl perfective negative. $3 \mathrm{Pl}-\mathrm{n}-\mathrm{â}$ : is shared with the stative negative (§10.4.2.1).
(238) Experiential perfect negative (Boui)

| category | suffix | 'see' | 'go' |
| :---: | :---: | :---: | :---: |
| 1Sg | $\{L\}$-té:-ní- ${ }^{\text {n }}$ | bà̀ì-yè-té:-ní- ${ }^{\text {n }}$ | ùnì-té:-ní- ${ }^{\text {n }}$ |
| 1Pl | nì $\{\mathrm{L}\}$-tè:-nì | nì bàlì-yè-té:-nì | nì ùnì-tè:-nì |
| 2 Sg | \{L\}-té:-ní-ẁ | bàlì-yè-té:-ní-ẁ | ùnì-té:-ní-ẁ |
| 2Pl | è $\{\mathrm{L}\}$-tè:-nì | è bàlì-yè-té:-nì | è ùnì-tè:-nì |
| 3 Sg | \{L\}-tè:-nì-Ø | bàì-yè̀-tè:-nì-Ø | ùnì-tè:-nì-Ø |
| 3 Pl | \{L\}-tè:-n-â: | bàlì-yè-tè:-n-â: | ùnì-tè:-n-â: |

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 (239).
(239)

b. [bòmòk'́ yà] ùnì-té:-ní-ỳn
[B Loc] go-ExpPf-PfNeg-1SgSbj
'I have never gone to Bamako.'

### 10.2.3.3 Recent perfect negative or past perfect negative (-nì-yé-)

Morphologically, this is the past-time version of the perfective negative (-nì-), with the characteristic $\varepsilon$ vowel of the past-time inflections (§10.6). For the Boui speaker, it functions as the negation of the recent perfect, whose morphology is likewise a kind of past-time of the perfective ( $\S 10.2 .1 .4$ ). An example is (240).
(240) gò:-nì-yé-Ø
exit(v)-PfvNeg-Past-3SgSbj
'He/She has not gone out (i.e. is still inside).'
For Boui dialect the word-level tone patterns are $\{\mathrm{LH}\}$ for $1 \mathrm{Pl}, 2 \mathrm{Pl}$, and 3 Sg , $\{\mathrm{HL}\}$ for 1 Sg and 2 Sg , and $\{\mathrm{HLHL}\}$ for 3 Pl . The paradigm is (241).
(241) Recent perfect negative (Boui)

| category | form | 'has not gone/come out' |
| :---: | :---: | :---: |
| 1Sg | $\{\mathrm{H}\}$-nì-yè-y ${ }^{\text {n }}$ | gó:-nì-yè-y ${ }^{\text {n }}$ |
| 1 Pl | nì $\{\mathrm{L}\}$-nì-yé | nì gò:-nì-yé |
| 2 Sg | $\{\mathrm{H}\}$-nì-yè-y ${ }^{\text {n }}$ | gó:-nì-yè-w |
| 2 Pl | è $\{\mathrm{L}\}$-nì-yé | è gò:-nì-yć |
| 3 Sg | \{L\}-nì-yé-Ø | gò:-nì-yé-Ø |
| 3 Pl | $\{\mathrm{HL}\}$-nì-y-ह̂: | gô:-nì-y-ê: |

For the Ningo speaker, the form in -nì-yè has the expected sense past perfect negative (242). He uses word-level $\{\mathrm{LH}\}$ tones even for 1Sg.

For the Ningo speaker, a 'not yet' construction, functioning semantically as one type of negation of the recent perfect, is produced by a verb-verb construction where the main verb is followed by a conjugated perfective negative of an otherwise unattested verb síyó (243a). The main verb is in bare perfective form, like the first verb in other similar verb-verb constructions (§15.1). The positive counterpart 'have (already/just now) VPed', has a positive perfective form of the verb gímó, again added to a bare perfective first verb (243b).

| a. jè: | síyó-ní-ỳn <br> eat.meal.Pfv <br> have.yet-PfvNeg-1 <br> 'I haven't eaten yet.' (Ningo) |
| :--- | :--- |

b. nદ̀: gímé-ỳ eat.meal.Pfv have.just.Pfv-1SgSbj
'I have (already/just now) eaten.' (Ningo)

### 10.2.3.4 Imperfective negative (-ra- ~ -da-)

The imperfective negative has a suffix -ra (3Sg -râ-Ø in Boui) after the O-stem. The tone of the preceding stem depends on the pronominal-subject category: $\{\mathrm{H}\}$ for $1 \mathrm{Sg} / 2 \mathrm{Sg} / 3 \mathrm{Sg},\{\mathrm{L}\}$ for $1 \mathrm{Pl} / 2 \mathrm{Pl},\{\mathrm{HL}\}$ for 3 Pl . In nonmonosyllabic stems, syncope occurs after unclustered \{nlr\}. After syncope, -ra hardens to -da after alveolar consonants (§3.4.3.5). The paradigm is (244).
(244) Paradigm of imperfective negative

| category | IpfvNeg | 'enter' | 'lie down' | 'shake' |
| :---: | :---: | :---: | :---: | :---: |
| 1 Sg | $\{\mathrm{H}\}$-rà- ${ }^{\text {n }}$ | nó:-rà-y ${ }^{\text {n }}$ | bí-yó-rà-y ${ }^{\text {n }}$ | yígíjó-rà-y ${ }^{\text {n }}$ |
| 1P1 | nì $\{\mathrm{L}\}$-rá | nì nò:-rá | nì bì-yò-rá | nì yìgìjò-rá |
| 2Sg | \{H\}-rà-w | nó:-rà-w | bí-yó-rà-w | yígíjó-rà-w |
| 2PL | è $\{\mathrm{L}\}$-rá | è nò:-rá | è bì-yò-rá | è yìgìjò-rá |
| 3Sg | $\{\mathrm{H}\}$-râ-Ø | nó:-râ-Ø | bí-yó-râ-Ø | yígíjó-râ-Ø |
|  | \{ H$\}$-rà-Ø | nó:-rà-Ø | bí-yó-rà-Ø | yígíjó-rà-Ø |
| 3 Pl | \{HL\}-r-â: | nô:-r-â: | bí-yò-r-â: | yígíjò-r-â: |
|  | $\{\mathrm{H}\}$-r-à: | nó:-r-à: | bí-yó-r-à: | yígíjó-r-à: |

The (a) pattern for 3 Sg and 3 Pl is from the Boui speaker, the (b) pattern is from the Ningo speaker.

The final H -tone on -rá in $1 \mathrm{Pl} / 2 \mathrm{Pl}$ forms shifts onto a following polar interrogative particle, as in -rà lé (§13.2.1).

A sample of imperfective negative forms from stems ending in nonhigh vowels is in (245). Forms are from Boui and show the tones of the 3 Sg .
(245) Imperfective negative (final-nonhigh-vowel class)
stem IpfvNeg gloss
a. Cv :

| dó: | dó:-râ | 'pound' or 'insult' |
| :--- | :--- | :--- |
| gó: | gó:-râ | 'exit (v)' |
| nó: | nó:-râ | 'eat, drink' |

b. NCv :
ndó ndó-râ 'give'
c. CvCv

| gújó | gújó-râ | 'dig' |
| :---: | :---: | :---: |
| cíjó | cíjó-râ | 'reply' |
| yégó | yégó-râ | 'fall' |
| sémó | sémó-râ | 'slaughter' |
| dú-yó | dú-yó-râ | 'carry on head' |
| téwó | téwó-râ | 'hit' (Boui) |
| Cvnv |  |  |
| dónó | dón-dâ | 'buy' |
| mínó | mín-dâ | 'swallow' |
| Cvlv |  |  |
| íló | íl-dâ | 'ascend' |
| yóló | yól-dâ | 'look for' |
| náló | nál-dâ | 'give birth' |
| Cvrv > Cvr-dâ |  |  |
| póró | pór-dâ | 'throw' |
| óró | ór-dâ | 'draw (water)' |
| Cvrv > Cvd-dâ |  |  |
| író | í(d)-dâ | 'get' |

d. CvCCv
ów-yó ów-yó-râ 'sit’ (Ningo óbí-yó-rà)
dámbó dámbó-râ 'push'
émbó émbó-râ 'winnow in wind'
e. $\mathrm{Cv}: \mathrm{Cv}$

| sé:gó | sé:gó-râ | 'come down' |
| :--- | :--- | :--- |
| já:ló | já:ló-râ | 'build (shed)' or 'look' |

f. trisyllabic and longer
sómbí-yó sómbí-yó-râ 'squat'
téwá-gó téwá-gó-râ 'shatter'
CvCvlv
bégíló bégíl-dâ 'winnow by shaking'
ígíló ígíl-dâ 'sweep'
g. irregular
gún(ú) gún-dâ 'say’
Stems ending in high vowels are in (246).
(246) Imperfective negative (final-high-vowel class)
bare stem IpfvNeg gloss
a. $\mathrm{CaC}(\mathrm{u})-$
dám(ú) dámú-râ 'speak'
kám(ú) kámú-râ 'steal'
Cán(ú)-
kán(ú) kán-dâ 'do’
b. $\mathrm{CiC}(\mathrm{u}), \mathrm{CuC}($ ú $)$

Cún(ú), Cín(ú)-

| ún(ú-) | ún-dâ | 'go' |
| :--- | :--- | :--- |
| sín(ư) | sín-dâ | 'take (convey)' |

c. causatives
yógó-m(ú) yógó-mú-râ 'send here’ ("cause to come")
málá-m(ú) málá-mú-râ 'squeeze’

### 10.2.3.5 Progressive negative (órâ)

The progressive negative replaces mbó ~ -bó 'be' in the positive progressive (10.2.2.3) by órâ (3Sg órâ-Ø), the 'not be (somewhere)' predicate (§11.2.2.3). órâ may contain a variant of imperfective negative -râ-. The verb stem has the same durative form as in the positive progressive, including $\{\mathrm{L}\}$ tone overlay. The paradigm is (247). Again, à: ${ }^{n}$ varies with àw ${ }^{n}$.
(247) Paradigm of progressive negative

| category | ProgNeg | 'do work' |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | $\{\mathrm{L}\}$ órá- ${ }^{\mathrm{n}}$ | wàlè kànà ${ }^{\text {n }}$ órá- ${ }^{\text {n }}$ |

An example is (248).

| (248) | íjílí | ìjilò: $^{\text {n }}$ | órá- $^{\text {n }}$ |
| :--- | :--- | :--- | :--- |
|  | sweeping(n) | sweep.Dur | not.be-1SgSbj |
|  | 'I am not (engaged in) sweeping.' |  |  |

### 10.3 Pronominal paradigms for non-imperative verbs

### 10.3.1 Subject pronominal suffixes

1 Pl and 2 Pl are expressed by proclitics nì and è, respectively. These proclitics are usually in immediate preverbal position. However, existential proclitic è $\sim$ é (or distant yà $\sim$ yá $)$ intervenes between $1 \mathrm{Pl} / 2 \mathrm{Pl}$ proclitics and the verb. The proclitics are transcribed as separate words.

1 Sg is expressed by suffix $-\mathrm{y}^{\mathrm{n}}$. The nasalization is not distinctively audible in the sequence $\mathrm{Ni}-\mathrm{y}^{\mathrm{n}}$ ( N a nasal or nasalized consonant) due to monophthongization to phonetic [ Ni :]. The 2 Sg counterpart is -w . If the preceding vowel is $u$, monophthongization produces phonetic [u:].

3 Sg is the zero category. 3 Pl is expressed by a variable suffix, depending on the specific inflectional category, involving a long vowel or a syllable ya.
(249) category affixes

| 1Sg | STEM- ${ }^{\text {n }}$ |
| :---: | :---: |
| 1Pl | nì STEM |
| 2Sg | STEM-ẁ |
| 2 Pl | è STEM |
| 3Sg | STEM-Ø |
| 3 Pl | STEM plu |

Depending on the TAMP category, the stem may have different tone patterns associated with subject categories. 1 Sg and 2 Sg always share a stem tone pattern, as do 1 Pl and 2 Pl . In some categories, 1 Pl and 2 Pl also have the same stem tone as the 3Sg.
$1 \mathrm{Sg}-\mathrm{y}^{\mathrm{n}}$ and 2 Sg -ẁ are subject to phonological modification before yes/no interrogative particle lè, resulting in $n$ nì and 1 lè, respectively.

3 Pl is expressed by a variable ending (250), generally with falling tone.
(250) 3 Pl
-â:
-ìyè/-ìyz̀ ~-íyè/-íyè simple perfective
-w-à: imperfective
-n-î:
-r-â: imperfective negative
-mà-â:
-n-â: stative negative, experiential perfect negative
category
stative
perfective negative
capacitative

### 10.3.2 Tones of verbs and pronominal-subject markers

In the pronominal-subject paradigms of the various aspect-negation categories, $1 \mathrm{Sg} / 2 \mathrm{Sg}$ are usually opposed tonally to $1 \mathrm{Pl} / 2 \mathrm{Pl}$. The relationship of 3 Sg and 3 Pl to each other and of both of them to the $1 \mathrm{st} / 2 \mathrm{nd}$ person categories is variable. The summary formulae below show the stem melody in curly brackets. Tones are marked on $x$ (aspect-negation suffix), y ( $1 \mathrm{Pl} / 2 \mathrm{Pl}$ proclitic), and $\mathrm{z}(1 \mathrm{Sg} / 2 \mathrm{Sg} / 3 \mathrm{Pl}$ suffix). Unhyphenated xz in 3 Pl forms indexes fusion into one syllable.
a. $1 \mathrm{Sg} / 2 \mathrm{Sg}$ falling, all others $\{\mathrm{L}\}$

| Pfv | $\{\mathrm{H}\}$-z̀ | ỳ $\{\mathrm{L}\}$ | \{L\} | $\{\mathrm{L}\}$-z̀ |
| :---: | :---: | :---: | :---: | :---: |
| 'know'/'want' (yey-/cey-) | $\{\mathrm{H}\}$-z̀ | ỳ $\{\mathrm{L}\}$ | \{L\} | \{L\}-ẑ |
| StatNeg (-na-) | $\{\mathrm{H}\}$-x́-z̀ | ỳ $\{\mathrm{L}\}$-x̀ | \{L\}-x̀ | $\{\mathrm{L}\}$-x́z̀ |
| PfvNeg (-ni-) | $\{\mathrm{H}\}$-x́-z̀ | ỳ $\{\mathrm{L}\}$-x̀ | \{L\}-x̀ | $\{\mathrm{HL}\}$-x́z̀ |

b. $1 \mathrm{Sg} / 2 \mathrm{Sg}$ rising, others $\{\mathrm{L}\}$
ExpPf (-tey-)
$\{\mathrm{L}\}$-x́-ź y $\{\mathrm{L}\}$-x̀
$\{L\}-\bar{x}$
$\{\mathrm{L}\}-\mathrm{x}-\hat{z}$
c. $1 \mathrm{Sg} / 2 \mathrm{Sg}$ falling, $1 \mathrm{Pl} / 2 \mathrm{Pl}\{\mathrm{L}\}$, 3rd persons falling IpfvNeg (-ra-)
$\{\mathrm{H}\}$-x̀-z̀ ỳ $\{\mathrm{L}\}$-x́
$\{\mathrm{H}\}-\hat{\mathrm{x}} \quad\{\mathrm{HL}\}-$-x́z̀
$\sim\{H\}-\bar{x} \sim\{H\}$-x̀z̀
d. all 1st/2nd falling, 3rd person $\{\mathrm{L}\}$
Result (-sa-)
$\{\mathrm{H}\}-\mathrm{x}-\mathrm{z} \quad$ ỳ $\{\mathrm{H}\}-\overline{\mathrm{x}}$
$\{H\}$-x
$\{\mathrm{H}\}$-x́z̀
e. all rising

| $\operatorname{RecPf}(-s \varepsilon-)$ | $\{\mathrm{L}\}$-x̀-ź | ỳ $\{\mathrm{L}\}$-x́ | $\{\mathrm{L}\}$-x́ | $\{\mathrm{L}\}$-x́z̀ |
| :---: | :---: | :---: | :---: | :---: |
| 'resemble' ( |  |  |  |  |

f. all falling
stative (final a)
$\{\mathrm{HL}\}$-z̀ $\quad$ ỳ $\{\mathrm{HL}\} \quad\{\mathrm{HL}\} \quad\{\mathrm{HL}\}-\hat{\mathrm{z}}$
imperfective (-wò-) $\{\mathrm{H}\}-\mathrm{x}-\mathrm{z} \quad$ ỳ $\{\mathrm{H}\}$-x̀ $\quad\{\mathrm{H}\}$-x̀ $\quad\{\mathrm{HL}\}$-x́z̀
There is a broad association of $1 \mathrm{Sg} / 2 \mathrm{Sg}$ with $\{\mathrm{H}\}$-toned stem, and of $1 \mathrm{Pl} / 2 \mathrm{Pl}$ and third person with $\{\mathrm{L}\}$-toned stem. Aside from the cases in (251d-e) where the stemtones are constant, the remaining irregularities are the H -tone in the stem in 3rd person forms for the imperfective negative (251c), and the $\{\mathrm{H}\}$-toned stem in the $1 \mathrm{Pl} / 2 \mathrm{Pl}$ in the resultative (251d).

### 10.4 Derived stative verbs

This section covers stative forms derived from regular (active) verbs. For defective stative quasi-verbs that do not have active forms, including 'be (somewhere)', 'have', 'want', and 'know', see Chapter 11.

### 10.4.1 Stative positive

### 10.4.1.1 Stative stem 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, or the like. Statives do not distinguish perfective from imperfective aspect. There is no initial Cv-reduplication for verb focalization as there is in several other languages.

As in several other Dogon languages, stance verbs like 'sit' occur in suffixed mediopassive form when denoting change of state, but in unsuffixed stative form when denoting the resulting state. Tiranige differs from most Dogon languages in also forming statives from perception verbs ('see', 'hear').

Stative stems are normally bisyllabic, have $\{\mathrm{HL}\}$ tone overlay (unless defocalized with $\{\mathrm{LH}\}$ ), and end in a. Nonfinal vowels shift to + ATR. This is the rare A-stem (§3.3.6), found elsewhere only in one type of purposive clause (§17.5.2). Many stems that have mediopassive suffix -yv as dynamic (=aspectually marked) verbs have stative paradigms that lack this suffix (unless the verb would otherwise be monosyllabic and needs the suffix to satisfy minimality). The paradigm is (252). Data are from Boui unless otherwise noted.
(252) Stative

| category | form | 'stand' |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | $\{\mathrm{HL}\}-\mathrm{y}^{\mathrm{n}}$ | ígà-yn |
| 1 Pl | nì $\{\mathrm{HL}\}$ | nì ígà |
| 2 Sg | $\{\mathrm{HL}\}-\mathrm{w}$ | ígà-w |
| 2 Pl | è $\{\mathrm{HL}\}$ | è ígà |
|  |  |  |
| 3 Sg | $\{\mathrm{HL}\}-\varnothing$ | ígà-Ø |
| 3 Pl | $\{\mathrm{HL}\}-\mathrm{â}:$ | ígà-â: |

Representative pairs of regular and stative stem are in (253).
gloss active O-stem stative
a. from a bisyllabic stem that is not obviously segmentable

| 'hear' | nú:ndó | nú:ndà |  |
| :--- | :--- | :--- | :--- |
| 'be hung' | gúwó | gúwà | (Ningo gúbí-yó, gúbà) |
| 'sleep' | nóyó | nóyà | (cf. nóyú-ró 'make sleep') |

b. from bisyllabic mediopassive (-yv- omitted in stative)

| 'sit' | ów-yó | ówà | (Ningo óbí-yó, óbà) |
| :--- | :--- | :--- | :--- |
| 'stand' | ígí-yó | ígà |  |
| 'squat' | sómbí-yó | sómbà |  |
| 'carry on back' | bámbí-yó | bámbà |  |
| 'see' | bálí-yó | bálà |  |
| 'be on' | ságí-yó | ságà |  |
| 'be on (wall)' | dángí-yó | dángà |  |
| -ATR vowel in penult shifts to $+A T R$ |  |  |  |
| 'be tilted' |  | jéngí-yó | jéngà |

c. from mediopassive Cv-yv- (-yv- retained in the stative for minimality) 'lie down' bí-yó bí-yà

Existential particle è (or distant yà) is not required with statives, but it can occur with some of them in unfocalized positive main clauses (254).
a. nì è nú:ndà

1PlSbj Exist hear.Stat
'We hear (i.e. are not deaf).' (Boui)
b. [yé: rì] yà ówà-Ø
[woman Def] Exist.Dist sit.Stat-3SgSbj
'The woman is sitting (some distance away).' (Boui)
Existential particles are not allowed in combination with a focalized constituent, negation, or relativization.

Statives have a past-time form with $\varepsilon$ replacing the final a, see §10.6.1.3. For the negative stative see $\S 10.4 .3$ below.

### 10.4.1.2 Passive stative with $-\mathrm{y} \varepsilon ́=\grave{\mathrm{w}}^{\mathrm{n}} \sim-\mathrm{yé}=\grave{\mathrm{w}}^{\mathrm{n}}$

For 'shut (door)' and other transitive verbs, a different intransitive stative-like construction is attested (255a). It is here labeled the passive stative. Its form resembles that of a 3 Pl subject perfective verb as in (255b), but it is used impersonally. The two constructions differ both tonally and in the final $=\grave{\mathrm{w}}^{\mathrm{n}}$, a variant of the 'it is' clitic. (Ningo has unnasalized $=\grave{\mathrm{w}}$.) If $=\grave{\mathrm{w}}\left({ }^{(1)}\right.$ ) is correctly identified as the 'it is' enclitic, which follows NPs, this implies that the form in -y $/$ /yé is syntactically nominal. I gloss -yź/-yé as "Pass" in interlinears.
a. [bów ${ }^{\mathrm{n}} \quad$ rì $] \quad$ ímbí-y $\mathrm{\varepsilon}=$ ẁ $^{\mathrm{n}}$
[door Def] shut-Pass=it.is
'The door is shut.' (Boui)
(Ningo: [bón dì] jáy-yé $=$ ẁ $)$
b. [bów ${ }^{\mathrm{n}}$ rì ] Lìmb-ìyè
[door Def] shut.Pfv-3PlSbj
'They shut-Past the door.' (Boui)
c. [[nà $\quad{ }^{\text {Lb }}$ bà:] ${ }^{\text {LH }}$ gìbá $] \quad$ yárí-yé $=\grave{\mathrm{w}}$
[[3SgPoss father] house] recognize-Pass=it.is
bìlè-Ø
become.Pfv-3SgSbj
'His-or-her father's house (=parentage) has come to be recognized.'
(Ningo, T7 @ 05:54)

Consistent with the analysis of -yé ~-yé as a nominal, the plural of (255a) is (256). Plural suffix -gè intervenes between $-y \varepsilon ́$ and $=\grave{w}^{n}$.
(256) [bów ${ }^{\mathrm{n}}$-gè rì $] \quad$ ímbí-yé-gé $=$ ̀ $^{\mathrm{n}}$
[door-Pl Def] shut-Pass- $\mathrm{Pl}=\mathrm{it}$.is
'The doors are shut.' (Boui)
(Ningo: [bón-gé rì $]$ jáy-yé-gé $=\grave{w}^{\mathrm{n}}$ )

The reversive of ímbé ‘shut (door)' is ímbí-lé 'open (door)'. Its passive stative form is ímbí-lí-y $\varepsilon=\grave{\mathrm{w}}^{\mathrm{n}}$ 'it is open' (Boui). The Ningo equivalent is jáy-lí-yé $=\grave{\mathrm{w}}^{\mathrm{n}}$ 'it is open'.
págí-yé = $\grave{\mathrm{w}}^{\mathrm{n}}$ 'it (e.g. cow) is tied up’ is from págó 'tie (up)'. ndí:-yé $=\mathrm{w}$ 'is given' with lengthened í: (T7 @ 01:03) is from ndó 'give’ (§10.1.2.3).

For -yé ~-yé in product-of-action compounds with a preceding noun, see §5.1.11.

### 10.4.1.3 'Be known' (yèy-yá: plus ‘it is’ enclitic)

The stative quasi-verb yèy 'know' (§11.2.5.1) has a passive form consisting of yèy-yá: plus either 'it is' enclitic = wò or its negation = là. Thus yèy-yá: = wò 'is known' or yèy-yá: = là 'is not known'. The positive version is attested in a text with an NP "subject" (257a). Follow-up elicitation shows that yèy-yá: is nominal and can take plural -gé (257b). The "subject" may really be an object.
a. pàngà-déní
yèy-yá: = wò
granary-take.out.ration.Agent know-Pass=it.is
'The person charged with taking out the day's grain rations from the granary is known (to everyone).' (Ningo, T7 @ 12:01)
b. bé-gé yèy-yá:-gé= wò
child-Pl know-Pass- $\mathrm{Pl}=\mathrm{it}$.is
'The children are known.' (Ningo)
c. mì-gí yèy-yá: = wò

1Sg-Acc know-Pass=it.is
'I am known.' (Ningo)
yèy-yá: is phonologically similar to 3 Pl subject yèyy-â: 'they know', which likewise takes objects and which can be used in nonspecific indefinite contexts that resemble the present construction. However, yèy-yá: = wò does not fit precisely into any regular morphosyntactic construction (e.g. relative clause, agentive) that would account for the 'it is' enclitic.

### 10.4.2 Stative negative

### 10.4.2.1 Basic stative negative (-nà-)

Stative negative suffix (or enclitic) -nà- is added to the stative stem (which is bisyllabic and ends in a). The stem and suffix are $\{\mathrm{L}\}$-toned, except in the 1 Sg and 2 Sg . Data are from Boui.
(258) Stative negative

| category | form | 'not be standing' |
| :---: | :---: | :---: |
| 1Sg | \{ H$\}$-ná-y ${ }^{\text {n }}$ | ígá-ná-y ${ }^{\text {n }}$ |
| 1Pl | nì $\{\mathrm{L}\}$-nà | nì ìgà-nà |
| 2Sg | $\{\mathrm{H}\}$-ná-ẁ | ígá-ná-ẁ |
| 2Pl | è $\{\mathrm{L}\}$-nà | è ìgà-nà |
| 3Sg | $\{\mathrm{L}\}$-nà | ìgà-nà |
| 3Pl | $\{\mathrm{L}\}$-n-â: | ìgà-n-â: |

For past forms with -né-, see §10.6.1.3.

Stative negative -nà- is also found in sà:-nà- 'not have' (§11.5.1). A variant -là- occurs in cè-là- (Boui) 'did not want', (268) in §10.6.1.3. Unusually, yé-nì- 'not know' (§11.2.5.1) has the regular perfective negative suffix.

For adjectives with -ná negating another adjective (e.g. 'not good' = 'bad'), see §4.5.4 and §11.4.1.3.

### 10.4.2.2 Passive stative negative

The passive stative in $-y \varepsilon ́ \varepsilon=\grave{\mathrm{w}}^{\mathrm{n}} \sim-\mathrm{ye}=\grave{\mathrm{w}}^{\mathrm{n}}$ has negative counterparts as in (259). The verb stem now ends in -à:- and is followed by an H-toned variant of the perfective negative suffix -nì-. Just as -yé resembles a 3 Pl subject suffix for the perfective, so the -à:- resembles some other 3 Pl subject suffix allomorphs, though here the construction is an impersonal passive. There is no clear indication that the form is nominal syntactically, and there is no plural -gè- in examples like (259b) with plural subject.
(259)
a. [bów ${ }^{\mathrm{n}}$
rì] ímb-à:-ní
[door Def] shut-Pass-PfvNeg
'The door is not shut.' (Boui)
$\begin{array}{lll}\text { b. } \begin{array}{ll}\text { [ná:-gè } & \text { rì }\end{array} & \text { pág-à:-ní } \\ \text { [cow-Pl } & \text { Def] } & \text { tie-Pass-PfvNeg }\end{array}$

### 10.5 Capacitative ('can, be able')

### 10.5.1 Capacitative suffix (-má-)

-má- is added to the O-stem of the verb, with $\{\mathrm{H}\}$ overlay except in $1 \mathrm{Pl} / 2 \mathrm{Pl}$. The negative is -má-nâ-, cf. stative negative -nà (§10.4.2.1). Boui forms are in (260).
'can sweep' 'cannot sweep'
1 Sg ígíló-má-y ${ }^{\mathrm{n}}$ ígíló-má-ná- $\mathrm{y}^{\mathrm{n}}$

1Pl nì ìgìlò-má nì ìgìlò-mà-ná
2 Sg ígíló-má-ẁ ígíló-má-ná-w
2 Pl è ìgilò-má è ìgilò-mà-ná
3Sg ígíló-mâ-Ø ígíló-má-nâ-Ø
3 Pl ígíló-mà-â: ígíló-mà-n-â:

From -ATR verb dónó- ‘buy’ is formed 3 Sg dónó-mâ-Ø ‘he/she can buy’ and so forth, showing that this is the O -stem, not the $\mathrm{A} / \mathrm{O}$-stem.

For past-time counterparts (-mè- or negative -mè-nと̀- following the E/I-stem), see §10.6.1.6.

The only other Dogon languages that have a cognate capacitative derivative are those in southwestern Dogon (e.g. Bunoge, Penange). Other Dogon languages have a two-verb sequence with a dedicated 'be able' verb.

Among the apparently unique features of Tiranige, not shared with any other Dogon languages, is the development of a productive past-time marking in verbs characterized by vocalic mutation to $\varepsilon$ ( $\S 10.6 .1$ ). Another is the preference for L-H-L tone patterns in N -Adj1-Adj2 and some other NP-internal sequences, versus L-L-H in other Dogon languages.

### 10.5.2 Verb ímá- 'be capable'

The stative stem ímá- 'be capable, have (enough) strength or capability', negative ímá-ná- 'not be capable', is a kind of default, corresponding to English X can/cannot or $X$ is (un)able, without specifying the domain of capability. Most often it means more specifically '(not) have the power, (not) be strong enough'. ímá- might be analysed as containing the capacitative suffix -má-, or ímá- may have been the etymological source of the suffix. The form ímí-yó, with mediopassive suffix, means 'be stronger than, be able to defeat' or simply 'defeat' (e.g. in wrestling or a political election).

### 10.6 Nonpast versus past time

### 10.6.1 Past-time forms (ablaut to $\varepsilon$ or suffixation of $-\mathrm{y} \varepsilon$-)

Past-time forms are especially common with statives ('was sitting'), compensating for their lack of a perfective/imperfective aspectual distinction. They are also common with imperfectives ('was dancing'), displacing the temporal reference point from the moment of speaking to some time in the past. I use the label past time rather than past tense since the eventuality in question is not itself specified as having occurred prior to the moment of speaking. The normal translation equivalent of the English past tense (he jumped) is a simple perfective verb in Tiranige, i.e. part of the unmarked non-past inflectional system. Rather, past-time forms shift the abstract temporal reference point into the past.

The past-time form is consistently marked by $\varepsilon$-vowels, regardless of the ATR-harmonic class of the stem. -yè is suffixed to the simple form if the latter ends in i or y, including Cey- ('want', 'know', experiential perfect), see also -nì-yと́- in $\S 10.2 .3$.3. In other cases, an ablaut process is observed by which vowels are mutated
to $\varepsilon$. Unlike the $\mathrm{E} / \mathrm{I}$-stem, this mutation can extend into the penult in negative forms, see for example 'had not' in §10.6.1.3.

The recent perfect -sś (§10.2.1.4) has suffixal vocalism compatible with the other explicitly past-time forms. Morphologically, it might be considered to function as the past-time form of the perfective. Since the perfective already ends in $\varepsilon$ for many verbs, it is necessary to add a syllabic suffix to bear the past-time vowel $\varepsilon$. Such a suffix is already available, since the suffixal resultative in -sà- can replace the unsuffixed simple perfective in relative clauses. However, -sé can function synchronically as a present perfect ('has eaten', etc.) rather than as a specifically past perfect ('had eaten').
10.6.1.1 Past bè: ~ wè: 'was'

Locational bò ~ wò 'be (somewhere)', see §11.2.2.2, has a past form bè: ~wè: . In both cases the form with $w$ is used after existential è $\sim$ é (or yà $\sim$ yá), and è $\sim$ é is harmonized to $\varepsilon$ in this combination. As with bò $\sim$ wò, the existential proclitic is the obligatory default in the absence of a more specific locational phrase, except in syntactic environments (such as after a focalized constituent) that are incompatible with the proclitic. The paradigm is (261).
(261) Past 'was/were (in a place)' or 'existed'

| category | after locational | with existential |
| :---: | :---: | :---: |
| 1Sg | $b$ bè ${ }^{\text {n }}$ | $\varepsilon^{\prime}$ wè̀-y ${ }^{\text {n }}$ |
| 1P1 | nì bè: | nì $\varepsilon$ wè: |
| 2 Sg | bè-w | غ́ wè-w |
| 2 Pl | è bè: | è $\varepsilon$ ¢ c : |
| 3 Sg | bè:-Ø | દ́ wè:-Ø |
| 3 Pl | bè-रิ: | દ́ wè-रิ: |

Examples are in (262).
(262)
a. gólí
[bòmə̀ḱ
ná] bè-y ${ }^{n}$ last.year [B Loc] be.Past- 1 SgSbj 'Last year I was in Bamako (city).'
b. mó-yà bè:-Ø lé
here be.Past-3SgSbj Q
'Was he/she here?
c. mó-yà bè-ê:
here be.Past-3PISbj
'They were here.'

### 10.6.1.2 Past órè 'was not'

The past form of órâ 'not be (in a place)' (§11.2.2.3) is órè. As always in negative clauses, the existential morpheme is not allowed. The paradigm is (263). 3 Sg and 3 Pl differ only in vowel length.
(263) Past 'was/were not (in a place)' or 'did not exist'
category form (with or without locational)
1Sg órè-y ${ }^{\mathrm{n}}$
1 Pl nì órè-Ø
2 Sg órغ̀-w
2 Pl è órè-Ø

3Sg órè-Ø
3Pl ór-દ̀: ~ ór-l̀y-yè
Examples are in (264). In (264a), 2 Sg -w assimilates to the following 1 .
(264)
a. órè-l lè
not.be.Past-2SgSbj Q
'Weren’t you-Sg present?' (</órè-w lè/)
b. gólí té: órè-Ø
last.year tea not.be.Past-3SgSbj
'Last year there was no tea.'
c. [bòmòk'́ yà] órè-y ${ }^{\mathrm{n}}$
[Bamako Loc] not.be.Past-1SgSbj
'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 (265). The Boui and Ningo data differ tonally and in whether existential è $\sim$ é harmonizes to $\varepsilon$.

|  | 'had' |  | 'had not' |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Boui | Ningo | Boui | Ningo |
| 1Sg | è sć-y ${ }^{\text {n }}$ | ع́ sc̀-y ${ }^{\text {n }}$ | sé:-nè-y ${ }^{\text {n }}$ | sé:-né-y ${ }^{\text {n }}$ |
| 1 Pl | nì è $\mathrm{s} \hat{\mathrm{E}}$ : | nì ¢́ sè: | nì sè:-nદ́ | nì sè:-nè |
| 2Sg | è sć-ẁ | $\varepsilon$ ¢ sè-ẁ | sé:-nè-w | sé:-nć-ẁ |
| 2 Pl | è è $s \hat{\varepsilon}$ : | è $\varepsilon$ s sè: | è sè:-nદ́ | è sè:-nè |
| 3 Sg | è s $\hat{\varepsilon}$ :-Ø | દ́ sè-Ø | sè:-nદ́-Ø | sè:-nè-Ø |
| 3Pl | è sc̀-દิ: | $\varepsilon$ ¢ sìy ${ }^{\text {n}}$-y | sè:-n-रे: | sè:-níy-yè |

For the Ningo speaker, the tones are different from regular 'have' (266a) to past-time 'had' (266b). In the latter, the existential morpheme ( $\varepsilon$ unmarked, ya distant) is H -toned and the verb is L-toned.
a. gíb
è / yà
sá-ỳ ${ }^{n}$
house Exist / Exist.Dist have-1SgSbj
'I have a house (here/there).' (Ningo)
$\begin{array}{lll}\text { b. gíbá } \quad \text { ह́ / yá } & \text { sè-y }{ }^{\mathrm{n}} \\ \text { house } \quad \text { Exist / Exist.Dist } & \text { have.Past-1SgSbj } \\ \text { 'I had (used to have) a house (here/there).' (Ningo) }\end{array}$
Past forms of 'know' (§11.2.5.1) are in (267). In 'know' and 'want' (see just below), y $\varepsilon$ - is suffixed to the regular positive form, where the e-vowel of the stem harmonizes to $\varepsilon$ (Ningo speaker) or remains e (Boui speaker). In the negative, for Boui the shift to $\varepsilon$ applies twice, to the stem-vowel /e/ and to the vowel of the suffix -nì-. For Ningo the suffix keeps its i-vowel.

| category | 'knew' |  | 'did not know' |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Boui | Ningo | Boui | Ningo |
| 1Sg | yéy-yè-y ${ }^{\text {n }}$ | yéy-yé-y ${ }^{\text {n }}$ | yé-nè-y ${ }^{\text {n }}$ | y -ní- ${ }^{\text {n }}$ |
| 1P1 | ní yèy-yé | ní yèy-yè: | nì yè-nć | nì yè-nì |
| 2Sg | yéy-yè-w | yéy-yé-ẁ | yé-nè-w | yé-nú-ẁ |
| 2P1 | é yèy-yé | é yèy-yè: | è yè-nદ́ | è yè-nì |
| 3Sg | yèy-yé-Ø | yèy-yè:-Ø | yè-né-Ø | yè-nì-Ø |
| 3Pl | yèy-y-̂̂: | yèý-y-z̀: | yè-n- $\hat{\text { e }}$ | yè-n-â: |

Past forms of 'want' and 'not want' (§11.2.5.2) and of 'resemble' and 'not resemble' (§11.2.5.3) are in (268). The 'resemble' forms are from the Ningo speaker. The morphophonology is similar to that for 'knew' and 'did not know'.
(268) category 'wanted' 'did not want'

| 1Sg | céy-yè- ${ }^{\text {n }}$ | cé-lı̀- ${ }^{\text {n }}$ |
| :---: | :---: | :---: |
| 1Pl | nì cèy-yé | nì cè-là-Ø |
| 2Sg | céy-yè-w | ć̇-lè-w |
| 2 Pl | è cèy-yと́ | è cè-là-Ø |
| 3Sg | cèy-yé-Ø | cè-1é-Ø |
| 3 Pl | cèy-yê: | cè-l- $\hat{\text { : }}$ |
|  | 'resembled' | 'did not resemble' |
| 1Sg | mòlé- ${ }^{\text {n }}$ | mólé-né-y ${ }^{\text {n }}$ |
| 1Pl | nì mòlé | nì môlı̀-nદ̀ |
| 2Sg | mòlè-ẃ | mólé-né-w |
| 2P1 | è mòlé | è mòlè-nè |
| 3 Sg | mòl-દ́:-Ø | mòlè-nદ̀-Ø |
| 3 Pl | mòlíy-yè | mòlè-níy-yè |

Derived statives (§10.4.1.1) like bámbà 'be carrying (on back)' produce a past-time form by mutating the stem-final a to $\varepsilon$ while keeping the stative $\{\mathrm{HL}\}$ overlay. The same mutation applies to the vowel of stative negative -na- (269).
(269)

| category | 'was carrying on back' | 'was not carry |
| :---: | :---: | :---: |
| 1Sg | bámbè-y ${ }^{\text {n }}$ | bàmbé-nè-y ${ }^{\text {n }}$ |
| 1Pl | nì bámbè | nì bàmbè-né |
| 2 Sg | bámbè-w | bàmbé-nè-w |
| 2 Pl | è bámbè | è bàmbè-nદ́ |
| 3 Sg | bámbè-Ø | bàmbè-nદ́ |
| 3 Pl | bámbè-cิ: | bàmbè-n-ê: |

10.6.1.4 Past imperfective and past progressive

Since the imperfective and progressive forms end in variants of bò $\sim$ wò 'be', past forms are easily created by shifting the final vowel to $\varepsilon$.

Positive past imperfectives with contextual senses like 'used to go in' and 'was about to go in' are in the first two data columns in (270). The suffixal vowel of the 3 Sg form is short. The negative counterparts are based on -re-, shifted from the usual imperfective negative -râ-.
(270) Past imperfective paradigm

| category | 'went in' | 'danced' | 'did not go in' |
| :--- | :--- | :--- | :--- |
| 1Sg | nó:-wè-y | yéb-bè--y | nó:-rè-y |

The close parallelism between imperfective and past imperfective is brought out in (271a-b).
(271)
$\begin{array}{llll}\text { a. } & \text { mbé: } \quad \text { wàlè } & { }^{\text {LH}} \text { kàm-bò- } y^{n} \\ \text { here } \quad \operatorname{work(n)~} & \text { do-Ipfv- } 1 \operatorname{SgSbj}\end{array}$
b. mbé: wàlè ${ }^{\text {LH}} k a ̀ m-b e ̀-$ ýn $^{n}$
here work(n) do-Ipfv.Past-1SgSbj
'I used to work here.'
A past progressive paradigm is (272). The forms of simple 'was (somewhere)', see $\S 10.6 .1 .1$, reappear here but with final rising tone. The regular progressive form ...m bǒ: likewise has final rising tone ( $\S 10.2 .2 .3$ ). The corresponding negation is with órè 'was not (somewhere)'.
(272) Past progressive paradigm

| category | 'was doing' | 'was not doing' |
| :---: | :---: | :---: |
| 1Sg | kànà:m bè-ýn | kànà: ${ }^{\text {n }}$ órè- ${ }^{\text {n }}$ |
| 1P1 | kànà: ${ }^{\text {n }}$ nì-bě: | kànà: ${ }^{\text {n }}$ nì òré |
| 2 Sg | kànà:m bè-ẃ | kànà: ${ }^{\text {n }}$ orcè-w |
| 2P1 | kànà: ${ }^{\text {n è }}$ bě: | kànà: ${ }^{\text {n }}$ è òŕ́ |


| 3 Sg | kànà:m bě:-Ø | kànà: ${ }^{\text {n }}$ ¢́rè-Ø |
| :---: | :---: | :---: |
| 3Pl | kànà:m bè-ê: | kànà: ${ }^{\text {² }}$ |

10.6.1.5 Past experiential perfect (-tèy-yદ́-)

The experiential perfect (§10.2.1.3) in its past-time form, glossable 'had (at least once) VPed', is formed by suffixing -yદ́- to the regular ending -tèy ~ -té-, resulting in -tèy-yé- ( $1 \mathrm{Sg} / 2 \mathrm{Sg}$-téy-yè-). The corresponding negation is -tè:-né- (or $1 \mathrm{Sg} / 2 \mathrm{Sg}$-té:-nè-), with unshifted e in the penult.
(273) category 'had (once) seen' 'had never seen'

1Sg bàlì-yè-téy-yè-y ${ }^{n}$ bàlì-yè-té:-nè-y ${ }^{n}$
1 Pl nì-bàlì-yè-tèy-yé nì-bàlì-yè-tè:-nع́
2 Sg bàlì-yè-téy-yè-w bàì̀-yè-té:-nè-w
2 Pl è-bàlì-yè-tèy-yé è-bàlì-yè-tè:-nદ́
$3 S g$ bàlì-yè-tèy-yદ́-Ø bàì-yè-tè:-nć-Ø
3 Pl bàlì-yè-tèy-y-ê: bàlì-yè-tè:-n- $\mathrm{\varepsilon}$ :

### 10.6.1.6 Past capacitative (-mè-)

The past version of capacitative -mâ- (§10.5.1) is -mè-. The preceding stem also switches from the O-stem to the E/I-stem, which is elsewhere associated with the perfective positive. The negative forms have -mè-nè- corresponding to nonpast -má-nâ-. Sample positive and negative paradigms are in (274).
'could sweep' 'could not sweep’

| 1Sg | ígílé-mè-y ${ }^{\text {n }}$ | ígílé-mè-nc̀-y ${ }^{\text {n }}$ |
| :---: | :---: | :---: |
| 1 Pl | nì ìgìè-mé | nì ìgìlè-mè-nદ́ |
| 2Sg | ígílé-mè-w | ígílé-mè-nè-w |
| 2 Pl | è ìgì̀̀̀-mع́ | è ìgìlè-mè-né |
| 3Sg | ígílé-mè-Ø | ígílé-mè-nè |
| 3 Pl | ígílé-mè-ĉ: | ígílé-mè-n-દิ: |

With a -ATR stem: dóné-mè-Ø 'he/she could buy', etc.

### 10.7 Imperatives and hortatives

### 10.7.1 Imperatives and prohibitives

### 10.7.1.1 Imperative (unsuffixed singular, plural $-\mathrm{y}^{\mathrm{n}}$ )

The imperative stem, which without further affixation is the singular-addressee imperative, consists for most verbs of an $\{\mathbf{L}\}$-toned A/O-stem of the verb (275a). The plural-addressee form adds suffix $-\hat{y}^{n}$, which raises the tone of its syllable to H , and shortens the long vowel of a monosyllabic stem. For sé:gó- 'come down', the imperative is $\{\mathrm{H}\}$-toned and the plural suffix L-toned (275b).

|  | gloss | stem | Sg Imprt |
| :--- | :--- | :--- | :--- | Pl Imprt

Imperative stems for verbs with final nonhigh vowels are in (276).
(276) Imperative (final-nonhigh-vowel class)
stem $\quad$ Imprt gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :
$+A T R$ gó: gò: 'exit (v)'


Counterparts from verbs with final high vowels are in (277).
(277)

Imperative (final-high-vowel class)
stem Imperative gloss
a. $\mathrm{CaC}(\mathrm{u})$

| dám(ú) | dàmà | 'speak' |
| :---: | :--- | :--- |
| kám(ú) | kàmà | 'steal' |
| Cán(ú) |  |  |
| kán(ú) | kànà | 'do' |
| gán(ú) | gànà | 'put' |

b. $\mathrm{CiC}(\mathrm{u}), \mathrm{CuC}(\mathrm{u})$

Cún(ú), Cín(ú)
ún(ú) ùnù 'go'
sín(ú) sìnù 'take (convey)'
c. causatives

| dú:rú-yó-m(ú) | dù:rù-yò-mù | 'make $(\mathrm{sb})$ run' |
| :--- | :--- | :--- |
| yógó-m(ú) | yògò-mò | 'send here' |
| témá-m(ú) | tèmà-mà | 'cause to eat (meat)' |
| ná:-m(ú) | jà:-mà | 'cause to eat, feed' |

Although the second person agent 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 (278a). The second person subject can bind anaphoric reflexives (278b), though in Tiranige these are of the 'your head' type rather than transpersonal reflexive pronouns of the sort found in Tomo Kan and Togo Kan.
(278)

| a. | mì-gí | jà:là |
| :--- | :--- | :--- |
|  | 1Sg-Acc | look.at.Imprt |
|  | 'Look-2Sg at me!' |  |

b. [ò ${ }^{\text {LH}}$ kògó] jà:là
[2SgPoss head] look.at.Imprt
'Look at yourself!'
Under conditions that are not fully understood, simple spatiotemporal adverbs that always precede indicative verbs can be postposed to imperatives. In the available data this occurs chiefly with 'come'. For example, mó-yà or mbé: 'here' follows imperative 'come!' in (279a), but precedes indicative 'he/she came' (279b).
a. yògò mbé:
come.Imprt here
‘Come here!'
b. mbé: yògè-Ø
here come.Pfv-3SgSbj
'He/She came here.'

Imperatives of 'go' and 'come' may combine with imperatives of another verb. In the case of 'go', the second verb takes $\{\mathrm{HL}\}$ overlay, even when separated from 'go' by an intervening constituent (280a-b). Only the second verb is marked for plurality.

b. ùnù HLbí-yò
go.Imprt lie.down-MP.Imprt
‘Go-Sg (there) and go to bed!’

With 'come', there is no $\{\mathrm{HL}\}$ overlay on the following verb.
a. yògò
jà:ngè nà:
come.Imprt meal eat.Imprt
‘Come-Sg eat!’
[plural: yògò nà:ygè ná- ${ }^{n}$ ]
b. yògò bì-yò
come.Imprt lie.down-MP.Imprt
'Come-Sg (here) and go to bed!'
10.7.1.2 Prohibitive (-lâ ~ -là, plural -lá-ỳ)

For the younger speaker from Boui, the prohibitive (negative imperative) is formed, for most verbs, by adding suffix -lâ to the $\{\mathbf{H}\}$-toned $\mathbf{O}$-stem of the verb. The stemfinal vowel is therefore normally o or (readily syncopated) $u$ (§3.4.2.2). The form for plural addressee is -lá-ỳ. The older Ningo speaker had the same plural -lá-ỳ but pronounced the singular suffix as L-toned -là.

The prohibitive suffix -lâ is clearly distinct from stative negative -na (§10.4.2.1). For sé:gó 'come down’, singular sé:gó-lá has H-toned suffix, while plural sé:gò-là-y has $\{\mathrm{HL}\}$ stem and L-toned suffixes. Syncope occurs after unclustered
medial $\{$ n l\}, i.e. between two alveolar sonorants. After syncope, a resulting /nl/ assimilates to nn , and a resulting $/ \mathrm{rl} /$ assimilates to 11 .

| gloss | stem | Sg Proh | Pl Proh |
| :---: | :---: | :---: | :---: |
| a. 'eat, drink' | nó: | nń:-lâ | nó:-lá-ỳ |
| 'pull' or 'shut' | ímbó | ímbó-lâ | ímbó-lá-ỳ |
| 'bring' | sógó | sógó-lâ | sógó-lá-ỳ |
| 'sleep' | nóyó | nóyó-lâ | nóyó-lá-ỳ |
| 'descend' | sígó | sígó-lâ | sígó-lá-ỳ |
| 'jump' | tómbó | tómbó-lâ | tómbó-lá-ỳ |
| 'stand, stop' | ígí-yó | ígí-yó-lâ | ígí-yó-lá-ỳ |
| syncopated |  |  |  |
| 'go' | ún(ú) | ún-nâ | ún-ná-ỳ |
| 'shave' [tr] | káy-ró | kày-rà | kày-rá-ỳ |
| 'send here' | yógó-mú | yógó-m-lâ | yógó-m-lá-ỳ |
| b. 'come down' | sé:gó | sé:gó-lá | sé:gò-là-y |

Further examples of the singular prohibitive from verbs with final nonhigh vowel are in (283).
(283) Prohibitive (final-nonhigh-vowel class)
stem Prohibitive gloss of stem
a. $\mathrm{Cv}, \mathrm{Cv}$ :
gó: gó:-lâ 'exit (v)'
dó: dó:-lâ 'pound' or 'insult'
tó: tó:-lâ 'pour'
nó: nó:-lâ 'eat, drink'
b. $\mathrm{NCv}(:)$
ndó ndó-lâ 'give'
c. CvCv
$\mathrm{CaCv}-$

| dáyó | dáyó-lâ | 'lay out' |
| :---: | :---: | :--- |
| nájó | nájó-lâ | 'have fun' |
| other $+A T R$ | stem |  |
| yógó | yógó-lâ | 'come' |
| bí-yó | bí-yó-lâ | 'lie down' |


| -ATR stem |  |  |
| :---: | :---: | :---: |
| díyó | díyó-lâ | 'abandon' |
| kúwó | kúwó-lâ | 'do farming' (Boui) |
| tógó | tógó-lâ | 'lift, pick up' |
| yégó | yégó-lâ | 'fall' |
| medial alveolar sonorant (syncopated) |  |  |
| tónó | tón-nâ | 'butcher' |
| túló | túl-lâ | 'sell' |
| póró | pól-lâ | 'throw' |
| c. CvCCv |  |  |
| ów-yó | ów-yó-lâ | 'sit' (Boui) |
| ع́mbó | ćmbó-lâ | 'winnow in wind' |
| d. $\mathrm{Cv}: \mathrm{Cv}$ |  |  |
| já:ló | já:1-1â | 'build (shed)' or 'look' |
| irregular tones |  |  |
| sé:gó | sé:gó-lá | 'come down' |
| e. trisyllabic and longer |  |  |
| ímbílló | ímbíl-lâ | 'open (door)' |
| jínáygó | jínáygó-lâ | 'break' |
| kándíyó | kándíyó-lâ | 'do well' |

Singular-addressee prohibitives from verb stems with final high vowels are in (284).
(284) Prohibitive (final-high-vowel class)
stem Prohibitive gloss of verb
a. $\mathrm{CaC}($ ú

| dám(ú) | dámú-lâ | 'speak' |
| :--- | :--- | :--- |
| kám(ú) | kámú-lâ | 'steal' |
| Cán(ú), syncopated <br> kán(ú) <br> gán(ú) | kán-nâ <br> gán-nâ | 'do' |
| 'put' |  |  |

b. $\mathrm{CiC}(\mathrm{u}), \mathrm{CuC}(\mathrm{u})$

Cún(ú), Cín(ú), syncopated

| ún(ú-) | ún-nâ | 'go' |
| :--- | :--- | :--- |
| sín(û) | sín-nâ | 'take (convey)' |


| c. causatives (syncopated) |  |  |
| :--- | :--- | :--- |
| dú:rú-yó-m(ú) | dú:rú-yó-m-lâ | 'make (sb) run' |
| yógó-m(ú) | yógó-m-lâ | 'send here' |
| témá-m(ú) | témá-m-lâ | 'cause to eat (meat)' |
| ná: $-\mathrm{m}(\mathrm{u})$ | já:-m-lâ | 'cause to eat, feed' |

The syntax is the same as that of the positive imperative regarding accusative casemarking and anaphoric objects.
a. mì-gí já:1-lâ

1Sg-Acc look.at.Proh
'Don't look-2Sg at me!'
b. [ò ${ }^{\text {LH}}$ kògó] já:1-lâ
[2SgPoss head] look.at.Proh
'Don't look at yourself!'

### 10.7.2 Hortatives

### 10.7.2.1 Hortative (- $\mathrm{y}^{\mathrm{n}}$, plural -yà ${ }^{\mathrm{n}}$ )

By "hortative" without a modifier I mean the usual first person inclusive hortative, where the speaker proposes that he/she and the addressee(s) perform some action. As with the imperative, the hortative has two forms, the choice depending on number (singular versus plural) of addressees, excluding the speaker. The form for singular addressee could be described either as first person inclusive dual ('you-Sg and I') hortative, including all prospective agents, or as singular-addressee hortative.

The hortative is based on an $\{\mathbf{H L}\}$-toned $\mathbf{E} / \mathbf{I}$-stem. The $\{\mathbf{H L}\}$ overlay is realized as $\langle\mathrm{HL}\rangle$ (monosyllabic), H.L, H.H.L, etc. The suffixes are $-y^{\mathrm{n}}$ for singular addressee (this monophthongizes with preceding $i$ to [i:], transcribed ì-y ${ }^{n}$ ) and -yày ${ }^{n}$ (Boui) for plural addressee. For Ningo a plural-addressee form $-y^{n} y^{n}$ à was elicited but does not seem to be common. The high-frequency hortative of 'go', ní únì-y (plural ní únì-yày ${ }^{n}$ ), is often contracted to ní:-nì-y (plural ní:-nì-yày ${ }^{n}$ ) in Boui, and to nú:-ní-ỳn (note the tone as well as the vocalism) in Ningo. 1Pl subject morpheme nì precedes the verb, as in indicative inflections. There is no stem-final syncope even between like consonants (i.e. y): nì jíyè-yày ' 'let's-Pl harvest!'

The forms in arrays (286-288) are from the Boui speaker unless otherwise indicated.
gloss stem

| gloss | stem | hortative |  |
| :---: | :---: | :---: | :---: |
|  |  | Sg addressee | Pl addressee |
| a. uncontracted with presuffixal e/ع |  |  |  |
|  |  |  |  |  |
| 'eat, drink' | nó: | nì né-y̆ ${ }^{\text {n }}$ | nì né-yày ${ }^{\text {n }}$ |
| 'pull' or 'shut' | ímbó | nì ímbè-y ${ }^{\text {n }}$ | nì ímbè-yày ${ }^{\text {n }}$ |
| 'bring' | sógó | nì sógèe-y ${ }^{\text {n }}$ | nì sógè-yày ${ }^{\text {n }}$ |
| 'sleep' | nóyó | nì nóyè-y ${ }^{\text {n }}$ | nì nóyè-yày ${ }^{\text {n }}$ |
| 'descend' | sígó | nì sígè- $\mathrm{y}^{\text {n }}$ | nì sígè-yày ${ }^{\text {n }}$ |
| 'come down' | sé:gó | nì sé:gè-y | nì sé:gè-yày ${ }^{\text {n }}$ |
| 'shave' [tr] | káy-ró | nì káy-rè- ${ }^{\text {n }}$ | nì káy-rè-yày ${ }^{\text {n }}$ |
| 'jump' | tómbó | nì tómbè- $\mathrm{y}^{\text {n }}$ | nì tómbè-yày ${ }^{\text {n }}$ |
| 'stand, stop' | ígí-yó | nì ígí-yč-y ${ }^{\text {n }}$ | nì ígí-yc̀-yày ${ }^{\text {n }}$ |
| with presuffixal i |  |  |  |
| 'send here' | yógó-mú | nì yógó-mì-y ${ }^{\text {n }}$ | yógó-mì-yày ${ }^{\text {n }}$ |

Sg addressee $\quad \mathrm{Pl}$ addressee
b. optionally contracted with presuffixal i

| 'go' | ún(ú) | nì únì- ${ }^{\text {n }}$ | nì únì-yày ${ }^{\text {n }}$ |
| :---: | :---: | :---: | :---: |
|  |  | $\sim$ ní:-nì-y ${ }^{\text {n }}$ (Boui) | $\sim$ ní:-nì-yày ${ }^{\text {n }}$ |
|  |  | $\sim$ nú:-ní-y ${ }^{\text {n }}$ (Ningo) |  |

More examples of singular-addressee E/I-stem hortatives with verbs ending in a nonhigh vowel are in (287).
gloss
stem
hortative (singular addressee)
a. monosyllabic

| +ATR |  |  |
| :---: | :---: | :---: |
| 'exit (v)' | gó: | nì gwé-y ${ }^{\text {n }}$ |
| -ATR |  |  |
| 'pound' | dó: | nì dwé- ${ }^{\text {n }}$ |
| 'eat, drink' | nó: | nì jé-ý ${ }^{\text {n }}$ |

b. $\mathrm{NCv}(:)$
'give'
ndó ndé-y ${ }^{\text {n }}$
c. CvCv
$+A T R$

| 'lay out' | dáyó | nì dáyè- $\mathrm{y}^{\mathrm{n}}$ |
| :--- | :--- | :--- |
| 'come' | yógó | nì yógè- $\mathrm{y}^{\text {n }}$ |
| 'lie down' | bí-yó | nì bí-yè-y ${ }^{\text {n }}$ |


| -ATR |  |  |
| :--- | :--- | :--- |
| 'fall' | yégó | nì yégè- $\mathrm{y}^{\mathrm{n}}$ |
| 'lift, pick up' | tógó | nì tógè̀-y |
| 'abandon' | díyó | nì díy $\mathrm{c}-\mathrm{y}^{\mathrm{n}}$ |

c. CvCCv
$+A T R$
‘sit' (Boui) ów-yó nì ów-yè-y ${ }^{n}$
-ATR
'winnow in wind' ع́mbó nì émbè-y"
d. $\mathrm{Cv}: \mathrm{Cv}$

| 'build' or 'look' | já:ló | nì já:lè- $\mathrm{y}^{\mathrm{n}}$ |
| :--- | :--- | :--- |
| rregular tones <br> 'come down' | sé:gó | nì sé:gè- $\mathrm{y}^{\mathrm{n}}$ |

e. trisyllabic

| 'open (door)' | ímbí-ló | nì ímbíl-l-è-y |
| :--- | :--- | :--- |
| 'break' | jínángó | nì jínángè-y |
| 'fix; do well' | kándí-yó | nì kándí-yè-y |

More examples of singular-addressee from stems with final high vowel, therefore with presuffixal $i$ in the hortative, are in (288).
gloss
stem
Hort
a. $\mathrm{CaC}(\mathrm{u})$
'speak
'steal'
Cán(ú)
'do'
'put'
b. $\mathrm{CiC}(\mathrm{u}), \mathrm{CuC}(\mathrm{u})$

Cún(ú), Cín(ú)
'go
'take (convey)' $\quad \sin (u ́) \quad$ nì sínì- $\mathrm{y}^{\mathrm{n}}$
c. causatives
'make (sb) run' dú:rú-yó-m(ú) nì dú:rú-yó-mì-y ${ }^{\text {n }}$
'send here'

| dám(ú) | nì dámì- ${ }^{\text {n }}$ |
| :---: | :---: |
| kám(ú) | nì kámì-y ${ }^{\text {n }}$ |
| kán(ú) | nì kánì- ${ }^{\text {n }}$ |
| gán(ú) | nì gánì- $\mathrm{y}^{\mathrm{n}}$ |


| 'go' | ún(ú) | nì únì- ${ }^{\text {n }}$ |
| :---: | :---: | :---: |
| 'take (convey)' | sín(ú) | $\begin{aligned} & \text { ~ ní:-nì-y } \\ & \text { nì sínì-y } \end{aligned}$ |
| cusatives |  |  |
| 'make (sb) run' | dú:rú-yó-m(ú) | nì dú:rú-yó-mì-y ${ }^{\text {n }}$ |
| 'send here' | yógó-m(ú) | nì yógó-mì- ${ }^{\text {n }}$ |

```
'make eat (meat)' témá-m(ú) nì témá-mì-y
'make eat, feed' ná:-m(ú) nì ná:-mì-yn
```

As indicated and illustrated above, there is an overt 1Pl subject (289a-b). A direct object, if present, can take accusative marking (289a). Anaphoric objects such as reflexives (289b) can be used.
a. nà-gí
nì
3Sg-Acc 1PISbj
télè-y ${ }^{\mathrm{n}}$
'Let's-Dual cut him/her!'
b. [nì ${ }^{\text {LH }}$ kògó] nì télè- $\mathrm{y}^{\mathrm{n}}$
[1PlPoss head] $\mathbf{1 P l}$
cut-HortSg
'Let's-Dual cut ourselves!'
The singular-addressee hortative is segmentally identical to the 1 Sg simple perfective. For nonmonosyllabic stems, hortative télغ̀-y ${ }^{\mathrm{n}}$ in the preceding examples is tonally distinct from 1Sg perfective téĺ́-ỳn 'I cut-Past'. For monosyllabic stems the two are homophonous in spite of the orthographic differentiation used here: nì gwé-y ${ }^{n}$ 'let's go out!' and gwé-ỳ 'I cut'. In any event there is no possibility of confusion when the hortative verb is preceded by the 1 Pl subject proclitic nì.

### 10.7.2.2 Hortative negative (-láỳ ${ }^{n}$, plural -láy $\left.{ }^{n} y^{n a ̀}\right)$

The hortative negative is based on the $\{\mathrm{L}\}$-toned $\mathbf{O}$-stem of the verb. The suffix is -láỳn for singular addressee in Boui (Ningo has -lá:ỳn with long vowel), -láy ${ }^{n} y^{n a ̀ ~ f o r ~}$ plural addressee. -láy ${ }^{\mathrm{n}}$ resembles prohibitive -lâ, and the same segmental morphophonology occurs in both (syncope after unclustered medial $\{1 \mathrm{nr}\}$, then $/ \mathrm{nl} />\mathrm{nn}$ and $/ \mathrm{rl} />11$ ). Moreover, both the hortative negative and the prohibitive are based on the O-stem of the verb. These similarities are not surprising given the close pragmatic connection between imperatives and hortatives, and the fact that addressee number is marked in both. However, in addition to the small difference in suffixal segments, the two differ in stem tone overlay, which is $\{\mathrm{L}\}$ for hortative negative and $\{\mathrm{H}\}$ for prohibitive.
(290) Hortative negative ( Sg and Pl addressee)

| gloss | stem | Sg HortNeg | Pl HortNeg |
| :---: | :---: | :---: | :---: |
| 'eat, drink' | nó: | nì nò:-láy ${ }^{\text {n }}$ | nì nò:-láy ${ }^{\text {n }}{ }^{\text {nà }}$ |
| 'go' | ún(ú) | nì ùn-náy ${ }^{\text {n }}$ | nì ùn-náy ${ }^{\text {n }}{ }^{\text {nà }}$ |

Further examples of singular-addressee hortative negatives from stems with final nonhigh vowels are in (291).
(291) Hortative negative (final-nonhigh-vowel class)
stem HortNeg gloss
a. $\mathrm{Cv}, \mathrm{Cv}$ :
gó: nì gò:-láy ${ }^{\text {n }}$ 'exit (v)'
nó: nì nò:-láy ${ }^{n}$ 'eat, drink'
b. $\mathrm{NCv}(:)$
ndó nì ndò-láỳ ${ }^{\text {n }}$ 'give'
c. CvCv
$\mathrm{CaCv}-$
dáyó nì dàyà-láy ${ }^{n}$ 'lay out'
other + ATR stem
bí-yó nì bì-yò-láy ${ }^{n}$ 'lie down'
-ATR stem
díyó nì dìyò-láỳ ${ }^{\mathrm{n}}$ 'abandon'
medial n
tónó nì tòn-náy ${ }^{n}$ 'butcher'
medial 1
túló nì tùl-láỳ ${ }^{\text {n }} \quad$ 'sell'
medial r póró nì pòl-láy ${ }^{n}$ 'throw'
c. CvCCv
ów-yó nì òw-yò-láỳn 'sit'
ع́mbó nì èmbò-láy ${ }^{n}$ 'winnow in wind'
d. $\mathrm{Cv}: \mathrm{Cv}$
já:ló nì jà:l-láy' 'build' or 'look'
sé:gó nì sè:gò-láýn ${ }^{n}$ 'come down'
e. trisyllabic and longer
ímbíló nì ìmbì-l-láýn ${ }^{n} \quad$ 'open (door)'
jínáygó nì jìnàngò-láỳ ${ }^{n}$ 'break'

Singular-addressee hortative negatives from final-high-vowel verbs are in (292).
(292) Hortative negative (final-high-vowel class)
stem Prohibitive stem gloss
a. $\mathrm{CaC}(\mathrm{u})$
dám(ú) nì dàmù-láỳ ${ }^{\text {n }}$ 'speak'

Cán(ú)
kán(ú)
nì kàn-náỳ ${ }^{\text {º }}$
'do'
b. Cún(ú), Cín(ú)
ún(ú) nì ùn-náỳ ${ }^{n}$ 'go'
sín(ú) nì sìn-náỳ ${ }^{\text {n }} \quad$ 'take (convey)'
c. causatives
dú:rú-yó-m(ú) nì dù:rù-yò-m-láỳ ${ }^{n}$ 'make $(\mathrm{sb})$ run'

This hortative negative form is also used in quoted prohibitives (§10.7.3.2).
10.7.3 Quoted imperatives and hortatives

### 10.7.3.1 Quoted imperatives (I-stem)

This QuotImprt form occurs in quoted imperatives in a broad sense, including indirect imperatives that are conveyed by another person (293a,d), clarification requests by the recipient regarding the interlocutor's apparent commands (293b), and regular quoted imperatives (jussives) as in narratives (293c). It is usually followed by either quotative enclitic wà or polar interrogative nì, but it can also be used without such a particle in imprecations (wishes, blessings, curses) involving third-party agents ('may God help you!'), on which see $\S 10.7 .3 .3$ below. In quoted imperatives, the subject is separated from the remainder of the clause, both portions being followed by quotative enclitic wà.

| a. | $\left[\begin{array}{lll}\text { ò } & \text { LHbàwá }\end{array}\right]$ | $\left[\begin{array}{ll}\text { ò } & \text { wà }\end{array}\right]$ | [yògù | wà |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $[2 S g P o s s$ | father $]$ | $[2 S g$ | QuotSbj $]$ | [come.QuotImprt |
|  | Quot $]$ |  |  |  |  |
|  | 'Your-Sg father says for you-Sg to come.' (Boui) |  |  |  |  |

b. (mì) yògì ní
(1Sg) come.QuotImprt Q
'(Did you say/signal) (for me) to come? (Boui)
c. [à:màdú wà] [yògù wà]
[A QuotSbj] [come.QuotImprt Quot]
'He told Amadou to come.' (Boui)
(= 'He said to Amadou, come!' or 'He said: hey Amadou, come!)
d. [ò LHbàbá] [ò wá] [yògù wà ]
[2SgPoss father] [2Sg QuotSbj] [come.QuotImprt Quot] 'Your-Sg father says (for you-Sg) to come.' (Ningo)

The tone patterns (including irregularities) are identical to those of the imperative. The vocalism is unique to this verb form, and exemplifies the rare I-stem (§3.3.6). It resembles the E/I-stem, but vowels of nonfinal syllables are shifted from -ATR to + ATR, and final $\{\mathrm{e}(:\} \varepsilon(:)\}$ are raised to $\{\mathrm{i} \mathrm{i}:\}$. This form with final $\{\mathrm{i} \mathrm{i}:\}$ is the only surface form for monosyllabic verbs whose E/I-stems (Ce:-, $\mathrm{NC} \mathrm{\varepsilon}$ :-) do not contain w, e.g. 'eat' and 'give' (249a-b). It is also the only surface form for nonmonosyllabic verbs whose E/I-stem otherwise ends in iye- or iye-, including underlying/iye/ or /iye/ whose /i/ is elsewhere syncopated, as with 'lie down', 'abandon', 'sit', and 'fix' (294c-e). For these nonmonosyllabic verbs, the final long i: of the I-stem could be analysed as the result of monophthongization of /iyi/. All other verbs, i.e. monosyllabic stems whose E/I-stem contains w (Cwe:-, Cwe:-, we:-) and most nonmonosyllabic stems, shift the final $\{\mathrm{i} i:\}$ to $\{\mathrm{u} u:\}$ by assimilation to the w of a following quotative wa (293a, c). However, they keep \{i i: \} before the interrogative particle, which itself appears in the allomorph nì (rather than lè) in this combination (293b).

Representative forms for stems with final nonhigh vowels are in (294).

QuotImprt (final-nonhigh-vowel class, Boui)

$$
\text { O-stem } \quad \text { E/I-stem } \quad \text { QuotImprt } \quad \text { gloss }
$$

a. $\mathrm{Cv}, \mathrm{Cv}$ :
$+A T R$

| go: | gwe: | gù: $\backslash \backslash$ gwì: | 'exit (v)' |
| ---: | :--- | :--- | :--- |
| $-A T R$ |  |  |  |
| do: | dwe: | dù: $\backslash \backslash d w i ̀: ~$ | 'pound' or 'insult' |
| no: | ne: | jù: | 'eat, drink' |

b. $\mathrm{NCv}(:)$
ndo
nde:
ndì:
'give
c. CvCv
$+A T R$

| dayo | daye | dàyù $\backslash$ daàyì | 'lay out' |
| :---: | :--- | :--- | :--- |
| yogo | yoge | yògù $\backslash$ lyògì | 'come' |
| bi-yo | bi-ye | b-ì: | 'lie down' |
| $-A T R$ |  | yègù $\backslash$ yyègì | 'fall' |
| yego | yege | tògù $\backslash$ toogì | 'lift, pick up' |
| togo | toge | dì: | 'abandon' |

c. CvCCv
$+A T R$

| ow-yo <br> $-A T R$ | ow-ye | òw-ì: | 'sit' |
| :--- | :--- | :--- | :--- |
| عmbo | عmb $\varepsilon$ | èmbù \èmbì | 'winnow in wind' |

d. $\mathrm{Cv}: \mathrm{Cv}$
ja:lo ja:le jà:lùl\jà:lì 'build' or 'look'
irregular tones
se:go se:ge sé:gû<br>sé:gî 'come down'
e. trisyllabic and longer
imbi-lo imbi-le ìmbù-l-ùl\ìmbìl-l-ì 'open (door)' jinango jinange jìnàngùl\jìnàngì 'break' kandi-yo kandi-ye kànd-ì: 'fix; do well'

Corresponding forms from verbs with final high vowels are in (295).
(295) QuotImprt (final-high-vowel class, Boui)
O-stem
E/I-stem
QuotImprt
gloss
a. $\mathrm{CaC}(\mathrm{u})-$

| damu | dami | dàmù $\backslash$ dàmì | 'speak' |
| :--- | :--- | :--- | :--- |
| kanú | kani | kànù $\backslash$ kànì | 'do' |

b. $\mathrm{CiC}($ ú $), \mathrm{CuC}($ ú $)$ unu uni ùnù $\backslash$ ùnì 'go'
c. causatives
na:-m(u) na:-mi jà:-mùl\nà:-mì 'cause to eat, feed'

As noted above, the polar interrogative particle (elsewhereusually lè) takes the form nì in this combination. This nì is elsewhere found as the fusion of polar interrogative lè with preceding 1 Sg pronominal-subject suffix $-\mathrm{y}^{\mathrm{n}}$ (§13.2.1). A reasonable hypothesis is that the quoted imperative originally had a suffix *-y (or *-yn), which monophthongized with a preceding high vowel.

### 10.7.3.2 Quoted prohibitives (-lá)

Quoted prohibitives have the same verb form as the regular prohibitive (§10.7.1.2), with suffix -lâ added to the $\{\mathrm{L}\}$-toned O -stem. The suffix combines with quotative wà as -lá wà, and with the interrogative particle lè as -lá nì.

b. (mì) yògò-lá nì
(1Sg) come-HortNeg $Q$
'(Did you say/signal) (for me) not to come?' (Boui)

### 10.7.3.3 Quoted hortative and imprecations ('may God ...')

A hortative may be quoted. The regular hortative verb form (§10.7.2.1) is used. Plural-addressee marking is not present in my examples (from Ningo). This may be a hard grammatical restriction (as in other Dogon languages), but it is difficult to show this since plural-addressee marking is uncommon anyway in this dialect.

| (297) | sé:dú | $[$ bó: | gì $]$ | nú:-ní-ýn | wá | ${ }^{\text {LH gùné-Ø }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | S | [together | Loc] | 1PlSbj-go-Hort | Quot | say.Pfv-3SgSbj |
|  | 'Seydou said (to me), "let's go together!" ' (Ningo) |  |  |  |  |  |

Wishes and imprecations, generally with a celestial subject, have a verb form identical to the quoted imperative form (§10.7.3.1), i.e. the unsuffixed I-stem, for Boui dialect (298a). Ningo adds $-y^{n}$ to the $I$-stem, not to the $E / I-s t e m$ as in the simple hortative (§10.7.2.1). Here $-\mathrm{y}^{\mathrm{n}}$ after the I-stem is glossed 3Hort (third person hortative), equivalent to "subjunctive" in many languages. (28b-d). (298e) is negative, with regular hortative negative -láy'. In all such imprecations, 'God' is resumed by a preverbal 3 Sg subject proclitic.

```
a. á: yògó: nà tà:rì
God future 3 SgSbj show.QuotImprt
'May God show you the future (=give you long life)!' (Boui)
(said e.g. on holy days) (verb is tá:ró ‘show')
[yògó: contracted from *yógó-bó 'what is coming']
```

b. á: yógó-bó nà tà:rì-y ${ }^{\mathrm{n}}$

God come-IpfvRel 3SgSbj show-3Hort
'May God show you what is coming (=give you long life)!' (Ningo)
c. á: [írò gì] nà bàrì-y ${ }^{n}$

God [better Loc] 3SgSbj help-3Hort
'May God help (you) get better!' (to a sick person) (Ningo)
(verb is báró ‘help')
d. á: nà bì:-rì-y ${ }^{n}$

God 3 SgSbj lie.down-Tr-3Hort
'May God lay (him/her) down (in peace)!' (said after a death)
(Ningo) (verb is bí:-ró)
e. á: yògó: nà tà:l-láy ${ }^{n}$

God future 3 Sg show-HortNeg
'May God not show you the future!' (Boui) (verb is tá:ró 'show')

## 11 Clause, VP, and predicate structure

### 11.1 Clausal constituents

Linear order is SOV, where S and O are nonpronominal NPs. Setting adverbs like 'yesterday' often precede the subject NP.

### 11.1.1 Subjects

### 11.1.1.1 Subjects in indicative main clauses

Subject NPs are clause-initial, except that they may be preceded by setting adverbs and pragmatic elements like 'but'. Third person subject NPs require agreement in the verb, though 3 Sg is the zero category. $1 \mathrm{st} / 2$ nd person and 3 Pl subjects, barring focalization, are expressed by a combination of suffixes $(1 \mathrm{Sg}, 2 \mathrm{Sg}, 3 \mathrm{Pl})$ and preverbal proclitics ( $1 \mathrm{Pl}, 2 \mathrm{Pl}$ ).

Subjects are the normal antecedents for reflexive objects, though in Tiranige these are of the type 'my head' ("I saw my head" = 'I saw myself').

### 11.1.1.2 Subjects in relative and complement clauses

Subjecthood plays a role in some subordinated clause constructions, to the extent that these clauses require coindexation of the subjects of the subordinated and main clauses. However, switch-reference subordination is only moderately well-developed in Tiranige. See $\S 15.2 .1 .2-3$ and $\$ 15.2 .2 .1-3$ for discussion.

In relative clauses, the marking of pronominal subjects is different. If the relative head is the subject of its clause, as in 'the cows that ran away', there is no pronominal-subject agreement on the verb, which is really a verb-participle that can only distinguish singular from plural. In nonsubject relatives, if the subject is pronominal as in 'the cows that I/we/you/he-or-she/they bought', the pronominal subject is expressed by a complete set of preverbal proclitics (§14.3).

### 11.1.1.3 Subjects of imperative and hortative verbs

In imperatives, the addressee is not normally expressed by an overt 2 Sg or 2 Pl pronoun. However, addressee number is indicated by presence/absence of a pluraladdressee suffix on the imperative verb (§10.7.1.1).

The implied second person agent can bind a reflexive object ("your head"), as in 'look at yourself!', see (278) in §10.7.1.1 above.

In hortatives ('let's VP!'), there is an overt 1 Pl subject pronoun, in addition to the marking of addressee number. Examples are (289a-b) above.

### 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. In (299a), two collocations with yé as pro forma subject denote the two day/night transitions. yé is not elsewhere attested as a noun, and monomoraic Cv is normally too short to be a noun stem. Data are from Boui.
collocation gloss identifiable components
a. yé dénó 'night fall'
dénó 'spend mid-day’; cf. yà:gù 'night'
yé yó: 'day break'
cf. yó: 'pick up, take (a single item)'
b. á:mì tégó 'rain fall’' tégó '(roof) leak'
yó: also occurs in yé: yó: ‘let out a fart’ (304a below) and yórí yó: ‘do an exchange, barter (v)'. For á:mì ‘rain (n)’ cf. perhaps á: ‘God’ and mí: ‘water’.

### 11.1.2 Simple transitives

### 11.1.2.1 Direct objects of simple transitives

There is a clear difference between subject and objects. If both are nonpronominal, subjects normally precede objects unless the object is topicalized and fronted. Subjects but not objects are the basis of pronominal agreement in verbs. Likewise, subjects but not objects are involved in determining same-subject status in interclausal syntax. Pronominal and other human object NPs regularly take accusative postposition gì (§6.7).

There is no sharp difference between direct objects and dative-like indirect objects which occur with ditransitive verbs like 'give' (§11.1.3.3).

Perception verbs like bálí-yó- 'see' and nú:ndó- 'hear' are ordinary transitives with subjects and objects like those of canonical transitives.

Many activity verbs that are low in transitivity (e.g. 'dance', 'cough') commonly occur with an object-like cognate nominal ('dance a dance', 'cough a cough'); see §11.1.2.5-6 below.
11.1.2.2 kán(ú) 'do' with nouns and unconjugatable words
kán(ú) 'do' combines readily with nouns (especially borrowings) or semionomatopoeic elements ('hiccup', 'bellow') that cannot otherwise function as predicates. This construction is very characteristic of Tiranige. Examples from Boui are in (300).
(300)
a. jìwé 'carrion (unslaughtered dead animal)' jìwé kán(ú) '(livestock animal) die naturally’
b. bìgè-bígè 'hiccups'
bìgè-bígè kán(ú) 'have the hiccups'
c. újé 'sweat (n)'
[ X gì] újé kán(ú) ' X sweat, perspire' $(\mathrm{X}$ is object)
d. pèní 'comb (n)' (Fr peigne)
pèní kán(ú) 'comb (something)'
e. hùbí 'bellowing' (< Fulfulde)
hùbí kán(ú) '(adult male animal) bellow'
f. kúná 'oath, sworn statement'
kúná kán(ú) 'swear, take an oath'
g. wà:jú 'Muslim sermon'
wà:jú kán(ú) 'deliver a sermon'
h. sà:ní
sà:ní kán(ú) 'pray, perform a prayer'
i. wàlè
'work (n)'
wàlè kán(ú) 'perform work'
In inflected forms in which kán(ú) begins with a H-tone, a preceding LH-toned word drops its final H-tone by a phonological rule (§3.6.3.3). For example, pèní kán(ú) $(300 \mathrm{~d})$ is actually pronounced pè̀ì kán(ú). However, here (and in the lexical spreadsheet) I write the H -tone in order to show the lexical tone, which is audible in isolation or before an L-tone. In sentence examples and in texts I transcribe the actual output tone, e.g. pèní (301a) versus pènì (301b).
(301)
a. pèní kànì-Ø
comb do.Pfv-3SgSbj
'He/She combed.' (Boui)
b. pènì kání- ${ }^{\mathrm{n}}$
comb do.Pfv-1SgSbj
'I combed.' (Boui)
11.1.2.3 gún(ú) 'say' and causative gúná-m(ú) with onomatopoeias
gún(ú) 'say' and its causative gúná-m(ú) are the auxiliaries of choice with the more transparent onomatopoeias. gúná-m(ú) suggests volitional agency, while gún(ú) does not.
(302)
a. bín $\rightarrow$ gùnè-Ø
vibrate say.Pfv-3SgSbj
'It (e.g. motor) vibrated.' (Boui)
b. dín-dán-díw ${ }^{\mathrm{n}}$ gùnà-mì- $\varnothing$
pitter-patter say-Caus.Pfv-3SgSbj
'He/She went pitter-patter (sound of footsteps).' (Boui)
gúná- $m$ (ú) can also be used as a true causative of the collocation with gún(ú), as in bín $^{\text {n }} \rightarrow$ gúná-m(ú) 'cause (something) to vibrate'.

### 11.1.2.4 Collocations with low-referentiality objects

'X bathe’ is expressed as mí: dú-yó including mí: ‘water’. dú-yó (or a homonym) by itself means 'carry (from underneath, esp. on one's head)'. (303) presents 'bathe' and other noun-verb collocations. Data are from Boui.

| collocation | gloss | components (if recognizable) |
| :--- | :--- | :--- |
| mí: dú-yó | 'bathe' | mí: 'water', dú-yó 'carry' |
| pélé bám(ú) | 'applaud' | bám(ú) 'beat (tomtom)' |
| kó:ní gó:gó-m(ú) | 'cast a spell' | gó:gó-m(ú) 'take out' |
| pólngé súgó | 'lay an egg' | súgó- 'descend' |
| só:ndí tó: | 'spit' | só:nd́ ‘saliva' |
| bé:w gún(ú) | 'belch' | gún(ú) 'say' |
| غ́njè élógó | 'chew one's cud' | cf. énjó 'vomit (v)', élúgó '(sun) rise' |

Cognate nominals may also be low in referentiality, see just below.

### 11.1.2.5 Forms of cognate nominals associated with verbs

Examples of collocations involving a verb and a cognate nominal are in (304). The nominals are of two main phonological types. One, which includes all trisyllabics and many bisyllabics, ends in a short high vowel $\{i u\}$. The choice between the two high vowels is likely predictable from surrounding consonants and vowels. The other type, which includes all monosyllabics and many bisyllabics, ends in a non-high vowel that is consistent with either the $\mathrm{E} / \mathrm{I}$-stem (associated with perfective aspect) or the A/O-stem (associated with durativity) of the corresponding verb. Data are from Boui.
(304) a. Cv: including Cwv:

Cv: after non-alveolar yé: yó: 'fart'
Cv : after alveolar nwé: nó: $\quad$ 'sing (a song)' dwé: dó: 'insult' twé: tó: 'lie, tell a lie’
b. CvCv

CvCu péwú péwó 'whistle (v)' yèwù yéwó wògù wógó núgú núgó nújú nújó yàyù yání-yó ségú ségó
'dance (a dance)'
'(dog) bark'
'count ( $1,2,3,4, \ldots$ ), calculate'
'groan, moan'
'have a fight'
'make a contribution, pay dues'
CvCi
ónjí ónjó
nàjì nájó
cìrì círí-yó
other CvCv
túlé túló
kùwò kúwó
jìyò jíyó
súgó súgó
'urinate'
'have fun'
'have a discussion'
'give out a shout'
'do farm work, work in fields' (Boui)
'harvest (with knife)'
'defecate'
kòmò kómó 'weep'
c. CvCCv

CvCCi
énjí $̂ ́ n j o ́ ~$
màndì mándó
other CvCCv sàmbò sámbó 'do the second round of weeding'
d. $\mathrm{Cv}: \mathrm{Cv}$
$\mathrm{Cv}: \mathrm{Ci}$
tà:nì tá:nú 'go hunting'
other $\mathrm{Cv}: \mathrm{Cv}$ tí:lé tí:ló
e. trisyllabic

CvCvCu túgújú túgújó 'stutter'
CvCvCi kóródí kóródó 'cough’ kárádí kárádó 'clear one's throat' újárí újáró gúrádí gúrádó yámánjí yámánjó
'vomit'
'laugh' 'tell a story'
'ask a question'
'snore'
'have a dream'

Interesting vocalic differences in nonfinal stem vowels are observed in (305).

```
nógórí nágárí-yó 'think; be worried` (Boui)
```

Other similar deverbal nominals include those with suffix -ŋgé (§4.2.3.2). All verbs can form the productive verbal noun with -wà ~ -bà (§4.2.3.1).

### 11.1.2.6 Grammatical status of cognate nominal

Although in many cases the cognate nominal in such collocations is generic, it is occasionally determined or modified. For one thing, là 'also' cannot take a verb, VP, or clause in its scope, so it must attach to a cognate nominal or some other noun-like element in a clause. Therefore 'he sings too' must be phrased as "[songs too] he sings." Likewise, when the event unit is quantified over, as in 'he laughed three times', this can be phrased as "[three laughs] he laughed."

A good example of an adjectivally modified cognate nominal is (306), which refers to the very important first of two rounds of weeding in the millet fields during the rainy season.
(306) [kùwò ${ }^{\text {L }}$ gó:] kúwó-
[farming first] do.farming'do the first round of weeding' (Boui)

### 11.1.3 Clauses with additional arguments and adjuncts

### 11.1.3.1 Syntax of expressive adverbials (EAs)

Expressive adverbials (§8.4.5) can be optional adjuncts in clauses. However, they can be made predicative by adding quasi-verb bǒ: 'be (somewhere)', its negation órâ 'not be, be absent (somewhere)', or a form (positive or negative) of the regular verb bíló 'become'.
a. [ìjó rì] tén-téw ${ }^{n}$ nì ùnì [village Def] straight 1P1Sbj go.Pfv 'We went straight to the village.' (Boui)
b. tén ${ }^{n}$ téw ${ }^{n}$ bǒ:-Ø
straight be-3SgSbj
'It (path, stick) is straight.' (Boui)
c. t $\varepsilon^{\text {n }}$-téw ${ }^{\mathrm{n}}$ órâ-Ø
straight not.be-3SgSbj
'It is not straight.' (Boui)
d. tén-téw ${ }^{\mathrm{n}}$ bìlè-Ø
straight become.Pfv-3SgSbj
'It became straight.' (Boui)

### 11.1.3.2 Adverbials with motion, enclosure, and putting verbs

Motion verbs like 'go' and 'come' are intransitive and may combine with a locational adverb or with an adverbial phrase (a PP or spatial relative clause). Even toponyms such as names of villages and cities are overtly marked with a locative postposition in such clauses.
a. [mótí yá] ${ }^{\text {LH ùní-Ø }}$
[Mopti Loc] go.Pfv-3SgSbj
'He/She went to Mopti [focus].' (Boui)

```
b. [mótí yá] gwè:-Ø
[Mopti Loc] exit(v).Pfv-3SgSbj
'He/She left (or: came from) Mopti.' (Boui)
```

Most predicates of spatial position involve bò 'be (somewhere)' plus a locational expression. This applies, for example, to 'be [in X]' predicates (309a). Some other spatial relationships are commonly expressed by specialized stative verbs like dángà 'be on wall (i.e. on a vertical plane)' and sángà 'be up on (something)', but the locational expression still has locative rather than object form (309b-c).
a. [mí: rì] [[órí ${ }^{\text {LH}}$ kùlyé] yà] ${ }^{\text {LH}}$ bǒ:- $Ø$
[water Def] [[waterjar inside] Loc] be-3SgSbj
'The water is in(side) the waterjar.' (Boui)
b. [bó:lò rì] [[jíwá ${ }^{\text {LH}} \mathrm{b}$ à̀gá] yà] ${ }^{\text {Ld dàygà-Ø }}$
[agama Def] [[house wall] Loc] be.on.wall.Stat-3SgSbj 'The agama lizard is on the wall.' (bó:ló) (Boui)
c. [bàràdá rì] [púrné yà] ${ }^{\text {Lsàagà }-\varnothing ~}$
[tea.kettle Def] [burner Loc] be.up.on.Stat-3 SgSbj
'The tea kettle is (set) up on the burner.' (Boui)
'Put' verbs in a broad sense take an object and a locational expression.
(310) [mángòró rì] [[órí ${ }^{\text {LH }}$ dùyó] yà] ${ }^{\text {LH }}$ dìyè-ýn ${ }^{\text {n }}$
[mango Def] [[waterjar under] Loc] abandon.Pfv- 1 SgSbj 'I left the mangoes under the waterjar [focus].' (Boui)

### 11.1.3.3 Ditransitives

Verbs ndó 'give' and tá:ró 'show' take two direct objects morphologically. Specifically, the indirect object (usually human and often pronominal) is regularly marked by accusative gì. The theme (i.e. the transferred or displayed object) is usually nonhuman and so usually does not take accusative marking. An example is (5) in §2.5 above.

Benefactive verbs derived from already transitive stems (§9.4.2.1) are also ditransitive, with the same morphosyntax as 'give' and 'show'.

### 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 gì. The theme Y is usually inanimate and lacks accusative marking but is presumably also an object syntactically.
(311) [sàydú gì] [à:màdú gì] céléngé ndá:-mí-ỳ ${ }^{\text {n }}$ [Seydou Acc] [Amadou Acc] money give-Caus- 1 SgSbj 'I had Seydou give (some/the) money to Amadou.' (Boui)

### 11.1.4 Verb Phrase

VP is useful in connection with verb(-phrase) chains (chapter 15), where the subject is held constant over the two clauses. 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' enclitics in identificational predicates

### 11.2.1.1 Positive 'it is' ( $=\grave{\mathrm{w}}^{\mathrm{n}} \sim=$ wò $\sim=$ yò $)$

The 'it is' enclitic, 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 syllabic and nonsyllabic variants. The syllabic variants are = wò and $=$ yò, which shift to H-tone after a $\{\mathrm{L}\}$-toned word or pronoun. = yò (becoming = yó) occurs after pronouns ending in $\mathrm{i}(1 \mathrm{Sg}, 1 \mathrm{Pl})$ and after personal names ending in a high vowel (à:màdú 'Amadou', sì:dí 'Sidi'). This leaves = wò (sometimes becoming $=$ wó) after pronouns and names that end in a nonhigh vowel. Pronouns have long vowels before = wó but not before = yó.

The nonsyllabic variant is nasalized $=\grave{\mathrm{w}}^{\mathrm{n}}$. This form is used after common nouns, and after plural -gè. The L-tone is normally audible, but in interrogatives the usual final intonational pitch rise obscures the L-tone. In cases where unnasalized $=\grave{\mathrm{w}}$ was initially transcribed, this turned out to be a phonetic variant of the syllabic form = wò (see above), and the syllabic form was preferred in careful speech.

Demonstrative mbó 'this/that' forms mbô=: with long vowel and falling tone (312e).

Data from Boui are in (312).
(312) a. interrogative

$$
\begin{array}{ll}
\text { à: }=\text { wó } & \text { 'who is it?' } \\
\text { ángá }=\grave{\mathrm{w}}^{\mathrm{n}} \nearrow & \text { 'it is how many?' } \\
\text { ndégé }=\grave{\mathrm{w}}^{\mathrm{n}} \nearrow & \text { 'what is it?' }
\end{array}
$$

b. with noun

$$
\begin{array}{ll}
\text { jíwá }=\grave{w}^{\mathrm{n}} & \text { 'it's a house' } \\
\text { níyè }=\grave{\mathrm{w}}^{\mathrm{n}} & \text { 'it's a bird' } \\
\text { ná:-gé }=\grave{w}^{\mathrm{n}} & \text { 'they are cows' } \\
\text { ná }=\grave{w}^{\mathrm{n}} & \text { 'it's a cow' (from ná:) } \\
\text { ámbá }=\grave{\mathrm{w}}^{\mathrm{n}} & \text { 'it's a sheep' } \\
\text { ùnà }=\grave{\mathrm{w}}^{\mathrm{n}} & \text { 'it's a goat' } \\
\text { ndà:- } \text { yé }=\grave{w}^{\mathrm{n}} & \text { 'it's a woman' } \\
\text { mì bàwá }=\grave{\mathrm{w}}^{\mathrm{n}} & \text { 'it's my father' }
\end{array}
$$

c. with pronoun

| mì = yó | 'it's me' |
| :--- | :--- |
| nì = yó | 'it's us' |
| ò: = wó | 'it's you-Sg' |
| è: = wó | 'it's you-Pl' |
| nà: = wó | 'it's him' |
| cè: = wó | 'it's them' |

d. with personal names
à:màdú = yò 'it's Amadou'
sì:dí = yò 'it's Sidi'
hà:wá = wò 'it's Hawa'
à:dàmá = wò 'it's Adama'
dìkó = wò 'it's Dicko'
sìdìbé $=$ wò $\quad$ 'it's Sidibe'
bòmòkó = wò 'it's Bamako (city)'
e. other
mbô=: 'that's it'

The topic (i.e., the referent who is identified or specified) may appear as a kind of subject NP preceding the identificational predicate ('that' in 'that's a bird'), or it may be covert if understood in context.

The 'it is' clitic is not morphologically conjugatable. However, preposed subject pronouns can be added to specify a pronominal theme. Data in (313) are from Boui.
mì sójó $=$ ̀ $^{\mathrm{n}} \quad$ 'I am a Dogon.'
nì sójó-gé = ̀ $^{\mathrm{n}} \quad$ 'we are Dogon.'
ò sójó $=\grave{w}^{\mathrm{n}} \quad$ 'you-Sg are a Dogon.'

### 11.2.1.2 'It is not' ( = là ~ = lá)

The negative counterpart of the 'it is' clitic is = là. It replaces, rather than being superimposed on, the positive 'it is' clitic. Data are from Boui.

$$
\begin{array}{ll}
\text { ná: = là } & \text { 'it's not a cow' }  \tag{314}\\
\text { mì sójó = là } & \text { 'I am not a Dogon.' } \\
\text { nì sójó-gé = là } & \text { 'we are not Dogon.' } \\
\text { ò sójó = là } & \text { 'you-Sg are not a Dogon.' } \\
\text { cè sójó-gé = là } & \text { 'they are not Dogon' }
\end{array}
$$

After an all-L-toned word, H-toned = lá appears, as in sùgùnù = lá 'it is not an ear'.
= là is also found in the negative predicative form of some adjectives, especially basic color adjectives and diminutive adjectives with suffix -wè. See the end of §11.4.2 for details.
= là can be confused with là 'also, too' (§19.1.2), which has the same tonal alternation. It is less likely to be confused with -lá in the future-habitual construction (§10.2.2.4). The transcription here has = (clitic boundary) only for $=$ là 'it is not'. In addition, = là 'it is not' is usually clause-final while the other two elements are usually not.

### 11.2.2 Existential and locational predicates

### 11.2.2.1 Existential è ~é (unmarked) and yà ~ yá (distant)

These proclitics immediately precede verbs, following even 1 Pl and 2 Pl subjectpronominal proclitics ( 315 b ). The tones are polarized to the initial tone of the following predicate, see (318) below. The proclitics occur with stative predicates in positive main clauses that do not have a focalized constituent. They are disallowed in the presence of a focalized constituent, in negative clauses, and in relative clauses. With these exceptions, è or yà is obligatory with sâ: 'have', and in the absence of a more specific locational expression é or yá is obligatory with 'be'. In other words, these proclitics function as default locational adverbs with 'be', but have existential function with 'have'. Existential proclitics are optional with derived statives.
è $\sim$ é can occur in any spatial context; it puts more emphasis on existence than on location and will be glossed simply "Exist" in interlinears. It is common in elicited examples and may be typical of conversation focused on the here and now. It shifts to
$\grave{\varepsilon} \sim \varepsilon$ in tandem with a mutation to $\varepsilon$-vowel in past-time forms of 'be' and 'have', as in $\varepsilon ́$ sè-y 'I had' (266b) and $\varepsilon$ wè: 'was/were' (261).
yà $\sim$ yá additionally specifies a nonproximate or discourse-definite location and will be glossed "Exist.Dist". It is common in the texts at the end of this volume, which are narrative or expository rather than conversational.

The existentials likely began as demonstrative adverbs, and still have some resemblance to them. For è ~ é compare adverbs énì-gì 'here' and é-yà 'over there', and for yà ~ yá compare adverb yá: 'there (definite)' (§4.4.2.1). Demonstratives é-wò rì (near distant) and yá-wò rì (far distant) are specialized and somewhat reduced definite relative clauses including existential proclitics (§4.4.1.2).

Examples of è with 'have' are in (315). It occurs in (315a-b) but is absent in negative (315c), in subject-focalized (315d), and in relative clause (315e).
a. jíwá è sá-ỳn
house Exist have-1 SgSbj
'I have a house.' (Boui)
b. jíwá nì è sá house 1PlSbj Exist have 'We have a house.' (Boui)
c. jíwá sá:-ná-ỳn
house have-StatNeg-1SgSbj
'I do not have a house.' (Boui)
d. à:-wó jíwá ${ }^{H}$ sá
who? house have
'Who has a house?' (Boui)
e. jíwá jélé mì ${ }^{L H_{s a ̌}^{~}}$
house place 1 SgSbj have 'the place where I have a house' (Boui)

Examples of é with bò 'be (somewhere), exist' are in (316). The combination of the existential particle and bò comes out as é wò in Boui. The proclitic is present in (316a), but absent in (316b) in the presence of a more specific locational expression. It is also absent in negative (316c) and in focalized (316d-e).
a. té: é
wò-Ø
tea Exist be-3SgSbj
'There is some tea.' (Boui)

```
b. [[nì \(\left.{ }^{\text {LH }} \mathrm{ijó}\right]\) yá \(]\) bò-Ø
    [[1PlPoss village] Loc] be-3SgSbj
    ' \(\mathrm{He} /\) She is in our village.' (Boui)
    c. té: órâ-Ø
    tea not.be-PfvNeg.3SgSbj
    'There is no tea.' (Boui)
d. àná bò-Ø
    where? be.3SgSbj
    'Where is he/she?' (Boui)
    (Ningo áníyá \({ }^{\text {LH}}\) bǒ:)
e. à:=wò Hbó-Ø
    who?=Foc be.3SgSbj
    'Who is there?' (Boui)
```

The preceding examples are with è $\sim$ é. Examples with yà $\sim$ yá are in (317).

```
a. jíwá yà sá-ỳ \({ }^{n}\)
house Exist.Dist have-1SgSbj
    'I have a house (e.g. in another region).' (Boui)
```

b. té: yá wò-Ø
tea Exist.Dist be-3SgSbj
'There is some tea (in another location).' (Boui)

H-toned forms é and yá occur before L-toned syllables (318b), and before the 'be’ quasi-verb ( 320 below). L-toned è and yà occur before other H-toned syllables (318a).
a. yà ówà-Ø

Exist.Dist sit.Stat-3SgSbj
'He/She is sitting.' (Boui)
b. yá w-à:

Exist.Dist be-3PlSbj
'They are present (here/there).' (Boui)

Text 7 begins with (316), where è combines with imperfective 'come'. The speaker explained that addition of è implies a brief delay. This is the only example in the data of an existential proclitic combining with a non-stative predicate.

| tònì | túmbúlá: | nì | è | yógó-bò |
| :--- | :--- | :--- | :--- | :--- |
| talk(n) | begin.Purp | 1 Pl | Exist | come-Ipfv |
| 'We will come to begin talking.' (T7 @ $00: 00)$ |  |  |  |  |

For the optional use of existential proclitics before derived stative verbs, see (254) in §10.4.

### 11.2.2.2 'Be (somewhere)' (bò ~ wò, bíyó)

The stative quasi-verb used in the locational sense 'be (in a place), be present' and by abstraction 'exist', is bò after a locational phrase ('here', 'in Bamako', etc.). For Boui dialect it takes the form wò when preceded by existential é or yá as the default locational, or after mbó-rò 'like this/that' (§4.4.2.3). Either a locational phrase or existential é or yá is required in unfocalized positive main clauses. In the 3Pl, the tone is bell-shaped in bà-â: but low in é w-à: and yá w-à:. In other words, the quasi-verb is slightly reduced phonologically when combined with the existential particle.

There is the usual pronominal-subject paradigm, as with regular inflected verbs. 'Be' has no aspectual marking (perfective, imperfective, etc.), though it does have a past form (see below). There is no imperative or hortative.

The paradigms are in (320). Forms are from Boui.
(320) Nonpast 'be (in a place)' or 'exist'

| category | after locational | with existential |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | bò-y | é wó-ỳ |
| 1 Pl | nì bò-Ø | nì é wò-Ø |
| 2 Sg | bò-w | é wó-ẁ |
| 2 Pl | è bò-Ø | è é wò-Ø |
|  |  |  |
| 3 Sg | bò-Ø | é wò-Ø |
| 3 Pl | bà-â: | é w-à: |

Examples of bò (~ wò) are in (321a-b). A variant bíyó 'be present' without the existential morpheme or an overt locational expression occurs three times in (321c), most likely as a defocalized verb after a focalized constituent (the subject). This bíyó 'be (present)' is distinct from bí-yó 'remain' but both may be related to bò.
$\left.\begin{array}{lll}\text { a. } & {[\text { bòmòk'́ }} & \text { yà }\end{array}\right] \quad$ bà-â:
b. é wó-m̀ mè
Exist be-2SgSbj if
'if you-Sg are present' (< wó-ẁ) (Boui)
c. nèjì-yò-gè bíyó-b-à:, tà:rí-gè bíyó-b-à:, cousin- Pl be-Ipfv-3P1Sbj, respect.relation-Pl be-Ipfv-3P1Sbj, hêy, sàgò-gè bíyó-b-à: hey, griot-Pl be-Ipfv-3PlSbj
'Collateral kin (uncle, aunt, cousin, nephew, niece) will be there. People in (interethnic) respect relationships (to you) will be there. Hey, griots will be there.' (T7 @ 05:09)

In the presence of a preceding focalized constituent, bò becomes ${ }^{\mathrm{LH}}$ bǒ: with the regular $\{\mathrm{LH}\}$ defocused overlay (realized as 1 Sg bǒ-y, 3 Sg bǒ:-Ø, etc.). é wò has its usual form before mè 'if' (é wò-Ø mè 'if he/she is here').

There is no transparent morphological connection between (stative) bò and inchoative counterparts bíló 'become’ (§11.2.4.2) or wó: ‘become’ (§11.2.4.3).

For past time 'was/were', bò ~ wò is replaced by bè: ~ wè: . The variant with w occurs after existential é, which harmonizes in ATR value to produce $\varepsilon$ w wè: (§10.6.1.1).

For durative background clauses with bí:-nì 'keep being (thus)', see §15.2.1.6.

### 11.2.2.3 Negative órâ 'is not (in a place)'

bò ~ wò 'be (in a place), be present' is negated by órâ 'not be (present), be absent'. órâ does not co-occur with the existential particle, but it may occur by itself (i.e., an overt locational expression is optional). The paradigm is (322). órâ is also part of the progressive negative construction (§10.2.3.5). In the distant past órâ may have been *(b/w)ó- 'be' plus imperfective negative *-râ.
(322) 'is/are absent' or 'does/do not exist'

| category | form (with or without locational) |
| :--- | :--- |
|  |  |
| 1 Sg | órá-ỳn |
| 1 Pl | nì órâ-Ø |
| 2 Sg | órá-ẁ |
| 2 Pl | ò órâ-Ø |
|  |  |
| 3 Sg | órâ-Ø |
| 3 Pl | ór-â: |

Examples are in (323).
(323)
a. (móyà) órá-y ${ }^{n}$
(here) not.be-1SgSbj
'I am not present (here).' (Boui)
b. té: órá-Ø lè
tea not.be-3SgSbj $\quad \mathrm{Q}$
'Is there is no tea?' (from /órâ lè/) (Boui)

Past bè: ~ wè: 'was (somewhere)' is similarly negated by órè 'was not (present), was absent' or 'did not exist', see §10.6.1.2.

### 11.2.3 Other stative locational and positional quasi-verbs

### 11.2.3.1 Other stative locational quasi-verbs ('be in/on')

There is no stative verb in the general sense 'be [in X]'. There are stative verbs for 'be [on X]', namely dángà 'be on (wall, vertical planar surface)' and sángà 'be (set) up on (object or horizontal surface). See (309b-c) in §11.1.3.2 for examples.

### 11.2.4 'Become', 'happen', and 'remain' predicates

For deadjectival inchoative verbs ('become red/long'), many of which include derivational suffixes, see $\S 9.6$. In the following subsections the focus is on bipartite 'become X ' and 'remain X ' predicates with distinct verbs or quasi-verbs.

### 11.2.4.1 'Remain’ (ánjó, bí-yó)

ánjó is in both dialects (324). bí-yó is at least in Ningo (T7 @ 01:18 and @ 09:06).

| jíwâ: | ${ }^{\text {LHànjò̀-wò-ýn }}$ |
| :--- | :--- |
| house.Loc | remain-Ipfv-1SgSbj |
| 'I will stay at home [focus].' (Boui) |  |

bí-yó is related to bò ~ wò 'be', parallel to sí-yó 'keep (having)' from sâ: 'have'. See also bí:-nì and sí:-nì in durative constructions (§15.2.1.6), and bíló 'become' (with adverbials) just below.

### 11.2.4.2 'Become, be transformed into' (bíló)

'Become NP' as in 'become president', 'become (=be transformed into) a tree', etc., is bíló. This verb can also make adjectives and expressive adverbials (§11.1.3.1) into inchoative predicates. It often combines with a preceding predicate in a sense like '(it) happen (that ...), (it) come to pass (that ...)', see T7 @ 01:03, 03:41, 04:52, 05:51, $05: 54$, etc. It may be related to bò $\sim$ wò 'be' but the morphology is obscure.

### 11.2.4.3 'Be' (wó:) related to 'be (somewhere)' quasi-verbs

A stative verb wó: is attested in the superlative predicate construction (§12.1.5). The negative form wò:-nà shows that it is a stative verb. wó: (perfective wè:) is also attested in the sense 'be complete, transpire' (T7 @ 09:12).
wó: is likely related to the etymological word-family including bò 'be (somewhere)' and imperfective suffix -wò- ~ -bò-.

### 11.2.5 Mental and emotional statives

### 11.2.5.1 ‘Know’ (yèy)

This is normally a stative verb. It means 'know (a fact)' or 'know, be acquainted with (a person)'. The object takes accusative marking: mì-gí yèy- $\varnothing$ 'he/she knows me'. The paradigms, positive and negative, are in (325). Data are mostly from Boui.

| (325) category | 'know' | 'not know' |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | yé-y' $(</$ yéy-ỳn$/)$ | yé-ní-ỳn |
| 1 Pl | nì yèy | nì yènì |
| 2 Sg | yé-ẁ $(</$ yéy-ẁ/) | yé-nú-ẁ |
| 2 Pl | è yèy | è yè-nì |
|  |  |  |
| 3 Sg | yèy-Ø | yè-nì-Ø |
| 3 Pl | yèy-â: (Boui), yèyy-â: (Ningo) | yè-n-â: |

L-tone of the 3Sg is confirmed by the polar interrogative form yèy-Ø lé 'does he/she know?' (negative yè-nì-Ø lé).

For past-time yèy-yé 'knew' and yè-né ‘did not know', see §10.6.1.3. yéy (at least for Ningo) occurs without a suffix after focalized subjects and in subject relatives. For ${ }^{\text {LH }}$ yěy-yà ~ ${ }^{\text {LH }}$ yèy-yá after focalized nonsubject constituents see $\S 13.1 .1 .6$, and for these forms in nonsubject relatives see §14.4.2.

Statives are unspecified for aspect, but 'know' is attested as imperfective yéyyé-bò (with stem-extension yé) in the context of acquisition of knowledge (326). Likewise, 'know' is negated either by perfective negative -ni (325) or stative negative -nà, which appears in relative form ${ }^{\text {LH }}$ yè-ná in (326).

```
(326) [è̀ LHyè-ná] è yéyyé-bò
    [2P1Sbj know-StatNegRel] 2PlSbj know-Ipfv
    'You-Pl will know (=learn) what you-Pl don’t know (now).' (T7 @ 21:06)
```


### 11.2.5.2 'Want, like’ (cèy-~kèy-)

This defective stative quasi-verb, cèy (Boui) or kèy (Ningo), takes stative negative allomorph là. The verb is not used with existential è (§11.2.2.1). A likely cognate is Najamba kíyò (negative kélà). Data in (327) are from Boui.

| (327) | category | 'want' |
| :--- | :--- | :--- |
|  |  | 'not want' |
| 1 Sg | cé-ỳ $(</$ céy-ỳn$/)$ | cé-lá-ỳn |
| 1 Pl | nì cèy | nì cè-là |
| 2 Sg | cé-ẁ $(</$ céy-w̄/) | célá-ẁ |
| 2 Pl | è cèy | è cè-là |
|  |  |  |
| 3 Sg | cèy-Ø | cè-là-Ø |
| 3 Pl | cèy-â: | cè-l-â: |

The polar interrogative 3Sg is cèy-Ø lé. Past-time forms are in (268) in §10.6.1.3. kéy (Ningo) occurs without a suffix after focalized subjects and in subject relatives. For ${ }^{\text {LH }}$ kěy-yà $\sim{ }^{\text {LH }}$ kèy-yá after focalized nonsubject constituents see §13.1.1.6, and for these forms in nonsubject relatives see §14.4.2.

Dialectally, Ningo kèy 'want' has the same paradigm structure as Boui cèy. However, Ningo also has an alternative active (nonstative) form ké:-yó ( 1 Sg perfective ké:-yé-ỳ 'I wanted', past-time form ké:-yé-ỳn ‘I had wanted').

### 11.2.5.3 'Resemble' (mòlá)

' $(\mathrm{X})$ resembles Y ' is expressed as [ Y yà] mòlá, with instrumental-comitative postposition yà taking scope over the comparandum. In the positive, mòlá keeps its rising tone melody throughout the paradigm. The negative form is mòlà-nà 'does not resemble', with the usual tone alternations for stative negatives. Data are from Boui.
(328) category 'resemble' 'not resemble'

| 1 Sg | mòlá-y $^{\text {n }}$ | mólá-ná-ỳ ${ }^{\text {n }}$ |
| :--- | :--- | :--- |
| 1 Pl | nì mòlá | nì mòlá-ná |
| 2 Sg | mólà | mólá-ná-ẁ |
| 2 Pl | è mòlá | è mòlà-nà |
| 3 Sg | mòlá-Ø | mòlà-nà-Ø |
| 3 Pl | mòl-â: | mòlà-n-â: |

### 11.3 Quotative verb

### 11.3.1 'Say’ (perfective gùnغ̀-)

A partial paradigm of this verb is (329). For indicative categories, tones shown here are based on the zero 3 Sg subject form. Data are from Boui.
a. E/I-stem
gùnè- perfective
b. A/O-stem
gúná-nì- perfective negative gùnà imperative
c. O-stem
gúm-bò- imperfective
gún-dâ- imperfective negative
gúm-mâ- capacitative
d. I-stem
gùnù ~ gùnì $\quad$ 3rd person hortative
The E/I-stem points to the final-nonhigh-vowel class of verbs. However, but implied /gúnú/ and the syncope in the O-stem point to the final-high-vowel class.

The listener (recipient) is expressed as a direct object, with accusative gì. 'Say' can be a simple transitive, with summarizing NP 'that' or 'what?'
(330) ndégé ò-gí nà ${ }^{\text {LH gùné }}$
what? 2 Sg -Acc 3 SgSbj say.Pfv
'What did he/she say to you-Sg?' (Boui)
For quotative clause complements, see $\S 17.1$.

### 11.4 Adjectival predicates

Adjectival predicates described here denote states, rather than change-of-state processes. For the latter, see the inchoative verbs in §9.6.

### 11.4.1 Positive adjectival predicates

Adjectives (§4.5) can be organized into groups based on their form as predicates. The majority of adjectival predicates involve bǒ: 'be' following a form of the adjective differing from that used as a modifier within a NP. Some other adjectives take the $=\grave{\mathrm{w}}^{\mathrm{n}}$ 'it is' clitic to form predicates, and still others have bare predicative forms without bǒ: or $=\grave{\mathrm{w}}^{\mathrm{n}}$.

For 'dry' and 'old' I was not able to elicit a static predicate. A speaker produced only perfective inchoative verbs kùnjè- 'has gotten old' and mànì-yè- 'has dried'.

### 11.4.1.1 Adjectival predicates with bǒ: 'be'

Adjectives that take bǒ: can be divided into two main groups, one where the adjective itself ends in e and one where it ends in $\mathrm{m}(\mathrm{u})$. bǒ: is inflected with the usual pronominal-subject marks ( 1 Sg bǒ-y, 1 Pl nì bǒ:, etc.).

The adjectives in (331) all end in e before bǒ:. In (331a), the final vowel of the modifying adjective mutates to e . In (331b), the adjective is extended by an augment -ndé which includes the final e . This is also the case with the diminutive adjectives in (331c), which drop diminutive suffix -wè in the predicative construction. Cv́ní-ndé syncopates to Cv́n-dé ('be fat', 'be small') (331b-c). ménjí-wè 'thin' simplifies nj to n in predicative méní-ndé bǒ: (331c). Data are from Boui.
(331) Adjective ends in e before bǒ:
modifying predicative gloss
a. né:ngó: né:ygé bǒ: 'be heavy'
ní:njí ní:njé bǒ: 'be sweet'
má:gá má:gé bǒ: 'be difficult'
búrádá búrádé bǒ: 'be smooth'
yágárá yágáré bǒ: 'be coarse'
gálágá gálágé bǒ: 'be bitter'
kújájá kújájé bǒ: 'be rotten'
b. yálá yálá-ndé bǒ: 'be long'
báy báy-ndé bǒ: 'be big (e.g. house)'
bíní bín-dé bǒ: 'be fat'
nímí nímí-ndé bǒ: 'be deep'
c. déní-wè déní-ndé bǒ: 'be short'
ménjí-wè méní-ndé bǒ: 'be thin, slender'
wéní-wè wén-dé bǒ: 'be small'

In (332), the adjective ends in $m(u)$ before bǒ: . In (332a), the modifying form of the adjective already ends in $m$ or mú. In (332b), $-\mathrm{m}(\mathrm{u})$ is added to the modifying form of the adjective before bǒ: . The combination of $-\mathrm{m}(\mathrm{u})$ plus bǒ: is reminiscent of the progressive verb form with -m bǒ: (§10.2.2.3). Data are from Boui.
(332) Adjective ends in $m(u)$ before bǒ:
modifying predicative gloss
a. témúm témúm bǒ: 'be cold'
ámámú ámám bǒ: 'be sour'
b. yágá yàgà-m bǒ: 'be pretty'
númá númá-m bǒ: 'be hot' (variant núm bǒ: )
kùnú $\rightarrow \quad$ kùnú-m bǒ: $\quad$ 'be a lot, be much/many' (cf. §8.4.2)
The form of the adjective before bǒ: is invariant. In particular, it does not allow plural suffix -gè.

```
(333) né:\gé ni bǒ:
heavy 1PlSbj be
'We are heavy.' (Boui)
```

For 'be far away', the adjective (wágá) seemingly drops tones and has its final vowel prolonged intonationally (334). The 'be' quasi-verb takes the form bó. This is really an adverbial rather than adjectival predicate, since wàgà $\rightarrow$ can function as a nonpredicative adverb (e.g. in 'they ran far away')
wàgà $\rightarrow$ bó 'be far away' (Boui)
The predicative forms with bǒ: appear not to be used in focalized clauses. Focalization forces the adjective back into its simple modifying form (335).

```
a. né:ggé / bín-dé / déní-ndé / yàgà-m bǒ: heavy / fat / short / pretty be 'be heavy/fat/short/pretty' (Boui)
b. à: né: yg ó: / bíní / déní / yágá
who? heavy / fat / short / pretty
'Who is heavy/fat/short/pretty?' (Boui)
```


### 11.4.1.2 Adjectival predicates with $=\grave{\mathrm{w}}^{\mathrm{n}}$ 'it is'

For the adjectives in (336), the only attested predicates add the 'it is' clitic $=\grave{\mathrm{w}}^{\mathrm{n}}$ to the otherwise unaltered modifying adjective. Elsewhere $=\grave{\mathrm{w}}^{\mathrm{n}}$ is added mainly to NPs, suggesting that these adjectives may be more noun-like than others. Data are from Boui.
(336) Adjective followed by $=\grave{\mathrm{w}}^{\mathrm{n}}$

| modifying | predicative | gloss |
| :---: | :---: | :---: |
| yángá | yággá $=$ wi $^{\text {n }}$ | 'be lean (emaciated)' |
| yógóró | yógóró $=\grave{\mathrm{w}}^{\mathrm{n}}$ | 'be kaput' |
| dúmbú | dúmbú $=\grave{\mathrm{w}}^{\mathrm{n}}$ | 'be blunt (blade)' |
| búní | búní $=\grave{\mathrm{w}}^{\mathrm{n}}$ | 'be red' |
| jémé | j ¢́mé $=\mathrm{w}^{\text {n }}$ | 'be black' |
| púlé | púl $\dot{\varepsilon}=\grave{\mathrm{w}}^{\mathrm{n}}$ | 'be white' |
| ع́w ${ }^{\text {n }}$ | $\hat{\varepsilon}\left(\mathrm{w}^{\mathrm{n}}\right)=\grave{\mathrm{w}}^{\mathrm{n}}$ |  |

These predicates, unlike those with adjectives ending in e, allow plural suffix -gè. As with other 'it is' predicates, a pronominal subject can be expressed by an independent pronoun.
a. [ámbá-gè
rì ] yángá-gé $=\grave{w}^{\text {n }}$
[sheep-Pl Def] lean- $\mathrm{Pl}=\mathrm{it}$.is
'The sheep are lean.' (Boui)
b. mì yángá $=\grave{\mathrm{w}}^{\mathrm{n}}$

1Sg lean=it.is
'I am lean (emaciated).' (Boui)

### 11.4.1.3 Adjectival predicates resembling stative verbs

A few adjectives are used as predicates with no segmental changes from the modifying forms. However, while modifying adjectives are H-toned (except for diminutive suffix -wè), predicative forms are L-toned (338). Data are from Boui.
(338) Bare adjectival predicates
modifying predicative gloss
a. málání màlànì-Ø 'be soft'
b. mó: mò:-Ø 'be good'
[for mò:-w ${ }^{\mathrm{n}}$ bó in 'it's good to eat' see $\S 6.3 .3 .3$ ]

These are really verbs similar to statives, and take pronominal-subject inflection. The data in (338) are therefore 3 Sg subject forms with zero suffix. The tones of the stem and of 1 Pl and 2 Pl proclitics differ from those of regularly derived stative verbs (§10.4.1.1). Paradigms are in (339). For the negation of mò: with stative negative -nà- (§10.4.2), see §11.4.2 below.
(339) Stative-like verbs

| category | 'be good' | 'be soft' |
| :--- | :--- | :--- |
|  |  |  |
| 1 Sg | mó-ỳ | málání-ỳ |
| 1 Pl | ní mô: | ní málánì |
| 2 Sg | mó-w | málánú-ẁ |
| 2 Pl | é mô: | é málánì |
|  |  |  |
| 3 Sg | mò:-Ø | màlànì-Ø |
| 3 Pl | mòy-â: | málàn-î: |

### 11.4.2 Negative adjectival predicates

For adjectives whose positive predicates end in bǒ:, one option for negation is to just replace bǒ: 'be' by órâ 'not be (present)', preserving any quirky features of the adjectival form. Data in (340) are from Boui.
(340)
a. bíní 'fat'
b. bín-dé bǒ: 'be fat'
c. bín-dé órâ 'not be fat' cf. (343a), (345d)

However, in addition to this auxiliary-like construction, adjectives also have morphologically simpler negative predicative forms involving a negative morpheme of the shape -Ca-. One is initially tempted to treat them all as variants of a single morphological pattern, but it turns out that there are structural differences beyond suffix allomorphy.

In (341) the form shown (3Sg subject) has H-toned stem plus -râ- ~ -dâ-. Data are from Boui.
(341) Negative -râ-~ -dâ-
modifying negative predicate gloss
a. -râ- after $\{\mathrm{H}\}$-toned stem, cf. imperfective negative stem-final o né:ygó: né:ngó-râ- 'not be heavy’ gálágá gálágó-râ- 'not be bitter' kújájá kújájó-râ- 'not be rotten' númá númó-râ- 'not be hot'
stem-final u
témúm témúmú-râ- 'not be cold'
ámámú ámámú-râ- 'not be sour'
b. -dâ- variant
yágárá yágár-dâ- ~ yágád-dâ- 'not be coarse'
búrádá búrád-dâ- 'not be smooth'
This looks like the imperfect negative suffix -râ- ~-dâ-, and the identity is confirmed by tone patterns of the pronominal-subject paradigm. Note especially the $\{\mathrm{HL}\}$-toned stem in the 3 Pl (342), from Boui.
(342) category IpfvNeg 'not be heavy' 'not be cold' 'not be smooth'

| 1Sg | $\{\mathrm{H}\}$-rà- ${ }^{\text {n }}$ | né: y gó-rà- ${ }^{\text {n }}$ | - |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1Pl | nì $\{\mathrm{L}\}$-rá | nì nè: y gò-rá | - |  |  |
| 2Sg | $\{\mathrm{H}\}$-rà-w | né:ngó-rà-w | - |  |  |
| 2PL | è $\{\mathrm{L}\}$-rá | è nè:ygò-rá | - |  |  |
| 3 Sg | $\{\mathrm{H}\}$-râ-Ø | né:ygó-râ- |  |  | úrád-dâ- |
| 3 Pl | $\{\mathrm{HL}\}$-r-â: | né:ygò-r-â: |  |  | úrâd-d-â: |

Another set of adjectives has negative predicates with -nâ-~ -nà-. There are two tonal types, respectively Cv́Cv́-nâ- and Cv̀Cv̀-nà- in the 3 Sg . The latter looks like the negative of derived stative verbs (§10.4.2).
(343) Negative -nâ-~ -nà-
modifying negative predicate gloss

| a. -nâ- after H-toned stem in 3 Sg |  |  |  |
| :---: | :---: | :---: | :---: |
| báy | báy-nâ | 'not be big' |  |
| bíní | bíní-nâ | 'not be fat' | cf. (340c), (345d) |
| below |  |  |  |
| nímí | nímí-nâ | 'not be deep' |  |
| ní:jjí | ní:Mí-nâ | 'not be sweet' |  |

b. -nà- after L-toned stem in 3 Sg
yálá yàlà-nà 'not be long'
yágá yàgà-nà 'not be pretty'
má:gá mà:gà-nà 'not be difficult, be easy'
mó: mò:-nà 'not be good, be bad'
wágá wàgà-nà 'not be far away'
For the $\mathrm{nj} \sim \mathrm{n}$ alternation in 'not be sweet', see §3.4.3.4. Paradigms from Boui are in (344). The type with L-toned third-person forms, e.g. 'not be good' in (344), indeed does have the same paradigm as negative forms of derived statives, e.g. 'not be standing' (§10.4.2). The H-toned type 'not be big' has no exact counterpart elsewhere.
(344) category 'not be big' 'not be good'

H-toned 3rd L-toned 3rd

| 1Sg | báy-ná-ỳ ${ }^{\text {n }}$ | mó:-ná-y ${ }^{\text {n }}$ |
| :---: | :---: | :---: |
| 1Pl | nì bày-ná | ní mò:-nà |
| 2Sg | báy-ná-ẁ | mó:-ná-ẁ |
| 2 Pl | è bày-ná | é mò:-nà |
| 3Sg | báy-nâ-Ø | mò:-nà-Ø |
| 3 Pl | báỳ-n-â: | mò:-n-â: |

The last negative adjectival predicate type is with = là. This superficially resembles the other endings (-râ- ~-dâ-, -nâ- ~ -nà-), but it is structurally different. It is in fact the 'it is not' clitic that is used in negative predicates of NPs ('it is not a X'), see
§11.2.1.2. This construction is standard for the three basic color terms (345a), which take L-toned form before H -toned = lá (345a). The construction is also standard, without tonal change, for diminutive adjectives with suffix -wè (345b) and for a few other adjectives (345c). It is an option for 'fat' (345d). Data are from Boui.
(345) modifying negative predicate gloss

| a. búní jémé | $\begin{aligned} & \text { bùnì }=\text { lá } \\ & \text { j } \grave{m} \grave{c}=\text { lá } \end{aligned}$ | 'not be red', cf. bùnì 'white person 'not be black' |
| :---: | :---: | :---: |
| púlé | pùlı̀ = lá | 'not be white' |
| b. déní-wè | déní-wè $=$ là | 'not be short' |
| méjjí-wè | ménjí-wè = là | 'not be thin' |
| wéní-wè | wéní-wè = là | 'not be small' |
| c. yággá | yáygá = là | 'not be lean' |
| yógóró | yógóró= là | 'not be kaput' |
| dúmbú | dúmbú = là | 'not be blunt (blade)' |
| d. bíní | bín(1) $=$ là | 'not be fat' |

That this $=$ là is the 'it is not' clitic rather than a verb-like negative suffix is shown by the fact that it cannot be conjugated with pronominal-subject suffixes. For example, 'I am not red' is not \#bùnì-lá-ỳn but rather mì bùnì = lá. For plural subjects, plural suffix -gè is required: bùnì-gè = lá 'they are not red', nì bùnì-gè = lá 'we are not red'.
bíní 'fat, big' is attested in this construction (345d) as well as with -nà (343a) and with órâ (340c). Further study might show that other adjectives also shift among different negative predicate constructions.

### 11.5 Possessive predicates

### 11.5.1 'X have $Y$ ' (sâ:)

Existential proclitic è or yà is required in the positive 'have' construction in unfocalized main clauses. The proclitic is disallowed under negation. The paradigms of 'have' and 'have not' are in (346). Data are from Boui.
'have' 'have not'

| 1 Sg | è sá-y ${ }^{\text {n }}$ | sá:-ná-y ${ }^{\text {n }}$ |
| :--- | :--- | :--- |
| 1 Pl | nì è sâ: | nì sà:-nà |
| 2 Sg | è sá-w | sá:-ná-ẁ |
| 2 Pl | è è sâ: | è sà̀:-nà |
|  |  |  |
| 3 Sg | è sâ:-Ø | sà:-nà |
| 3 Pl | è sà-â: | sà:-n-â: |

For past-time counterparts with $\varepsilon$ replacing a, see $\S 10.6 .1 .3$. There is a nonstative variant sí-yó 'keep (having), maintain' with durative sí--nì 'keep having' (§15.2.1.6).

The transitivity level of 'have' predicates is low. Accusative marking on the object does not occur in the data, and a speaker rejected versions I proposed that included accusative marking.

### 11.5.2 ' Y belong to X ' predicates

' Y belongs to X ' or ' Y is X 's' is expressed as ' Y is X 's thing', with a variant of wè: 'thing' (§6.2.1.2) plus the 'it is' clitic $=\grave{\mathrm{w}}^{\mathrm{n}}$. There is no animacy distinction (e.g. 'thing' versus 'critter'.
a. [jíwá/í:njé $\left.{ }^{\text {L }} \mathrm{mbò}\right] \quad \mathrm{m} \check{c}:=\grave{\mathrm{w}}^{\mathrm{n}}$ [house / dog Dem] 1SgPoss=it.is 'That house/dog belongs to me (is mine).' (Boui)


## 12 Comparatives

### 12.1 Asymmetrical comparatives

bà $\rightarrow \sim$ bǎy 'than' shows up in several asymmetrical comparative constructions. It follows a NP (of any animacy category) with accusative gì.
12.1.1 Predicative adjective with bà $\rightarrow$ ~ bǎy 'than' and comparandum

In this construction, a reduced adjectival predicate (e.g., 'be heavy', 'be short') is understood to be comparative because the 'than' comparandum precedes it. The comparandum ends with bà $\rightarrow$ (Boui) or bǎy (Ningo). Most data here are from Boui.
(348) presents an adjectival predicate with e-final adjective and a conjugated form of bǒ: 'be' (§11.4.1.1). In the comparative (348b), this is replaced by an imperfective inchoative verb, literally 'be becoming heavy'. Negative counterparts are based on imperfective negative -râ- (348c). Likewise, (348d) 'short' has a special augment -ndé, again ending in e, before bǒ: (§11.4.1.1). This augment and bǒ: itself are dropped in the comparative, which is based on a stative verb of the same wordfamily ( $348 \mathrm{e}-\mathrm{f}$ ).
(348)
a. né:ygé bò-ýn
heavy be-1SgSbj
'I am heavy.' (Boui)
b. [ò-gí bà $\rightarrow$ ] né:ygó-wò- $\mathrm{y}^{\mathrm{n}}$
[2Sg-Acc than] become.heavy-Ipfv-1SgSbj
'I'm heavier than you-Sg (are).' (Boui)
c. [ò-gí bà $\rightarrow$ ] né:ygó-râ-Ø
[2Sg-Acc than] become.heavy-IpfvNeg-3SgSbj
'He/She isn't heavier than you-Sg (are).' (Boui)
$\begin{array}{ll}\text { d. sàydú déní-ndé bǒ:- } \varnothing \\ \text { Seydou short } & \text { be- } 3 \text { SgSbj } \\ \text { 'Seydou is short.' (Boui) }\end{array}$
e. [à:màdú gì bà $\rightarrow$ ] déyìy-â: / déní-ỳ ${ }^{\text {n }}$ [Amadou Acc than] become.short-3PlSbj/-1SgSbj 'They are / I am shorter than Amadou.' (Boui)
f. [à:màdú gì bà $\rightarrow$ ] déní-ná-ỳ ${ }^{n}$ [Amadou Acc than] become.short-StatNeg-1SgSbj 'I am not shorter than Amadou.' (Boui)
g. sàydú [à:màdú gì bà $\rightarrow$ ]] Lyàlà-Ø

Seydou [Amadou Acc than] be.long-3 SgSbj
'Seydou is taller than Amadou.' (Boui)
h. [té:nì nì-wé] [ह̀-wé gì bà $\rightarrow$ ] nímí-Ø
[well(n) 1PlPoss] [2PlPoss Acc than] be.deep-3SgSbj
'Our well is deeper than yours-Pl.' (Boui)

Past-time examples with telltale final $\varepsilon$ on the verbs are in (349).
a. sàydú [à:màdú gì bà $\rightarrow$ ] dénìyè-Ø

Seydou [Amadou Acc than] become.short.Past-3SgSbj
'Seydou was shorter than Amadou.' (Boui)
b. [à:màdú gì bà $\rightarrow$ ] dénì-nè-Ø
[Amadou Acc than] become.short-PfvNeg-3SgSbj
'He was not shorter than Amadou.' (Boui)
c. sàydú [à:màdú gì bà $\rightarrow$ ] yàlé-Ø

Seydou [Amadou Acc than] be.long.Past-3 SgSbj
'Seydou was taller than Amadou.' (Boui)
d. [té:nì nì-wé] [è-wé gì bà $\rightarrow$ ] nímì-yè-Ø [well(n) 1PlPoss] [2PlPoss Acc than] be.deep-Past-3SgSbj ‘Our well was deeper than yours-Pl.' (Boui)

Ningo bǎy is illustrated in (350).
(350)
a. [mì-gí bǎy] mò:-Ø
[1Sg-Acc than] be.good-3SgSbj
'He/She is better than I (am).'
b. [nà-gí bày] mó-ỳ ${ }^{\text {n }}$ [3Sg-Acc than] be.good-1 SgSbj 'I am better than he/she (is).'

### 12.1.2 Verbal predicate plus bà $\rightarrow$ ~bǎy 'than'

The same comparandum with bà $\rightarrow$ ~ bǎy after accusative object NP can occur when a verb is the predicate, whether the verb denotes an adjective-like quality ('become old') or an activity.
a. [ò-gí
bà $\rightarrow$ ] kúnjé -y ${ }^{\text {n }}$
[2Sg-Acc than] get.old.Pfv-1SgSbj
'I'm older than you-Sg (are).' (lit. "I have aged than you" (Boui)
b. [ò-gí bà $\rightarrow$ ] kúb-bò-y ${ }^{n}$
[2Sg-Acc than] do.farming-Ipfv-1SgSbj
'I do more farming than you-Sg (do)' (kúwó-) (Boui)
c. [mì-gí bà $\rightarrow$ ] íré-ẁ
[1Sg-Acc than] get.Pfv- 2 SgSbj
'You got more than I (did).' (Boui)

### 12.1.3 'Surpass' (tángó)

tángó 'pass by, go past' (or 'cross') can be used as an inchoative asymmetrical comparative (352).
(352)

| gó: | $\left[\begin{array}{ll}\text { mì-gí } & \text { bà } \rightarrow]\end{array}\right.$ | yálé-ẁ, |  |
| :--- | :---: | :---: | :--- |
| formerly | [1Sg-Acc | than] | be.long.Past- $2 S g S b j$ |
| mè: | ájá | ò-gì | táygé-ỳ |
| but | now | 2Sg-Acc | pass.Pfv-1SgSbj |

'You-Sg used to be taller than I (was), but now I have passed you-Sg.' (Boui)
12.1.4 'Be better' (mò:, írò), be more' (báy)
' X be better than Y ' is expressed with adjectival predicate mò: 'be good' (§11.4.1.3) and the comparandum in accusative form, without bà $\rightarrow$ ~ bǎy 'than'.
(353) [máygòró rì] [lémbúrú gì] mò:-Ø
[mango Def] [lemon Acc] be.good-3SgSbj
'The mango is better than lemons.' (Boui)
' X be bigger/more than Y ' is expressed with báy '(be) big', reduced from the full adjectival predicate báy-ndé bǒ: 'be big' (§11.4.1.1), plus an accusative comparandum without bà $\rightarrow$ (354). In (354b).

$$
\left.\left.\begin{array}{lccc}
\text { mótí } & {[\text { kárí }} & \text { gì }
\end{array}\right] \begin{array}{l}
\text { báy-Ø / báy-yè-Ø }  \tag{354}\\
\text { Mopti }
\end{array} \begin{array}{l}
\text { Konna }
\end{array} \mathrm{Acc}\right] \quad \text { be.big-3SgSbj / be.big-Past-3SgSbj }
$$

báy is the likely source of bà $\rightarrow$ (Boui) or bǎy (Ningo) 'than' when followed by an adjectival or verbal predicate (§12.1.1-2).

For the Ningo speaker, a conjugatable stative predicate specifically meaning 'be better' is írò, negative író-ná- 'not be better'. The comparandum is the direct object.

```
nà-gí író-ỳn}/\mathrm{ / író-ná-y}\mp@subsup{}{}{n
3SgSbj-Acc be.better-1 SgSbj / be.better-StatNeg-1SgSbj
'I am / am not better than him/her.' (Ningo)
```

írò can also be used, presumably participialized, in locative írò gì 'in better (health),' see (298c) in §10.7.3.3.

### 12.1.5 'Best' ([X jìrò] wó:)

A construction expressing the superlative is exemplified in (356a). It ends a verb wó: (§11.2.4.3) that is obscurely related to bò 'be' and its relatives. ${ }^{\mathrm{LH}}{ }_{j} \mathrm{i}$ ró with $\{\mathrm{LH}\}$ possessum overlay surfaces without change in the negative (and therefore focalization-free) counterpart (356b). The all-L-toned jirò in (356a) reflects tone sandhi. The phrasing in (356a) is literally "he [focus] is the front (=foremost) of singers."

> a. nà:=wó [nwè: ${ }^{\text {L-nwí-gé }} \quad{ }^{L H} j$ jì̀̀ $]$ wó:
> $3 \mathrm{Sg}=\mathrm{it}$.is [song-sing.Agent-Pl front] be
> 'He [focus] is the best of the singers.' (Boui)
$\begin{array}{llll}\text { b. nà } & \text { [nwè:L-nwí-gé } & \left.\text { LH }_{\text {jìró }}\right] & \begin{array}{l}\text { wò:-nà- } \varnothing \\ \text { 3SgSbj }\end{array} \\ \text { [song-sing.Agent-Pl } & \text { front] } & \text { be-StatNeg } \\ & \text { 'He is not the best of the singers.' (Boui) } & \end{array}$

### 12.2 Symmetrical comparatives

### 12.2.1 'Equal; be as good as' (dágó)

The verb dágó occurs elsewhere in the sense 'attach (blade, of daba [hoe] or pickhoe)'. The action in that case involves inserting a pin at the back of the blade into a hole at the end of a long shaft, which is tapped lightly on the ground so that the pin drops in.

The abstract sense in comparatives is ' $\mathrm{X}, \mathrm{Y}$ be equal, reach the same level'.

| yálá-ndé | nì | dàgè- $\varnothing$ |
| :--- | :--- | :--- |
| long-Inch | 1PISbj | be.equal.Pfv |
| 'We are the same height.' (Boui) |  |  |

### 12.2.2 'Same (equal)' (tó:má-ngá = wn $^{\text {n }}$ )

' X is the same (i.e. equal)' is tó:má- $\mathfrak{y}$ gá $=\grave{\mathrm{w}}^{\mathrm{n}}$, literally 'is one' (§4.7.1.1). To express equality of two entities, the plural form is used, literally "(they are) ones" (358). For -ygá- see §4.2.1.
(358) [[mbó yà] [mbó yà]] tó:má-ggá-gé $=$ wn $^{\text {n }}$
[[Dem and] [Dem and]] one-Char-Pl=it.is
'This one and that one are equal (or: the same).' (Boui)

## 12.3 'A fortiori' (sáykò)

The common regional form for 'a fortiori' (as in 'I don't have a dollar, much less a million dollars', local French à plus forte raison or ne parlons pas de) is pronounced sáykò in Tiranige. It is placed directly in front of the second, more unattainable comparandum.

## 13 Focalization and interrogation

### 13.1 Focalization

Focalization of a non-predicative constituent is expressed by one or more of the following four mechanisms of varying reliability (359).
(359) a. A focalized human NP or pronoun is followed by the focus clitic, which is identical to the 'it is' clitic ( = yò, = wò, or variant).
b. If a nonsubject constituent is focalized, the usual pronominal-subject suffixes ( $1 \mathrm{Sg}-\mathrm{y}^{\mathrm{n}}, 2 \mathrm{Sg}-\mathrm{w}$, various 3 Pl suffixes) are replaced under some conditions (especially in interrogative clauses) by preverbal subject pronouns ( 1 Sg mì, 2 Sg ò).
c. The verb get an $\{\mathrm{LH}\}$ tone overlay for nonsubject focus and $\{\mathrm{H}\}$ for subject focus.
d. Existential proclitic è $\sim$ é (otherwise common with statives) is disallowed.

Features (359b,d) and the $\{\mathrm{LH}\}$ part of (359c) are shared by focalization and relativization, suggesting a fairly close association between them. However, the shift from pronominal-subject suffixes to proclitics is less rigorous in focalization than in relativization, and the $\{\mathrm{H}\}$ overlay for subject focus does not occur in relatives in inflectional categories other than imperfective positive.

### 13.1.1 Basic syntax of focalization

13.1.1.1 Which constituents can and cannot be focalized?

NPs, including noun-like adverbs ('yesterday', 'here') and pronouns can be focalized. Numerous examples are given in this chapter.

In a reflexive object construction, of the type 'I cut [my head]' meaning 'I cut myself', the object can be (partially) focalized by use of the $\{\mathrm{LH}\}$ overlay on the verb.

```
(360) [mì kògó] mì [ }\mp@subsup{}{\mathrm{ LHtèlह́}}{
    [1SgPoss head] 1SgSbj cut.Pfv
    'I cut-Past myself.' (Boui)
```

An adverbial phrase such as a locative PP can be focalized in the same way (361).

```
(361) [bòmòkó yà] wàlè kám-bà }\mp@subsup{}{}{\mathrm{ LH}}\mathrm{ cè-ýyn
    [Bamako Loc] work(n) do-VblN want-1SgSbj
    'It's in Bamako (city) [focus] that I want to work.' (Boui)
```

I know of no way to syntactically focalize a verb or VP, other than using a corresponding noun (cognate nominal, verbal noun).

### 13.1.1.2 Preverbal subject pronouns in nonsubject focalizations

Under some conditions, the pronominal subjects that are expressed in ordinary main clauses by suffixes on verbs ( $1 \mathrm{Sg}, 2 \mathrm{Sg}, 3 \mathrm{Pl}$ ) or by zero affix ( 3 Sg ) are expressed in nonsubject focalized clauses by preverbal proclitics. The same proclitic forms are used in nonsubject relatives (§14.3). 1 Pl and 2 Pl subjects are expressed by proclitics in all clauses, whether main or subordinated.

The use of $1 \mathrm{Sg} / 2 \mathrm{Sg} / 3 \mathrm{Pl}$ and 3 Sg subject proclitics is not required in all nonsubject focalizations. In the available data it is associated with WH-interrogatives and with responses to them (362a-b). One could rationalize the connection between focalization and relativization by thinking of e.g. (362a) as containing a headless relative: 'what [is] that which you bought?'

$$
\begin{array}{llll}
\text { a. } & \text { ndégé(-sì) } & \text { ò } & { }^{\text {LHdòné }}  \tag{362}\\
& \text { what? } & \text { 2SgSbj } & \text { buy.Pfv } \\
& \text { 'What did you-Sg buy?' (Boui) }
\end{array}
$$

b. ámbá mì ${ }^{\text {LH dòné }}$
sheep 1 SgSbj buy.Pfv
'It's a sheep [focus] that I bought.' (Boui)

Nonsubject focalizations in noninterrogative contexts sometimes have the regular suffixes. That they are at least partially focalized is shown by the $\{\mathrm{LH}\}$ overlay on the verb.
a. mó-yà ${ }^{\text {LHìigà-ẃ }}$
here stand.Stat-2SgSbj
'It's here [focus] that you-Sg are standing' (Boui)

```
b. mì-gí \({ }^{\text {LH }}\) tèwè-ẃ
1 Sg-Acc hit.Pfv-2SgSbj
'It's me [focus] that you-Sg hit.' (Boui)
```


### 13.1.1.3 No systematic movement of focalized constituent

There is no systematic relinearization of focalized constituents. In particular, a focalized object follows a nonpronominal subject NP as in unfocalized clauses (364a). However, WH-interrogative clauses can topicalize nonfocal constituents, the effect being that the WH-interrogative itself is often directly preverbal. This is most noticeable in subject focalization of transitive clauses (364b). However, the regular SOV order is also possible ( $364 \mathrm{c}-\mathrm{d}$ ).
a. [mó:wélì rì] [à: gí] ${ }^{\text {LH }} \mathrm{b}$ ] ndé [vehicle Def] [who? Acc] bump.Pfv
'Who(m) did the vehicle bump?' (Boui)
(or: 'The vehicle, who(m) did it bump?')
b. [mó:wélì rì] à:= wò ${ }^{H}$ túlé
[vehicle Def] who?=Foc sell.Pfv
'The vehicle, who sold it?' (Boui)
c. à:màdú=yò [mó:wélì rì $] \quad{ }^{H}$ túlé

Amadou=Foc [vehicle Def] sell.Pfv
'It was Amadou [focus] who sold the vehicle.' (Boui)
d. à:=wó è-gì ${ }^{H}$ téwé
who?=Foc 2Pl-Acc hit.Pfv
'Who hit you-Pl?' (Boui)
Similarly, with a nonsubject focalized constituent, the fact that all pronominal subjects (not just 1 Pl and 2 Pl ) are expressed by preverbal pronominal proclitics can make it look as though the focalized constituent has been fronted (365a). In fact, this is the same linear order for 1 Pl and 2 Pl subject clauses without focalization ( 365 b ), so there is no evidence for actual movement of the focalized constituent in (365a).

| [à:màdú | yó] | mì | Wé |
| :---: | :---: | :---: | :---: |
| [A | Foc] | 1 SgSbj | hit.Pfv |
| It was Amadou [focus] that I hit.' (Boui) |  |  |  |

```
b. [à:màdú gì] nì tèwè
[A Acc] 1PlSbj hit.Pfv
'We hit-Past Amadou.' (Boui)
```


### 13.1.1.4 Focus enclitic identical to 'it is' clitic ( $=\grave{\mathrm{w}}^{\mathrm{n}} \sim=$ wò $\sim=$ yò $)$

If a non-verb focalized constituent is human, it can be followed by the focus enclitic, which is the same as the 'it is' clitic used in identificational predicates (§11.2.1.1). Accusative gì is not present on focalized object NPs. There is usually no overt morphological marking of focal status for nonhuman constituents, although in identificational predicates the 'it is' enclitic is routinely added to inanimate as well as animate nouns. Representative forms of focused human constituents are in (366). Pronominal-subject suffixes ( $1 \mathrm{Sg}, 2 \mathrm{Sg}, 3 \mathrm{Pl}$ ) are replaced by the focalized pronouns in (366c).

| gloss | focalized | regular |
| :---: | :---: | :---: |
| a. [name] | à:màdú = yò | à:màdú |
| [name] | à:dàmá = wò | à:dàmá |
| b. 'my child' | mì ${ }^{\text {LH }} \mathrm{bě}=\grave{\mathrm{w}}^{\text {n }}$ | mì ${ }^{\text {LH}} \mathrm{bě}$ |
| c. 1 Sg | $\mathrm{mì}=\mathrm{yó}$ | mì |
| 1P1 | nì $=$ yó | nì |
| 2Sg | ò: = wó | ò |
| 2 Pl | è: = wó | è |
| 3 Sg | nà: = wó | nà |
| 3 Pl | cè: = wó | cè |

13.1.1.5 $\{\mathrm{LH}\}$ or $\{\mathrm{H}\}$ overlay on defocalized verb

In the presence of a focalized nonpredicative, nonsubject constituent (object, adverbial, etc.), a positive (perfective, imperfective, stative) predicate is subject to an $\{\mathbf{L H}\}$ overlay, which effectively defocalizes the predicate. This might be equated with the $\{\mathrm{LH}\}$ overlay in relative-clause verbs, but $\{\mathrm{LH}\}$ occurs in (non-imperfective) subject relatives as well as in nonsubject relatives. This syntactic difference is an important argument against fully equating the focalization and relativization $\{\mathrm{LH}\}$ overlays.

The overlay is realized on the verb or other predicate, whether a pronominal subject is expressed by a preverbal clitic (367a-c) or by a suffix (367d). In
interrogative examples like ( $367 \mathrm{a}-\mathrm{c}$ ), the $\{\mathrm{LH}\}$ overlay may be redundant since interrogative clauses commonly end in an intonational pitch rise.
(367)
a. ndégé(-sì)
ò ${ }^{\text {LH }}$ dòné
what? 2 SgSbj buy.Pfv
'What did you-Sg buy?' (Boui)
b. ndégé(-sì) ò ${ }^{\text {LH }}$ dònà-ní
what? 2 SgSbj buy-PfvNeg
'What didn't you-Sg buy?' (Boui)
c. ndégé ò ${ }^{\mathrm{LH}_{\text {sǎ: }}}$
what? 2 SgSbj have
'What do you-Sg have?' (Boui)
d. mó-yà LHì̀à-ẃ
here stand.Stat-2SgSbj
'It's here [focus] that you-Sg are standing' (Boui)
e. mì-gí ${ }^{\text {LH }}$ tèwè-ẃ

1 Sg -Acc hit.Pfv-2SgSbj
'It's me [focus] that you-Sg hit.' (Boui)
f. mó-yà ${ }^{\text {LH }}$ nòyò-wò- yn $^{n}$
here spend.night-Ipfv-1SgSbj
'It's here [focus] that I will spend the night.' (Boui)
g. mó-yà ${ }^{\text {LH}}$ nàyò-w-â:
here spend.night-Ipfv-3PlSbj
'It's here [focus] that they will spend the night.' (Boui)

When a verb with 3 Pl subject suffix is defocalized (i.e. when it follows a focalized constituent), the $\{\mathrm{LH}\}$ overlay extends to the onset of the 3 Pl suffix, but the latter's final L-tone element is preserved. This accounts for the final falling tone in nàyò-w-â: in $(367 \mathrm{~g})$.

Constituent focalization is awkward in negative contexts, as in 'it's $\underline{X}$ [focus] that I didn't/don't see' or 'it's $\underline{X}$ [focus] who didn't come'. However, such examples are elicitable, e.g. ( $373 \mathrm{c}, \mathrm{e}$ ) in §13.1.2.

If the subject is focalized, an $\{\mathbf{H}\}$ rather than $\{\mathrm{LH}\}$ overlay appears on the verb. This is the tonosyntactic distinction between focalization and relativization mentioned above.
mì = yó nà-gì ${ }^{\mathrm{H}}$ téwé
$1 \mathrm{SgSbj}=\mathrm{Foc} \quad 3 \mathrm{Sg}-\mathrm{Acc}$ hit.Pfv
'It was I [focus] who hit him.' (Boui)
Further examples of nonsubject $\{\mathrm{LH}\}$ and subject $\{\mathrm{H}\}$ overlays occur throughout this chapter, e.g. in connection with content interrogatives (§13.2.2-8 below).

### 13.1.1.6 Defocalized stative verb ('know' and 'want')

'Know' (yèy, §11.2.5.1) and 'want, like' (kèy, §11.2.5.2) are lexically stative verbs. When they follow a focalized non-subject, they take a form ending in ya, which can be analysed at least diachronically as an assimilated variant of the suffix -wà ~-wá that occurs in nonsubject imperfective relatives. The forms are ${ }^{\text {LH }}$ yěy-yà $\sim^{\text {LH }}$ yèy-yá and ${ }^{\mathrm{LH}}$ kěy-yà $\sim{ }^{\mathrm{LH}}$ kèy-yá.
a. énì = yò mì ${ }^{\text {LH }}$ yěy-yà ( $\sim^{\text {LH }}$ yèy-yá $)$
Dem=Foc 1Sg know-Stat
'That [focus] is what I know.' (Ningo)

This bisyllabic form is not used after focalized subjects, which have unsuffixed ${ }^{H}$ yéy and ${ }^{\mathrm{H}}$ kéy.
(370) [yé:-gé rì = yò] ${ }^{H}$ yéy / ${ }^{\text {Héy }}$
[woman-Pl Def=Foc] know/want
'It's the women [focus] who know/want.'

### 13.1.1.7 Existential è ~é absent under focalization

Existential proclitic è $\sim$ é or yà $\sim$ yá (§11.2.2.1) is disallowed in clauses with a nonverb focalized constituent. This is most noticeable with 'have' clauses, where the particle is obligatory in positive unfocalized clauses (371a) but is not allowed in focalized counterparts (371b-c).
a. jíwá è
è sá-1 lè house Exist have-2SgSbj Q 'Do you-Sg have a house?' (< è sá-ẁ) (Boui)

# b. ndégé ò ${ }^{L H}$ sǎ: <br> what? 2 SgSbj have <br> 'What do you-Sg have?' (Boui) 

c. à:=wò ná: ${ }^{H}$ sá:
who?=Foc cow have
'Who has a cow?' (Boui)
We can also see this in positive 'be (present/absent)' clauses with no explicit locational, as when predicating existence. For example, é (or yá) is required in (372a) since there is no focalized constituent. The existential proclitic is absent in (372b) where 'what?' is focalized.
(372)
$\begin{array}{lll}\text { a. námá } \quad \text { é } \quad \text { wò-Ø } \\ \text { meat } & \text { Exist } & \text { be-3SgSbj } \\ \text { 'There is (some) } & \text { meat.' (Boui) }\end{array}$
b. ndégé $=\grave{\mathrm{w}}^{\mathrm{n}} \quad{ }^{\mathrm{H}} \mathrm{bó}$ :
what?=Foc be
'What is present (here/there)?' (Boui)

### 13.1.2 Subject focalization

Some further examples of subject focalization are given here. They illustrate points made above, except that the expression of (unfocalized) pronominal subjects as either suffix or proclitic is not relevant. Recall that the verb has $\{\mathrm{H}\}$ rather than $\{\mathrm{LH}\}$ overlay for subject focalization.
a. mì = yò Húm-bó
$1 \mathrm{Sg}=$ Foc go-Ipfv
'It's $\underline{I}$ [focus] who will go.' (Boui)
b. ò: = wó wàlè ${ }^{\text {H}}$ kání
$2 \mathrm{Sg}=\mathrm{Foc} \quad$ work(n) do.Pfv
'It's you-Sg [focus] who did the work.' (Boui)
c. è:= wó wàlè Hkáná-ní
$2 \mathrm{Pl}=$ Foc $\quad$ work(n) do-PfvNeg
'It's you-Pl [focus] who didn't work.' (Boui)
d. à:màdú = yò té: ${ }^{\mathrm{H}}$ sógé

Amadou=Foc tea bring.Pfv
'It was Amadou [focus] who brought the tea.' (Boui)
e. à:màdú = yò ${ }^{\text {Hígíl-dá }}$

Amadou=Foc sweep-IpfvNeg
'It's Amadou [focus] who doesn't sweep.' (Boui)

### 13.1.3 Object focalization

Further examples of object focalization are in (374). In addition to the features shared with subject focalization, we now see $1 \mathrm{Sg} / 2 \mathrm{Sg} / 3 \mathrm{Pl}$ and 3 Sg pronominal-subject proclitics, like 2 Sg ò in (374a). Accusative marking (gì) is often absent from the focalized object NP, even with pronouns, and it cannot be combined with an overt focus clitic.
a. mì =yó [èwà yá] ò ${ }^{\text {LHbàlì-yé rì }}$ $1 \mathrm{Sg}=$ Foc [market Loc] 2 SgSbj see-MP.Pfv Def 'It's me [focus] whom you saw at the market.' (Boui)
b. té: mì ${ }^{\text {LH yòlò-wó }}$
tea 1 SgSbj look.for-Ipfv
'It's tea [focus] that I am looking for.' (Boui)
c. [ná: mě:] ò ${ }^{L H_{j}^{j} \text { y } y \varepsilon ́ ~}$
[cow 1 SgPoss] 2 SgSbj kill.Pfv
'It was my cow [focus] that you-Sg killed.' (Boui)

### 13.1.4 Focalization of PP or other adverb

A PP like 'in the fields' (375) can be focalized. However, the focus enclitic is not used with PPs (or with nonhuman NPs). The $\{\mathrm{LH}\}$ on the verb indicates the presence of a focalized nonsubject constituent, but if there are two
(375) [wótóró rì] [yálá yà ] ${ }^{\text {LH }}$ dìy $\grave{\text { e }}$ - ${ }^{\text {n }}$
[cart Def] [field Loc] leave.Pfv- 1 SgSbj
'It's in the field(s) [focus] that I left the cart.' (Boui)

### 13.2 Interrogatives

### 13.2.1 Polar (yes/no) interrogatives (lè, nì)

The clause-final polar interrogative particle is usually lè, but it undergoes phonological processes when immediately preceded by a semivowel, as in 1 Sg and 2 Sg subject verb forms. The outputs are in (376). In (376d) it might appear that focus enclitic $=\grave{\mathrm{w}}^{\mathrm{n}}$ is omitted, as in ámbá = Ø nì 'is it a sheep?' (Boui), but the use of nì rather than lè betrays the virtual presence of a nasalized enclitic.

|  | input |  | output | example of input |
| :---: | :---: | :---: | :---: | :---: |
| a. | -ẁ lè | $\rightarrow$ | -1 lè | 2 Sg suffix -ẁ |
| b. | -ỳ lè | $\rightarrow$ | -1 lè | experiential perfect -tèy |
| c. | -ỳ lè | $\rightarrow$ | -n nì | 1 Sg suffix - ${ }^{\text {n }}$ |
| d. | $=\grave{w}^{\mathrm{n}}$ lè | $\rightarrow$ | $=\varnothing$ nì | 'it is' clitic $=\grave{\mathrm{w}}^{\text {n }}$ |

The interrogative enclitic has variable tone, but it can be analysed as basically L-toned. If the preceding syllable has contour (rising or falling) tone, the final tone component is realized on the enclitic (377a-b). Likewise, the final H of a preceding LH-toned word shifts to the particle (377c). If the preceding word is L-toned, the interrogative enclitic polarizes to it, becoming H-toned (377d). So the tone of the enclitic is highly context-sensitive. Throughout (377), the form of the preceding element in other contexts is given in parentheses after the free translation.

b. nígé bàlì-yè-tèl-Ø lé
elephant see-MP-ExpPf-3SgSbj Q
'Has he/she ever seen an elephant?' (< -tèy-Ø) (Boui)
c. è nò̀-rà lé

2PISbj enter-IpfvNeg Q
'Did you-Pl not go in?' (<è nò̀--rá) (Boui)
d. yògè-Ø lé
come.Pfv-3SgSbj Q
'Did he/she come?' (< yò̀gè-Ø) (Boui)

```
    e. yógó-wò-l lè
    come-Ipfv-2SgSbj Q
    'Will you-Sg come?'(< -wò-w) (Boui)
```


### 13.2.2 'Who?' (à:)

à: 'who?' is tonally distinct from á: 'God'. Examples of 'who?' are in (378). Like other WH-interrogatives, it is often marked by the 'focus enclitic, in the form à: = wó. The enclitic is heard with H-tone when final (i.e. predicative) or when followed by an L-tone. When nonfinal (i.e. nonpredicative), the $=$ wó is often reduced phonetically to $=$ ẃ, or to = ̀̀ before H-tone. In object function, there is a choice between accusative à: gí (378d) and focalized à: = wó or variant (378e), but the two morphemes do not co-occur.
a. à:=wó
who?=Foc
'Who is it?' (Boui)
$\begin{array}{ll}\text { b. } \begin{array}{l}\text { à: }=\text { wò } \\ \text { who?=Foc }\end{array} & \begin{array}{l}\text { Hyógé- } \\ \text { come.Pfv- } 3 S g S b j\end{array} \\ \text { 'Who came?' }\end{array}$
c. à: = wò $\quad{ }^{H}$ úm-bó-Ø
who=Foc go-Ipfv-3SgSbj
'Who will go?' (Boui)
d. [à: gí] ${ }^{\text {LH}}$ tèwé- $\varnothing$
[who? Acc] hit.Pfv-3SgSbj
'Who(m) did he/she hit?' (Boui)
e. à:=wó è ${ }^{\text {LH}}$ tèwé
who?=Foc 2PlSbj hit.Pfv
'Who(m) did you-Pl hit?' (Boui)
f. [à: $\left.\quad{ }^{\text {LH }}{ }_{j i ̀ w a ́}\right]=w^{n}$
[who? house]=it.is
'Whose house is it?' (Boui)


```
h. à:= wò Hyógó-ní
who?=Foc come-PfvNeg 'Who didn't come?' (Boui)
```

If the number of referents asked about is unclear to the speaker, the singular forms illustrated above are used. A marked plural à:-yá = ẃ is required in predicates with plural subject: è à:-yá= ẃ 'who are you-Pl?' It can also be used in nonpredicative function to make plurality explicit.

### 13.2.3 'What?’ (ndégé ~ ndégé-sì), 'with what?', ‘why?’

'What?' is ndégé or an extended variant ndégé-sì, cf. (362a) above. Like nonhuman NPs, it lacks an overt focus enclitic. It is usually the object or another nonsubject NP, but it can be subject and if so the $\{\mathrm{H}\}$ overlay occurs on the verb (379c).
a. ndégé ò $\quad{ }^{\text {LH}}$ cěy
what? 2 SgSbj want
'What do you-Sg want?' (Boui)
$\begin{array}{lll}\text { b. ndégé nà } & \text { LHìrè-sá } \\ \text { what? } \quad 3 \mathrm{SgSbj} & \text { get-Reslt } \\ & \text { 'What did he/she get?' (Boui) }\end{array}$
$\begin{array}{lll}\text { c. ndégé } & \text { ò-gì } & { }^{\text {H}} \text { kání-sá } \\ \text { what? } & \text { 2Sg-Acc } & \text { do-Reslt }\end{array}$
'What (e.g. which body part) has hurt you-Sg?' (Boui)
$\begin{array}{ll}\text { d. } & \text { mbó } \quad \text { ndégé }=\text { w }^{\text {n }} \\ \text { Dem what?= it.is }\end{array}$

A kind of plural can be formed by conjoining ndégé to itself: [ndégé yà] [ndégé yà] 'what and what?'. A speaker rejected a direct plural \#ndégé-gé.
'With what?' is ndégé-sì yà.
'Why?' ('for what?') is ndégé dàgà or contracted ndé dàgà.

### 13.2.4 'Where?' (àná)

'Where?' is àná, sometimes heard as áná. It can occur in static locative, allative, and ablative contexts, with direction of motion (if any) specified by verbs.
(380)
$\begin{array}{ll}\text { a. àná } & \text { LH bò-ẃ } \\ & \text { where? } \quad \text { be-2SgSbj } \\ & \text { 'Where are you-Sg?' (Boui) }\end{array}$
b. àná ${ }^{\text {LH }}$ ùm-bò-ẃ
where? go-Ipfv-2SgSbj
'Where are you-Sg going?' (Boui)
c. àná è ${ }^{\text {LH }}$ gwě:
where? 2PISbj exit(v).Pfv
'Where do you-Pl come from?' (Boui)
d. àná= $\hat{w}^{n}$
where?=it.is
'It's where?' (Boui)

### 13.2.5 'When?' (áná-ygà)

'When?' is áná-ŋgà. It begins with a general WH-interrogative formative also found in àná 'where?' The function of -ngà here is obscure, cf. perhaps -ngà 'while' as verbal subordinator (§15.2.1.9).
a. áná-ygà
LHyògò-wò-ẃ
when? come-Ipfv-2SgSbj
'When are you-Sg coming?' (Boui)
b. áná-ngà = ẃ
when? $=$ it.is
'When is it?' (Boui)
The phrasing dèy ${ }^{\mathrm{n}}$ árí 'which day?', cf. dèw ${ }^{\mathrm{n}}$ 'day', is also attested.

### 13.2.6 'How?' (árá)

Manner adverbial interrogative 'how?' is árá (Boui) or áráwn (Ningo). The latter variant may include a frozen focus enclitic.
a
árá ${ }^{\text {LHìilò-wò-ẃ }}$
how? ascend-Ipfv- 2 SgSbj
'How will you-Sg go up?' (Boui)
$\begin{array}{ll}\text { b. áráw }{ }^{\text {n }} & \text { LHbǒ:- } \varnothing \\ \text { how? } & \text { be- } 3 \mathrm{SgSbj}\end{array}$
'How is he/she?' (Ningo)

### 13.2.7 'How much/many?' (áygá)

The usual sense is 'how many?', since even masses (like 'money') can be conceptualized as collections of units. ángá comes at the end of the NP, after plural -ge. It has no effect on the tones of the preceding words, except in its ordinal adjective form (383e), cf. §4.7.2.
a. [[ámbá gé] áygá] ${ }^{\text {LH}}$ tùlغ̀-ẃ
[[sheep $\quad \mathrm{Pl}]$ how.many?] sell.Pfv- 2 SgSbj
'How many sheep did you-Sg sell?' (Boui)
b. [bé-gé ággá] ò $\begin{array}{ll}\text { LHbàlì-yé }\end{array}$
[child-Pl how.many?] 2 SgSbj see-MP.Pfv
'How many children did you-Sg see?' (Boui)
c. ángá-ággá ${ }^{\text {LHtùlò-wò-ẃ }}$

Rdp-how.many? sell-Ipfv-2SgSbj
'For how much each do you-Sg sell (them)?' (Boui)
d. [síkóró-gé áygá] $=\mathrm{w}$
[sugar-Pl how.many?]=it.is
'It's how much (= how many units of) sugar?' (Boui)
e. jìwà ${ }^{L}$ ángá-n
house how.many?-Ord
'how-many-eth house?' (reply: first, second, third, etc.) (Boui)

### 13.2.8 'Which?' (árí ~ á:rì)

árí (Boui) or á:rì (Ningo) ‘which?’ may contain a frozen definite marker, leaving just $\mathrm{a}(:)$ as the original interrogative root.
árí is adjective-like in some ways, but several facts point to an analysis with juxtaposed noun and 'which?' in a semi-appositional relationship. First, árí does not control tone-dropping on a preceding noun in the fashion of normal modifying adjectives, as seen in (384a). Second, the noun and árí are separately pluralizable with suffix -gè, as in (384b) below. Third, árí can occur by itself as an alternative 'what?' interrogative, as in T7 @ 18:32. Fourth, the set from which the referent is to be
selected may also be expressed separately as a locative PP in partitive function, as in (384d).
(384)

| a. | [ámbá | árí] | ò |
| :--- | :--- | :--- | :--- |$\quad$| LHdònò-wó |
| :--- |
| [sheep |$\quad$ which?] | 2SgSbj | buy-Ipfv |
| :--- | :--- |

b. [ámbá-gé árí-gé] ò ${ }^{\text {LH }}$ dònò-wó [sheep-Pl which?-Pl] 2 SgSbj buy-Ipfv 'Which sheep-Pl will you-Sg buy?' (Boui)
c. [[jíwá árí] yá] è ${ }^{\text {LH} b i ̀-y o ̀-w o ́ ~}$ [[house which?] Loc] 2P1Sbj lie.down-MP-Ipfv 'In which house will you-Pl sleep?' (Boui)
d. [[ná:-gè rì] yà] árí ò $\begin{array}{ll}\text { LH tùlò-wó }\end{array}$ [[cow-Pl Def] Loc] which? 2 SgSbj sell-Ipfv 'Which of the cows will you-Sg sell?' (Boui)

For árí in relative-clause internal head NPs, see §14.2.2.

## 14 Relativization

### 14.1 Basics of relative clauses

The following summarizes the major features of relative clauses.

- The core of the head NP is internal to the relative clause; it is maximally PossN -Adj-Num and may include plural -ge ;
- The internal head NP as such does not undergo tonosyntactic modification, i.e. tone-dropping due to the relative clause;
- Determiners and 'all' quantifiers associated with the head NP follow the verb;
- If the head NP is subject of the relative clause, it may be followed by a morpheme $\mathrm{w}^{\mathrm{n}}$ or by árí 'which';
- Subject relatives have no overt pronominal-subject inflection on the verb;
- Nonsubject relatives that have a pronominal subject express the latter as a preverbal pronominal-subject proclitic, even for $1 \mathrm{Sg}, 2 \mathrm{Sg}, 3 \mathrm{Sg}$, and 3 Pl pronominal subjects;
- The verb-participle is marked for an indicative category (aspect, negation, past time), as in main clauses, with minor adjustments, and may be pluralized, but allows no pronominal-subject agreement;
- In most types of relatives, including perfective subject relatives, an $\{\mathrm{LH}\}$ overlay is applied to the verb-participle;
- imperfective positive verb-participles resemble agentive compounds;
- The verb-participle behaves like a noun or adjective syntactically since it can be pluralized and can be followed by the definite marker and/or by the 'all' quantifier;
- with rare exceptions, the head noun is not doubled after the verb-participle, either verbatim or by a classifying noun.


### 14.2 Head NP

The head NP is (seemingly) bifurcated into a core internal the relative clause, and a postverbal coda. In effect, the entire relative construction is a NP. The core is maximally Poss-N-Adj-Num. The coda contains determiners, 'all' quantifiers, and any discourse-functional particles.

As in other Dogon languages, the "bifurcation" is a due to movement of the pre-relative clause portion of the higher NP into the relativization site.

### 14.2.1 Internal head NP (Poss-N-Adj-Num)

The internal head NP is maximally Poss-N-Adj-Num. Plural suffix -gè may be added in the same manner as in non-head NPs. There are no tonosyntactic changes other than those that take place anyway among these NP components. The internal head components are bolded in interlinears in (385). Examples are for Boui.
$\begin{array}{lll}\text { a. } & \text { jíwá } & { }^{\text {LHèwè-sá }} \\ \text { house } & \text { collapse-ResltRel }\end{array}$ Def
b. [jìwà ${ }^{\text {L }}$ báy-gé ${ }^{\mathrm{L}}$ nì:Đgà] ${ }^{\text {LH}}$ ùwè-sà-gé rì [house big-Pl two] collapse-ResltRel-Pl Def 'the two big houses that collapsed'
c. [sàydú ${ }^{\text {LH }}\left[\right.$ jìwà bày-gè nì:ngà-ngé]] ${ }^{\text {LH }}$ ùwè-sà-gé rì [Seydou [house big-PI two-PI]] collapse-ResltRel-Pl Def 'Seydou's two big houses that collapsed'

In (385c), the possessor 'Seydou' controls the usual $\{\mathrm{LH}\}$ overlay on the following possessum. Since the relative clause does not require its own overlays on the internal head NP, there is no conflict with the possessor-controlled overlay.

### 14.2.2 árí 'which' and/or $=\mathrm{w}^{\mathrm{n}}$ after internal head NP

In many examples there is no special morphological marking of the (internal) head status of the NP in question. However, there are also examples where the head is followed by árí and/or by $=w^{n}$. árí occurs elsewhere as the 'which?' interrogative (§13.2.8), while $=w^{n}$ resembles a variant of the 'it is' clitic or focus enclitic $=\grave{w}^{n}$ (§11.2.1.11, §13.1.1.4).
árí without $=\mathrm{w}^{\mathrm{n}}$ is seen in (386). Since it is followed by a postposition (purposive 'for'), this construction looks like the English type the X for which ..., with which coindexed to the head. However, efforts to elicit parallel examples with árí followed by other postpositions (locative, instrumental) were unsuccessful; see §14.7.4 for discussion of postpositional relatives.

| [[bé-gè | rì $]$ | [í:gé | árí | dàgá $]$ | LH yògè-sá $]^{[[\text {child-Pl }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Def $]$ | [honey | which | Purp $]$ | come-ResltRel] |  |
| àná | LHbǒ: |  |  |  |  |

where? be
'Where is the honey that the children came for?'

The combination árí $=\mathrm{w}^{\mathrm{n}}$ occurs in (387).
(387)
a. [ndà: árí $\left.=w^{n}\right] \quad{ }^{\text {LH }}$ yěy rì [person which=Foc] know.Rel Def 'the person who knows'
b. [bé-gé árí-gé $=w^{n}$ ] ${ }^{\text {LH}}$ tìw -sà-gá-gé rì [child-Pl which-Pl=Foc] die-ResltRel-Pl Def 'the children who have died'

Another example of árí, this time without $=w^{\mathrm{n}}$, is (388). For dùmbè see $\S 14.5$.
(388) [dèw ${ }^{\mathrm{n}}$ árí] nà dùmbè ${ }^{\mathrm{LH}_{\text {sìgé }}}$
[day which] 3 SgSbj fall.Pfv descend.Pfv
'the day when he fell down'
14.2.3 Restrictions on the head of a relative clause

A pronoun can function as head of a relative. The pronoun takes L-toned proclitic form (389a-b). A personal name can also be head (389c). In such cases the head is grouped prosodically with the rest of the relative clause, so there is no prosodic indication of parenthesis.
a. nì mó-yà ${ }^{\text {LH}}$ bò:-gé rì 1PISbj here be-Pl Def 'we who are here'
b. ò / nà / mì mó-yà ${ }^{\text {LH bǒ: rì }}$ $2 \mathrm{SgSbj} / 3 \mathrm{SgSbj} / 1 \mathrm{SgSbj}$ here be Def 'you-Sg who are here / he or she who is here / I who am here'
c. sàydù mó-yà ${ }^{\text {LH}}$ bǒ: rì

Seydou here be.Rel Def 'Seydou who is here'

The available data suggest that a demonstrative or an expressive adverbial cannot be a relative-clause head.

The head NP may function as subject, object, postpositional complement, or possessor of another NP within the relative clause. See §14.7.1-4 below for examples organized by clause-internal syntactic function.

### 14.2.4 Conjoined NP as head

A conjoined NP may be the head of a relative. The conjoined subject of the main clause in (390a) is unchanged as relative head (390b).

| a. [yé:-gé [woman-Pl | yà] | [bànà-gé | yà | yànì-y-íyè |
| :---: | :---: | :---: | :---: | :---: |
|  | and] | [man-Pl | and] | fight-MP-3PlSbj |
| 'women and men squabbled (with each other)' |  |  |  |  |

b. [yé:-gé yà] [bànà-gé yà] ${ }^{\text {LHyànì-yè-gé }}$ rì [woman-Pl and] [man-Pl and] fight-MP.PfvRel-Pl Def 'the women and men who squabbled'

### 14.2.5 Headless relative clause

In elicitation, headless relatives were dispreferred by speakers. At least a minimal head like 'person', 'thing', or 'place' was always present. In texts, however, headless relatives can substitute for main clauses (§14.8).

### 14.2.6 Doubling of head noun following verb-participle

Doubling (echoing) of the internal head following the verb-participle occurs in some Dogon languages. It is often limited to a few semantically light head nouns like 'day'. The clause-internal and postverbal nouns may be identical. Alternatively, the echoed noun may be a noncognate or a classifier-like noun. If the head is e.g. 'day', 'time', 'manner', or 'place', a noncognate echo can be reinterpreted as a specialized postposition ('on the day of', 'at the place of', etc.). Doubling is more productive in certain Dogon languages where it extends to human head NPs, where the postverbal echo is a classifying noun, i.e. 'person' (phrased as 'owner') or plural 'people'. Whether for 'day' or for humans, the postverbal noun usually has tones compatible with possessum overlay. So, in languages with $\{\mathrm{L}\}$ as possessum overlay, '(on) the day (when) Seydou' came is phrased as some variant of the schema [[Seydou day come.PfvRel] Lday], and 'the farmers who bought the house' is phrased as something like '[[farmer-Pl goat buy.PfvRel] ${ }^{\text {L }}$ people].

Most examples of this in Tiranige involve dèw ${ }^{\mathrm{n}}$ 'day', often dé $\mathrm{w}^{\mathrm{nH}}$ as relative head, and postverbal synonym ${ }^{\text {LH }}$ nàngá with the Tiranige $\{\mathrm{LH}\}$ possessum overlay. Although ${ }^{\text {LH }}$ nàngá co-occurs only with 'day', it could be analysed as a specialized postposition 'on the day of': see (434-435) in §15.2.1.1. A possible example of 'owner(s)' is T7 @ 07:37.

### 14.2.7 Special tonal forms of high-frequency head nouns

The semantically light nouns 'thing', 'person', 'place', and 'manner' are common as relative heads. They sometimes present unexpected tonal forms in this function.
wè: 'thing' is L-toned as an ordinary noun but can become wé: ${ }^{\mathrm{H}}$ as relative head.
(391) [ájá kày] wé: ${ }^{\mathrm{H}}$ [[ò $\left.{ }^{\text {LH }} \mathrm{jòlò}-\mathrm{bá}\right] \quad$ rì $] \quad$ á:rì $=w^{n}$
[now Topic] thing [[2SgSbj look.for-VblN] Def] which=it.is
'Now, the thing that you-Sg are looking for is which (=what)?'
(T7 @ 18:32)
ndà: 'person' is tone-raised to ndá: ${ }^{H}$ as relative head in some examples (392) but not others.

```
(392) ndá: }\mp@subsup{}{}{H}\mathrm{ ò lHgìr̀ pós
    person 2SgSbj get.PfvRel all
    'everyone whom you have gotten' (T7 @ 19:10)
```

While data are incomplete, the tonal forms wé: ${ }^{\mathrm{H}}$ and ndá: ${ }^{\mathrm{H}}$ seem to occur before L-toned pronominal-subject proclitics (in nonsubject relatives). These proclitics were likely once H -toned, and it may be that the H -tone transferred from the proclitic to the preceding head noun in these combinations. Similar tonal transfers involving proclitic pronominals occur in other Dogon languages (e.g. Jamsay).
dèw 'day' is likewise attested as $\{\mathrm{H}\}$-toned relative head déw ${ }^{\mathrm{nH}}$ in (396), (397d), (409b), (415b), and (416b) below. 'Place' and 'manner' behave in the opposite manner, with lexical $/ \mathrm{H} /$ melody but $\{\mathrm{L}\}$-toned relative heads.
gélé (Ningo) or jéĺ́ (Boui) 'place' often keeps its lexical tones as relative head (§15.3.1), but it is attested in L-toned form as apparent relative head in (393). Here it is immediately followed by a verb-participle related to the passive stative derivative (§10.4.1.2).
(393) [kóy gèlè ${ }^{\text {L }}$ géy-yé-Ø $\quad$ r] gì
[grass place kill-Pass.PfvRel Def] Loc
'in the place where the grass (=weeds) have been killed' (T7 @ 17:03)
bání 'manner' is the other / $\mathrm{H} /$-melody noun that often remains H -toned as relative head, but can be tone-dropped in this function as in (394). See also §15.3.2.
(394) $\left[t \hat{t}^{\mathrm{n}} \quad\right.$ dì $] \quad$ bànì ${ }^{\mathrm{L}}$ túmbúló-bá rì [sowing Def] manner begin-IpfvRel Def 'the way we begin the planting' (T7 @ 10:26)

Data are incomplete, but it looks as though tone-dropped gèl $\grave{\varepsilon}^{\mathrm{L}}$ and bànì ${ }^{\mathrm{L}}$ occur when they are immediately followed by an H-toned verb-participle or verbal noun. Since nouns are elsewhere tone-dropped chiefly before a modifying adjective (§6.3.1), and to a lesser extent as initials in some compounds (§5.1.2), it may be that the tonedropping to gè $1 \grave{\varepsilon}^{\mathrm{L}}$ and bànì ${ }^{\mathrm{L}}$ is a vestige of an older relative-clause construction where the verb-participle behaved tonally like a modifying adjective.

Together, the semantically light nouns 'thing', 'person', 'place', 'day', and 'manner' denote the most important ontological categories, and all are very common as relative heads. It is not surprising that they have special tonal characteristics not shared by other nouns.

### 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 an L-toned proclitic on the verb.


The proclitic precedes a nonfinal chained verb; see $\S 14.5$. Because the pronoun precedes both verbs, its location cannot be used as a syntactic test to distinguish verbverb chains, including verb plus specialized auxiliary verb, from verb-suffix combinations (e.g. experiential perfect).

There is no resumptive subject pronoun when the subject of a nonsubject relative is expressed by an overt nonpronominal subject NP.
(396) sàydù déw ${ }^{\mathrm{nH}}$ dùmbè ${ }^{\mathrm{LH}_{\text {sìgé }}}$

Seydou day fall.Pfv descend.PfvRel Def
'the day when Seydou fell down'

### 14.4 Verb-participle in relative clause

The verb-participle in a (subject or nonsubject) relative clause has an $\{\mathrm{LH}\}$ overlay. The $\{\mathrm{LH}\}$ overlay is shared in part by verbs in focalized clauses. However, under focalization the overlay is $\{\mathrm{LH}\}$ only for nonsubject focus, versus $\{\mathrm{H}\}$ for subject focus. Relative clauses have $\{\mathrm{H}\}$ overlay only under limited conditions: in agentivetype imperfective positive verb-participles (§14.4.2), and arguably in -sá adjectives that may have originated as relative clauses(§4.6.1).

In elicitation, a speaker sometimes failed to apply the $\{\mathrm{LH}\}$ overlay to (perfective and imperfective) negative verbs.

Other than the $\{\mathrm{LH}\}$ overlay, there is usually no other overt mark of participialization (i.e. nominal or adjectival features). However, perfective positive relatives often replace the regular (unsuffixed) perfective with the resultative (-sá-), and nonsubject imperfective positive relatives have a special suffix -wá- instead of -wó-, so in these cases there is morphological marking.

### 14.4.1 Participles of positive perfective-system verbs

The perfective consisting of the $\mathrm{E} / \mathrm{I}$-stem of the verb has $\{\mathrm{LH}\}$ melody in relative clauses. Most examples in my data end in definite rì. Historically, it may be that the $\{\mathrm{LH}\}$ melody was generalized from definite relative clauses, since the definite marker forces a final H -tone on a preceding $\{\mathrm{L}\}$-toned word. In the plural, the final H -tone element is realized on plural -gè.

The main clause (397a) becomes the subject relative (397b). The main clause (397c) becomes the nonsubject relative (397d). (397e), without final definite marker, shows that the $\{\mathrm{LH}\}$ overlay is synchronically independent of that marker.

| a. í:njé-gé | mì-gí | cèr-ìy $\varepsilon$ |
| :--- | :--- | :--- |
| dog-Pl | 1Sg-Acc | bite-Pfv.3PlSbj |
|  | '(The) dogs bit me.' (Boui) |  |

b. í:njé (-gé) mì-gí $\quad{ }^{\text {LH }}$ cèrè-gé rì
$\operatorname{dog}(-\mathrm{Pl}) \quad 1 \mathrm{Sg}-\mathrm{Acc}$ bite.PfvRel-Pl Def 'the dogs that bit me' (Boui)
c. í:njé mì-gí $\quad{ }^{\text {LH }}$ cèré rì
dog 1Sg-Acc bite.Pfv Def
'the dog that bit me' (Boui)
d. [í:njé rì̀ déw ${ }^{\mathrm{nH}}$ mì-gí ${ }^{\text {LH }}$ cèré rì [dog Def] day 1Sg-Acc bite.Pfv Def
'the day the dog bit me' (Boui)
e. í: ᄁgé bé: ${ }^{\text {LH}} k$ kèré
dog child bite.Pfv
'a dog that has bitten a child' (Ningo)
It was not possible to elicit an explicit recent perfect relative clause; a speaker merged these into the simple perfective. However an experiential perfect relative clause is (398). The $\{\mathrm{LH}\}$ melody is realized on the experiential perfect suffix.

```
(398) ndà: nígé \({ }^{\text {LH}}\) bàlì-yè-těy rì person elephant see-MP-ExpPfRel Def
``` 'the person who has (once) seen an elephant'

The resultative with -sà- 'have' can also form relative clauses (399). In fact, the resultative form occurs frequently in relative clauses where one would expect a simple perfective.
\begin{tabular}{lll} 
a. & bímá & \begin{tabular}{l} 
LH yògè-sá \\
visitor \\
come.Pfv-ResltRel
\end{tabular}
\end{tabular}\(\quad\)\begin{tabular}{l} 
rì \\
'the visitor who came/has come'
\end{tabular}
b. [bé: rì] \({ }^{\text {L }}\) kèlì-yè-sà bò:-Ø mè
[child Def] not.want-MP-ResltRel be-3SgSbj if
'if there is one ( \(=\) a cow) who has rejected a (newborn) calf'
(T7 @ 12:59)

\subsection*{14.4.2 Participles of positive imperfective-system and stative verbs}

In the imperfective positive, subject relatives frequently take the form of agentive compounds if the verb is transitive and the object is nonspecific. The object then appears as an \(\{L\}\)-toned compound initial (400a-b). For example, (400a) is similar in structure to 'beer-drinking women'.
(400)
\(\begin{array}{lll}\text { a. yé: } & \text { kònjè̀-né:-gè } & \text { rì } \\ \text { woman } & \text { beer-drink.Agent-Pl } & \text { Def }\end{array}\)
'the women who drink beer' (agentive compound form)
b. tillggò-tél-gè rì
tree-cut.Agent-Pl Def
'people who chop down trees' (agentive compound form)
Other imperfective subject relatives (401a) are based on the regular imperfective form with -wò or variant after \(\{\mathrm{H}\}\)-toned stem. If the head NP is singular, there is no trace of the usual \(\{\mathrm{LH}\}\) overlay on the verb (401a). However, if the head NP is plural, H-toned plural -gé does occur on the verb after the L-toned imperfective suffix -wò(401b), so there is a kind of \(\{\mathrm{LH}\}\) melody applied to the suffixes.
(401)
\[
\begin{array}{llll}
\text { a. } & \text { ndà: } & \begin{array}{l}
\text { nóyó-wò } \\
\\
\\
\\
\\
\text { person } \\
\text { 'the person who will sleep }
\end{array} &
\end{array}
\]
```

b. mó-yà yé:-gé yógó-wò-gé rì
here woman-Pl come-IpfvRel-Pl Def
'the women who come here'

```

Etymologically, -wò is related to bò 'be' and so was originally an auxiliary verb. The verb-participle in (401a) could therefore be reconstructed as *nóyó \({ }^{\text {LH }}\) wò, where the monomoraic wò is too short to express the full rising tone.

Nonsubject imperfective relatives are based on a different suffix -wa (Boui), which under the influence of the \(\{\mathrm{LH}\}\) overlay appears as -wá after the \(\{\mathrm{L}\}\)-toned stem ( \(402 \mathrm{a}-\mathrm{c}\) ). This is an explicitly relative suffix. In both -wò- and -wá, for speakers with \(w\) rather than \(b\), the \(w\) hardens to \(b\) after a stop or nasal (402a). Ningo has \(b\) rather than \(w\) in all cases.

Since the H-tone of -wá is due to an overlay, we are free to speculate whether this -wá is connected in any way with verbal noun suffix -wà (§4.2.3.1). If we decide in favor of this connection, we could say that nonsubject relative clauses resemble possessed verbal nouns. However, if the subject is nonpronominal, as in (402a), it need not be adjacent to the "possessed" verbal noun as we would expect in a true possessive construction.

b. kónjé ò \({ }^{\text {LH}}\) nò:-wá rì
beer 2 SgSbj drink-IpfvRel Def 'the beer that you-Sg drink'
c. [yé:-gè rì] kónjé \({ }^{\text {LH}} \mathrm{n}\) ò̀:-wá rì [woman-Pl Def] beer drink-IpfvRel Def 'the beer that the women drink'

The suffix -wá ~ -bá also has a past-time counterpart -wé ~ -bé, illustrated by \({ }^{L H}\) sànjè̀-bé 'was doing business' in (554) in T 4 , compare nonpast imperfective \({ }^{\text {LH }}\) sànjò̀-bá 'is doing business'.

Progressive relative clauses are (403a-b) with bǒ:, plural bò:-gé.

\(\begin{array}{lllll}\text { b. ndà: } & \text { wàlè } & \text { kànà:m } & \text { LHbǒ: } & \text { rì } \\ & \text { person } & \text { work(n) } & \text { do } & \text { ProgRel }\end{array}\) Def 'the person who is working'

Derived statives are illustrated in (404). The \(\{\mathrm{LH}\}\) overlay appears on the stative.
a. yé: yá \({ }^{\text {LHòwá rì }}\) woman Exist.Dist sit.StatRel Def 'the woman who is sitting (distant)'
b. yé: yá: \({ }^{\text {LH}} \mathrm{bì-}\)-yá rì
woman there lie.down-MP.StatRel Def 'the woman who is lying down over there'

Defective stative quasi-verbs are next. For 'have', the form is \({ }^{\mathrm{LH}}\) sǎ:, plural \({ }^{\mathrm{LH}}\) sà:-gé, for both subject and nonsubject relatives (405). However, it has also been heard as \({ }^{\mathrm{L}}\) sà:, plural \({ }^{\mathrm{L}}\) sà:-gè (§4.2.1).
(405)
a. ndà: jíwá \({ }^{\text {LH}_{\text {ǎa }}}\) rì
person house have.Rel Def
'the person who has a house' (Boui)

c. gélé-gè gíbá-gè nà \({ }^{\mathrm{LH}_{\text {sà:-gé }}}\)
place- Pl house- Pl 3 SgSbj have.Rel-Pl
'places where he/she has houses.' (Ningo)
Lexical statives yèy 'want' and kèy 'know' are \({ }^{\text {LH }}\) yěy-yà \(\sim{ }^{\text {LH }}\) yèy-yá and \({ }^{\text {LH }}\) kěy-yà \(\sim\) \({ }^{\text {LH }}\) kèy-yá in nonsubject relatives as in focalized clauses (§13.1.1.6), cf. -wà ~ -wá (406a-b). Subject relatives are \(\{H\}\)-toned versions of main-clause forms (406c-d).
a. mì
\({ }^{\text {LH }}\) yèy-yá
1 SgSbj know-Rel
'what I know' (Ningo)
\(\begin{array}{lc}\text { b. mì } & { }^{\text {LH} k e ̀ y-y a ́ ~} \\ & \text { 1SgSbj } \\ & \text { want-Rel } \\ & \text { what I want/like' (Ningo) }\end{array}\)
c. [ndà: árí= \(w^{n}\) ] Hyéy rì
[person which=Foc] know.Rel Def 'the person who knows' (Boui)
d. ndà: \({ }^{H}\) céy rì
person want.Rel Def 'the person who wants' (Boui)

For 'be' (locational-existential), both Lbò: and \({ }^{\text {LH }}\) bǎ: are well-attested. \({ }^{\text {L }}\) bò: occurs in (407a) and in textual examples (407b-d), cf. \({ }^{\text {LH}}\) bǒ: in progressives (403a-b) above.
(407)
a. yé:
é-yà
Lbǒ: rì
woman there.Near.Dist be.Rel Def 'the woman who is there (not far away)'
\(\begin{array}{llllll}\text { b. é-w } & \text { [[bà: } & { }^{\text {LH}}{ }^{\text {nibibá }} & \mathrm{r}] & \text { gì }] & { }^{\text {Lbò:-gè }} \\ \text { 2Pl-Indep } & \text { [[father } & \text { house } & \text { Def }] & \text { Loc] } & \text { be.Rel-Pl }\end{array}\) 'you- Pl who are in the father's house' (T7 @ 05:30)
c. ní-w \({ }^{n}\) [lyò: \({ }^{\text {LH}}\) tàgú \(\left.r\right]\) gì] ná \({ }^{\text {L bò:-gé }}\) rì] 1Pl-Indep [[today earth Def] Loc] ?? be.Rel-Pl Def] 'we who are on today's soil (=land)' (T7 @ 09:47)
d. ìjò-gè mbé: [[nì \({ }^{\text {LH }}\) gèlé \(]\) gì] \({ }^{\text {Lbò̀:-gé rì pós }}\) village-Pl here [[1PlPoss place] Loc] be.Rel-Pl Def all 'all of the villages that are here near us' (T7 @ 16:08)

The textual examples of \({ }^{\text {LH}}\) bǎ: are in (408). While (408a) could be interpreted as copular, the remaining examples are clearly locational.
a. [ò
\({ }^{\text {LH}}\) bě:] nà \(\quad{ }^{\text {LH }}\) bǎ:
[2SgPoss child] 3SgSbj be.Rel ‘what your child is’ (T7 @ 05:51)
\(\begin{array}{lllll}\text { b. } & \text { ndà-gè } & {[\text { bó: }} & \text { gì }] & \text { ò } \\ & { }^{\text {LH}} \text { bà:-gé } \\ \text { person-Pl } & {[\text { midst }} & \text { Loc }] & 2 S g S b j & \text { be.Rel-Pl }] \\ & \text { 'the people who you are among' }(\mathrm{T} 7 @ & 06: 29)\end{array}\)
c. [kóndí \({ }^{\text {LH}}\) bè-gé] gélé \({ }^{\text {LH }}\) bǎ: rì] gì [circumcision child.Pl] place be.Rel Def] Loc 'in the place where the circumcision novices are' (T7 @ 07:08)
d. [nà \({ }^{\text {LH }}\) ndǎ:] gélé \(\quad{ }^{\text {LH }}\) bà: pós [3SgPoss person] place be.Rel all ‘wherever his relative may be’ (T7 @ 08:10)
e. [[cò:fòl-gé rì] géĺ \(\quad{ }^{\text {LH}} \mathrm{bǎ:}\) : rì [[stream.bed-Pl Def] place be.Rel] Def 'the place where the stream beds are' (T7 @ 16:24)

\subsection*{14.4.3 Participles of negative perfective-system verbs}

The perfective negative with suffix -nì can take the \(\{\mathrm{LH}\}\) overlay before the definite marker, with the suffix H-toned. Alternative pronunciations with the usual nonrelative tone pattern, \(\{\mathrm{H}\}\)-toned stem and L -toned -nì, are also attested.
\begin{tabular}{llll} 
a. & ná: & \begin{tabular}{l} 
LH yègà-ní
\end{tabular} & rì \\
cow fall-PfvNegRel & Def \\
& 'the cow that didn't fall' &
\end{tabular}
b. déw \({ }^{\mathrm{nH}}\) ò \({ }^{\text {LH yògò-ní }}\)
day 2 SgSbj come-PfvNegRel Def
'the day you-Sg didn't come'
c. [ò \({ }^{\text {LH }}\) bàlì-yà-ní] bálí-yé-y \({ }^{n}\)
[2SgSbj see-MP-PfvNegRel] see-MP.Pfv-1SgSbj
'I have seen what you-Sg have not seen.' (T7 @ 20:49)
Since the experiential perfect negative contains the same perfective negative suffix, its relative clauses are similar (410).
\begin{tabular}{llll} 
ndà: & nígé & LHbàlì-yè-tèy-ní & rì \\
person & elephant & see-MP-ExpPf-PfvNegRel & Def
\end{tabular}
'the person who has never seen an elephant'

\subsection*{14.4.4 Participles of negative imperfective-system and stative verbs}

In the imperfective negative, all relative clauses are based on the regular imperfective negative form with suffix -râ, rather than on agentive compounds. With the \{LH\} overlay, the verb stem is L-toned and the suffix is H-toned -rá. However, alternative pronunciations with the regular (non-relative) tones are also attested.
\begin{tabular}{|c|c|c|}
\hline a. yé: & kónjé & \({ }^{\text {LH}}\) jò:-rá-gè \\
\hline woman & beer & drink-IpfvNegRel-Pl \\
\hline \multicolumn{3}{|l|}{'the women who do not drink beer'} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline b. kónjé & ò & \({ }^{\text {LH }}\) ¢ò:-rá \\
\hline beer & 2 SgSbj & drink-IpfvNegRel \\
\hline e & hat yo & Sg don't drink \\
\hline
\end{tabular}

The progressive negative is illustrated in (412). It is indeterminate whether the already L-toned durative verb is included in the \(\{\mathrm{LH}\}\) overlay.
(412) yé: wàlè kànà: \({ }^{\text {n }}{ }^{\text {LHòrá }}\) rì woman work(n) do.Dur not.be.Rel Def 'the woman who is not working'

Example (413a) is based on a derived stative, (413b-e) on underived statives (non-aspect-marking with the partial exception of 'not know', §11.2.5.1).
a. yé: LHòwà-ná rì
woman sit.Stat-StatNegRel Def
'the woman who is not sitting'
b. ndà-yé: \({ }^{\text {LHòrá }}\) rì
woman not.be.Rel Def 'the woman who is absent (e.g. not here).'
c. ndà: jíwá \({ }^{\text {LH }}\) sà:-ná rì
person house have-StatNegRel Def
'the person who doesn't have a house'
d. ndà: \({ }^{\text {LH}}\) yè̀-ní rì
person know-PfvNegRel Def
'the person who doesn't know'
e. ndà: \({ }^{\text {LH }}\) cè-lá rì
person want-StatNegRel Def 'the person who doesn't want'

\subsection*{14.4.5 Participle of past-time forms}

The various past-time forms, with characteristic vowel \(\varepsilon\), can occur in relative clauses with the same morphophonology as nonpast forms, i.e. in most cases with \(\{\mathrm{LH}\}\) melody.
\begin{tabular}{llll} 
a. yé: \begin{tabular}{ll} 
é-yà & LH bě:
\end{tabular} & rì \\
woman there.Near.Dist & be.PastRel & Def \\
'the woman who was there (not far away)' &
\end{tabular}
b. ndà: jíwá \(\mathrm{LH}_{\text {sě: }}\) rì person house have.PastRel Def 'the person who had a house'

\subsection*{14.5 Relative clause involving verb- or VP-chain}

In relativized verb chains, the final verb is affected by the \(\{\mathrm{LH}\}\) overlay.
In (415a), a chain with a nonfinal verb in bare perfective form (§15.1) is followed by the fully inflected verb ('descend'). When this is converted into a relative clause, the nonfinal verb is unchanged, but the final verb has relative-clause form with \(\{\mathrm{LH}\}\) overlay. The proclitic pronominal subject ( 3 Sg nà, 1 Sg mì) often precedes (415b) but may follow the nonfinal verb (§15.1.2).
a. dùmbè sígé-ỳ \({ }^{n}\)
fall.Pfv descend.Pfv-1SgSbj
'I fell down.'
b. déw \({ }^{\mathrm{nH}}\) nà / mì̀ dùmbè \({ }^{\mathrm{LH}}\) sìgé rì
day \(3 \mathrm{SgSbj} / 1 \mathrm{SgSbj}\) fall.Pfv descend.PfvRel Def 'the day when he/I fell down'

In (416a), the nonfinal verb has the same perfective form as before, but the final verb is imperfective. The relative-clause version is (416b).
a. ná: dònè sógó-wò-y \({ }^{n}\)
cow buy.Pfv bring-Ipfv-1SgSbj
'I will buy and bring a cow.'

cow day 1 SgSbj buy.Pfv bring-IpfvRel Def 'the day when I will buy and bring a cow'

An alternative analysis is that the \(\{\mathrm{LH}\}\) overlay is applied to both verbs, not just to the second, at least when they are adjacent. In this reanalysis, (416b) would be marked up with \({ }^{\text {LH }}\) [dònè sògò-wá]. Since the first verb is L-toned anyway, there is no way to prove or disprove this bracketing.

\subsection*{14.6 Late-NP elements that follow the verb (or verbal participle)}

\subsection*{14.6.1 Determiners (demonstrative and definite)}

Undetermined (indefinite) relative clauses are fine, either introducing a specific referent into the discourse or describing a nonspecific type (e.g., 'I'm looking for a person who has a cart').

Most relative clauses in natural speech are probably definite. Definite rì occurs in the majority of examples of relative clauses in this chapter. It follows the verb (and plural -gè if present) and does not affect the morphology or tones of the verb. Another example of a definite relative clause is (417).
```

(417) ndà-báná ò LHbàlá rì
man 2SgSbj see.StatRel Def
'the man who(m) you-sg see'

```

In (418a), the all-purpose demonstrative mbó replaces definite rì. The structure is the same, but since mbó is H-toned the final H-tone on the verb 'see' is dropped by tone sandhi. Marked demonstratives like yá-wò rì (far distant), which include the definite morpheme, can also occur in this construction (418b-c). The forms of the relativeclause verbs without the demonstrative are given in parentheses after the free translation.
\begin{tabular}{llll} 
a. ndà-báná & ò & LH bàlà & mbó \\
man & 2SgSbj & see.StatRel & Dem \\
& 'that man who(m) you-Sg see' (< ballá \()\)
\end{tabular}
b. yé: nà:ygè jà:m \(\quad{ }^{\text {LH}}\) bò: yá-wò rì
woman meal eat.meal.Dur ProgRel FarDist Def 'that woman over there who is eating (a meal)' (< bǒ:)
c. yé: \({ }^{\text {LH}}{ }_{\text {ìgà }}\) yá-wò rì
woman stand.StatRel FarDist Def 'that woman who is standing' (< ìgá)

\subsection*{14.6.2 Plural (-gè)}

When the head NP is plural, plural -gè is suffixed to the verb-participle. -gè is also optionally present in the final word of the internal head NP, and may also occur in nonfinal words; see examples in §14.2.1 above.

\subsection*{14.6.3 Non-numeral quantifiers ('all')}
címà 'all’ (Boui) occurs in its usual final position within the NP, following the definite morpheme and itself being followed only by accusative gì (or by postpositions).

\begin{tabular}{llllll} 
b. & [yé: & mó-yà & yógó-wò-gé & rì & címà \\
[woman & here & come-IpfvRel-Pl & Def & all & Acc] \\
[ť̀:měn & nì:ngà-nì:ngá] & ndà: & & & \\
[hundred & two-two] & give.Imprt & &
\end{tabular}
'Give-2Sg two hundred (currency units) to each woman who comes here.' (Boui)

\subsection*{14.6.4 gí after capacitative participle}

An obscure clause-final element gí is attested after L-toned subject relatives of either ímá ‘be capable’ or derived capacitative verbs ( \(\$ 10.5 .1\) ). It appears to make the relative construction predicative. The textual example is (420a). Follow-up elicitation produced (420b) with plural -gè, where clause-final gí is optional and its absence apparently does not affect the tones of the participle.
a. ò-gí \({ }^{\text {L }}\) bàrò̀-mà
gí
2Sg-Acc help-CapacRel ??
'He is one who can help you-Sg.' (T7 @ 21:43)
\(\begin{array}{lll}\text { b. ò-gí } & \text { Lbàrò-mà-gè } & \text { (gí) } \\ \text { 2Sg-Acc } & \text { help-CapacRel-Pl } & \text { (??) }\end{array}\)
'They are ones who can help you-Sg.'
The function of gí is difficult to determine from these sparse data.

\subsection*{14.7 Grammatical relation of relativized-on NP}

\subsection*{14.7.1 Subject relative clause}

Further examples of subject relatives are in (421). \(\{\mathrm{LH}\}\) is absent for imperfectives.
(421)

b. bé: dú:rú-yó-wò rì child run-MP-IpfvRel Def 'the child who will run'
c. [bé-gé árí-gé \(=w^{n}\) ] \({ }^{\text {LH}}\) tìwè-sà-gé rì
[child-Pl which-Pl=Foc] die.Pfv-ResltRel-Pl Def 'the child who has died'
d. á:gá bé: yógó-wò rì tomorrow child run-IpfvRel Def 'the child who will run tomorrow'

\subsection*{14.7.2 Object relative clause}

Further examples of object relatives are in (422).
a. à:màdù ná: \({ }^{\text {LH}}\) tùlé rì
Amadou cow sell.PfvRel Def 'the cow that Amadou sold' (< à:màdú)
b. ná:-gé ò rè tùlè-gé rì
cow-Pl 2SgSbj sell.PfvRel-Pl Def 'the cows that you-Sg sold'
c. ná: ò-gí nì \({ }^{\text {LH}}\) tùlé rì
cow 2Sg-Acc 1PlSbj sell.PfvRel Def 'the cow that we sold to you-Sg'
d. à:màdù bé: \({ }^{\mathrm{LH}}\) sògé rì

Amadou child bring.PfvRel Def 'the child whom Amadou brought'
\begin{tabular}{lllll} 
e. ámbá & túló-wà & mì & LHyò̀̀-wá & rì \\
sheep & sell-VblN & 1SgSbj & look.for-IpfvRel & Def \\
& 'the sheep that I seek to sell'
\end{tabular}
f. á:gá ámbá mì \({ }^{\text {LHtùl̀̀-wá rì }}\) tomorrow sheep 1 SgSbj sell-IpfvRel Def 'the sheep-Sg that I will sell tomorrow'

\subsection*{14.7.3 Possessor relative clause}

Attempts to elicit possessor relatives from the Boui speaker resulted in a construction with tìngà '(the) fellow' or '(the) owner (of sth)', whose \(\{\mathrm{LH}\}\) melody is that of a possessed noun. tìngà elsewhere denotes a contextually established but nonspecific individual (cf. the guy or French l'intéressé). (423a) literally means '(where is) the owner of [(the) place (where) the house fell]?'. Likewise, (423b) is literally 'the owner of [(the) child who died]'.
(423)

b.
\begin{tabular}{lccl}
{\([\) bé: } & \({ }^{\text {LH }}\) tìwè-sá] & \({ }^{\text {LH }}\) tìngá
\end{tabular}\(\quad\) (rì)

The older Ningo speaker produced a purer possessor relative. The possessor in (424a-b) is 'person'. It does not control the usual \(\{\mathrm{LH}\}\) overlay on the possessed noun, showing that the possessor and the possessed noun are tonosyntactically separated in this construction.
\(\begin{array}{llll}\text { a. } & \text { ndà: } \quad \text { bé: } & \text { LHtìbè-sá } & \text { rì } \\ \text { person child } & \text { die-ResltRel } & \text { Def } \\ & \text { 'the person whose child died' } & \end{array}\)
b. ndà: ùnà LHùnì-sá rì
person goat go-ResltRel Def 'the person whose goat went away'

\subsection*{14.7.4 Relativization on the complement of a postposition}

Example (425a) contains a purposive PP. In the relative version (425b), the purposive postposition is added to the head noun 'honey' plus árí 'which'.
a. [í:gé dàgá] yògè-s-â:
[honey for] come-Reslt-3PISbj
'They have come for honey.'
b. [[bé-gè rì] [[í:gé árí] dàgá] \({ }^{\text {LH }}\) yògè-sá \(]\)
[[child-Pl Def] [[honey which] Purp] come-Resit]
àná \(\quad{ }^{\text {LH}}\) bǒ:
where? be.Rel
'Where is the honey that the children came for?'

Attempts to elicit other postpositional-complement relatives resulted in alternative constructions without a postposition. (426a) contains a focalized instrumental PP ('with that knife'). One relative-clause version that was elicited, (426b), is literally either 'the knife of (the way) I cut-Past the meat' (possessor of a headless relative), or more awkwardly 'the knife of [(the) meat that I cut]'. A second relative-clause version (426c) omits the postposition, and is literally 'the knife (that) I cut the meat'.
a. [[tànà mbó] yà] [námà rì] \({ }^{\text {LH}}\) tęl è- \({ }^{\text {n }}\)
[[knife Dem] Inst] [meat Def] cut.Pfv-1SgSbj
'I cut-Past the meat with that knife [focus].' (námá)
\(\begin{array}{lllll}\text { b. } & {[\text { námá }} & \text { mì } & \left.{ }^{\text {LHt }} \text { tèĺ́ }\right] & { }^{\text {LHtàná }} \\ \text { [meat } & 1 \mathrm{SgSbj} & \text { cut.PfvRel] } & \text { knife } & \text { Def }\end{array}\)
'the knife with which I cut-Past (the) meat.' (tànà)
c. tànà námá mì \({ }^{\text {LHtèlé }}\) rì
knife meat 1 SgSbj cut.Pfv Def
'the knife with which I cut-Past (the) meat'
(427a) contains a focalized locative PP. Relative versions (427bc) omit the locative postposition. (427b) features the noun 'place' perhaps as head, but vaguely appositional to 'hole' though the two are not adjacent.
a. [bóndó yà] \({ }^{\text {LH}}\) dùmbè- ýn \(^{\text {n }}\)
[hole Loc] fall.Pfv-1SgSbj
'I fell in(to) a pit [focus].'
b. bóndó [ndǎ: rì] jéĺ́ dùmbè \({ }^{L^{L}}\) sìgé rì hole [person Def] place fall.Pfv descend.PfvRel Def 'the hole where the person fell down'
c. bóndó [ndǎ: rì] dùmbè \({ }^{{ }^{L H}}\) sìgé rì hole [person Def] fall.Pfv descend.PfvRel Def 'the hole (that) the person fell down (in)'

\subsection*{14.8 Relative clauses as quasi-main clauses}

In narratives and other extended discourses, clauses in the form of headless relative clauses are common where we might expect main clauses. For example, text 5 consists largely of headless relatives.

The diagnostics for this are \(\{\mathrm{LH}\}\) tones on the verb, preverbal rather than suffixed subject pronominals (observable for 1 Sg , \(2 \mathrm{Sg}, 3 \mathrm{Sg}\), and 3 Pl ), and for imperfectives the suffix -wá ~ -bá replacing. -wò ~ -bò. In natural discourse, which is only roughly approximated by my dictated texts, it is likely that these headless relatives are regularly followed by a final main clause in regular form.

\section*{15 Verb (VP) chaining and adverbial clauses}

\subsection*{15.1 Bare perfective verb in verb-verb chains}

In this construction, two verbs denote co-events that combine to express a single complex event, rather than two chronologically sequenced events. The nonfinal verb has a fixed form: \(\mathrm{E} / \mathrm{I}\)-stem with \(\{\mathrm{L}\}\) melody. This is identical to the 3 Sg subject form of the simple perfective stem. It is glossed ".Pfv" without pronominal marking.

The constructions differ in the morphology and tones of the second verb.

\subsection*{15.1.1 Bare perfective plus a regularly conjugated verb}

In this version, the final verb may be in any indicative inflectional category. The complex event may have occurred in the past or may be in the future. The two verbs are adjacent (except for an intervening 1 Pl or 2 Pl subject marker) in the examples in my data. Overall this construction is close to the compound-like direct chain pattern of other Dogon languages. The two chained verbs are bolded in interlinears.
a. dùmbè sígé-ỳ \({ }^{\mathrm{n}}\)
fall.Pfv descend.Pfv-1SgSbj
'I fell down.'
\(\begin{array}{llll}\text { b. } & \begin{array}{ll}\text { dùmbè } & \text { nì } \\ \text { fall.Pfv } & \text { 1PISbj } \\ & \text { 'We will fall down.' }\end{array} & \begin{array}{l}\text { sígó-wò } \\ \text { descend-Ipfv }\end{array} \\ & \end{array}\)
c. [sàtàlé rì] yá: tèy ̀ dìyè-ýn
[kettle Def] there set.down.Pfv leave.Pfv- 1 SgSbj
'I put the water kettle down there and left it.' (< sàtàlè)
d. bí:má nì:ndè nì sìnì
visitor accompany.Pfv 1PlSbj convey.Pfv
'We accompanied the visitor back (home)' (Ningo)
e. bí:má nì:ndè \({ }^{\text {Lìnììyè }}\)
visitor accompany.Pfv convey.Pfv-3PlSbj
'They accompanied the visitor back (home)' (Ningo)
f. ágá bí:má nì:ndè nì sím-bò tomorrow visitor accompany.Pfv 1 PlSbj convey-Ipfv 'Tomorrow we will accompany the visitor back (home).' (Ningo)
g. pángá dènè nì ndè:
granary take.out.ration.Pfv 1PlSbj give.Pfv
'We took a daily ration (of grain) from the granary and gave it.' (Ningo)
h. pángá dènè \({ }^{\text {Lndìy-yè }}\)
granary take.out.ration.Pfv give.Pfv-3PlSbj
'They took a daily ration from the granary and gave it.' (Ningo)
i. ágá pángá dènè nì ndó-bò tomorrow granary take.out.ration.Pfv 1PlSbj give-Ipfv 'Tomorrow we will take a daily ration from the granary and give it.' (Ningo)

The second verb can be negated. The first clause is included in the scope of negation (429).
```

(429) dùmbè sígó-rà-y }\mp@subsup{}{}{\textrm{n}
fall.Pfv descend-IpfvNeg-1SgSbj
'I didn't fall down.'

```

The second verb can be put into verbal noun form, again including the first clause in its scope.
\begin{tabular}{ll} 
dùmbè & sígó-wà \\
fall.Pfv & descend.VblN
\end{tabular}
'(the fact of) falling down'

For chains of this type involving reversives followed by intransitive gó: 'exit (v)' or transitive gó-m(ú), see the end of §9.1.

\subsection*{15.1.2 Bare perfective plus relative-like second verb}

In this version, the bare perfective first verb is as in the version described above. The second verb (bolded in interlinears) takes the form it would have in a perfective positive relative clause, with \(\{\mathrm{LH}\}\) tone overlay. Pronominal subjects are expressed as proclitics as in relative clauses. The events denoted by the two verbs are closely connected but chronologically sequenced.
\begin{tabular}{|c|c|c|}
\hline a. sìnì & kè & \({ }^{\text {LH }}\) bè \\
\hline convey.Pfv & 3 PlSbj & bury.Pfv \\
\hline \multicolumn{3}{|l|}{'They took (the body) and buried (it).' (T1 (521))} \\
\hline
\end{tabular}
\begin{tabular}{llll} 
b. tèbù-dúbà & àbè & nà & \({ }^{\text {LH }}\) sàyé \\
vulture & receive.Pfv & 3 SgSbj & reply.Pfv \\
'Vulture then spoke up.' \((\mathrm{T} 1(524))\) &
\end{tabular}
c. mí: tèlè nì \({ }^{\text {LH}}\) tàngé
water cut.Pfv 1 PlSbj cross.PfvRel
'We crossed the water (=river).' (T4, (548))
It is also possible to place the pronominal subject proclitic before the first verb, making the two verbs look even more like a compound (432), cf. (415b) above.
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
[kàmpálá \\
[Kampala
\end{tabular} & \begin{tabular}{l}
\({ }^{\text {LH }}\) dò:ndè-gé \\
bundle-Pl
\end{tabular} & \begin{tabular}{l}
nì:ngà \\
two
\end{tabular} & \begin{tabular}{l}
LHèndìgó] \\
indigo]
\end{tabular} \\
\hline kè & kàmì \(\quad{ }^{\text {LH }}\) S & \multicolumn{2}{|c|}{\({ }^{\text {LH }}\) Sìní} \\
\hline 3 PlSbj & steal.Pfv tak & \multicolumn{2}{|l|}{take.away.PfvRel} \\
\hline \multicolumn{4}{|l|}{'They stole and took away two bundles of indigo (fabric) from Kampala (city).' (T5, (564))} \\
\hline
\end{tabular}
15.1.3 gíró 'get' in the sense 'successfully complete VPing'

In some textual passages a perfective form of gírś 'get, obtain, acquire' combines in the sense '(successfully) complete VPing' or 'manage to VP' with a preceding perfective verb or VP. See textual examples (543-544) and T7 @ 18:27.

\subsection*{15.2 Temporal adverbial clauses}

\subsection*{15.2.1 Adverbial clauses expressing temporal overlap}

\subsection*{15.2.1.1 Noun-headed temporal relative clause ('day/time when ...')}

Temporal relative clauses are nonsubject relatives headed by a noun like 'day' or 'time'.
(433) wákátí / dèw \({ }^{\text {n }}\) mì \({ }^{\text {LH }}\) dùmbé rì time / day 1 SgSbj fall.Pfv Def
'(at) the time / (on) the day (when) I fell'

Except for 'day' (see below) there is no postposition for the relative construction as a whole, since temporal adverbs are not marked as locative. Other than this, the temporal adverbial relative construction is similar to the corresponding spatial construction (§15.3.1).

When 'day' is the head, it may be expressed by dè \({ }^{\mathrm{n}} \sim\) dé \(\mathrm{w}^{\mathrm{nH}}\) or variant dèn(î) \({ }^{\mathrm{L}}\) as internal head (§14.2.7), by postverbal suppletive "echo" \({ }^{\text {LH }}\) nàngá, or both. The tones of \({ }^{\mathrm{LH}}\) nàngá are compatible with \(\{\mathrm{LH}\}\) possessum overlay. However, \({ }^{\text {LH }}\) nàngá could also be analysed as a specialized postposition (§14.2.6). In (434), dé \({ }^{\mathrm{nH}}\) assimilates to dén \({ }^{\mathrm{H}}\) before n .
a. dén \({ }^{H}\) nà LHyògé \({ }^{\text {LH nàngá }}\)
b. dén \({ }^{\mathrm{H}}\) nà yògé
c. Ø nà LHyògé \({ }^{\text {LH}}\) nàygá
day 3 SgSbj come.Pfv on.day
'(on) the day when he/she came, ...' (Ningo)
\({ }^{\text {LH }}\) nàngá can also be added to an NP with 'day' and a modifier other than a relative clause, specifying a particular day.
\begin{tabular}{llll} 
a. \begin{tabular}{lll} 
dèn \({ }^{\mathrm{L}}\) & díló & \(\left(\right.\) dén \(\left.{ }^{\mathrm{H}}\right)\) \\
day first & (day) & \begin{tabular}{l} 
LHàngá \\
on.day
\end{tabular} \\
& (on) the first day'
\end{tabular} &
\end{tabular}
b. yà:gù \({ }^{\mathrm{L}}\) díló (dén \({ }^{\mathrm{H}}\) LH nàygá night first (day) on.day '(on) the first night'

\subsection*{15.2.1.2 Same-subject -wn 'while' with L-toned A/O-stem}

In (436), the clause with \(-w^{n}(\sim-\eta)\) denotes a continuous same-subject activity that overlapped with the main-clause eventuality. This \(-w^{n}\) is glossed 'while' in interlinears. It is added to an \(\{\mathrm{L}\}\)-toned A/O-stem. It resembles in form and function the durative stem, but the durative lengthens the final vowel ( \(\S 10.2 .2 .3\) ). It is not preceded by a subject NP or pronominal. If the clause that follows the 'while' clause is brief (e.g. just a verb), it is usually in defocalized \{LH\}-toned form when it is prosodically phrased tightly with the 'while' clause.
a. [yèwù \({ }^{L}\) yèwà-w \({ }^{n}\) ] \({ }^{\text {LH }}\) nàyè- y \(^{n}\)
[dance(n) dance(v)-while] spend.night.Pfv-1SgSbj
'I spent the night dancing.' ('I danced all night.')
b. [té: \({ }^{\mathrm{L}}\) sàggà-w \(\left.{ }^{\mathrm{n}}\right] \quad{ }^{\text {LH }}\) dènè-wó-Ø
[tea put.up.on-while] spend.midday-Ipfv-3SgSbj
'He/She will spend the mid-day making tea (on a burner).'
c. \({ }^{\mathrm{L}}\) dù:rù-yò-w \({ }^{\mathrm{n}} \quad{ }^{\text {LH }}\) nǔy-yè
run-MP-while enter.Pfv-3PISbj
'They ran in.' (lit. "They went in running.")
Other textual examples of same-subject - \(\grave{\mathrm{w}}^{\mathrm{n}}\) (not involving resultative -sà-) are T7 @ \(00: 35,08: 29,08: 42,09: 02,09: 34,10: 20,15: 28\), and 18:17. All but 08:29 and 08:42 involve - \(\grave{\mathrm{w}}^{\mathrm{n}}\) followed by a conjugated auxiliary ('do', 'be', ‘have').

\subsection*{15.2.1.3 Disjoint-subject - \(\grave{w}^{n}\) 'while’ with \(\{\mathrm{LH}\} \mathrm{A} / \mathrm{O}\) or stative}

In the examples in the preceding subsection, the subjects of the two clauses are the same. The 'while' clause has no overt subject of its own, whereas the following main clause has normal pronominal-subject marking.

If however the subjects are disjoint, the 'while' clause must have an overt subject. A pronominal subject takes the form of a preverbal proclitic pronoun, like 3 Sg nà in (437). The verb has \(\{\mathrm{LH}\}\) tone overlaid on either a stative stem (437) or an A/O-stem (imperfective) with lengthened final vowel before - \(\grave{\mathrm{w}}^{\mathrm{n}}\).
\begin{tabular}{|c|c|c|c|c|c|}
\hline níná & [nà & \({ }^{\text {LH }}\) nòyá:- \({ }_{\text {w }}{ }^{\text {n }}\) ] & [wàlè & nì & \({ }^{\text {LH}}\) kàní] \\
\hline yesterday & [3SgSbj & sleep.Stat-while] & [work(n) & 1PlSbj & do.PfvRel] \\
\hline \multicolumn{6}{|l|}{'Yesterday we worked while he/she was sleeping.'} \\
\hline
\end{tabular}

See also (564), (569), and T7 @ 16:50.
The disjoint-subject form of the 'while' construction also occurs in complements of direct perception verbs, as in 'we saw Seydou come'. See §17.2.2.1 for discussion and examples (478a-d),
15.2.1.4 hăl jè: yá 'from the time when ... (until ...)

A construction emphasizing extended duration of an eventuality, begins with hǎl jè: yá, literally, based on hàlí 'until' (or 'eventually'), the perfective of jó: 'pick up', and same-subject anterior yá (§15.2.2.3). This is followed by a 'before ...' clause (§15.2.3.2), which is here better translated freely as '(all the way) until ...'. The construction as a whole is emphatically durative, and serves as background for another event that will not occur until the entire time interval is completed.

Examples are in (541) and (543) in T3, which are both of the general type 'you won't leave (=stop pursuing/fighting) him, from the beginning until you have
caught/defeated him'. (541) is modified here as (438) by varying the subject pronominals.
```

(438) [hǎl jè: yá]
[until take.Pfv and.Nonpast.SS]
[[nà-gí mì / nì / kè LHìmì-y-ó:] gì],
[[3Sg-Acc 1SgSbj/1PlSbj/3PlSbj defeat-MP-before] Loc]
nà-gì Ø díyó-rà-yn/-r-à:
nà-gí nì diyò-rá
3Sg-Acc (1PISbj) leave-IpfvNeg(-1SgSbj/-3PlSbj)
'From the beginning until the time when I/we/they have defeated him, I/we/they will not leave him alone (=stop fighting him).' (Ningo)

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\subsection*{15.2.1.5 'Since ...‘ clauses (tòr̀̀)}
tòrò 'since' is added to a usually headless perfective relative (supply 'time' as the covert head). Since a relative is syntactically an NP, tòrò could be classified as a specialized postposition. For other senses of tòrò see §4.4.2.2 and §8.4.1.
a. [[mó-yà mì LHyògé \(]\) t̀̀rò \(]\)
[[here 1 SgSbj come.PfvRel] since]
[nà:ngè ná:-ní-y \({ }^{\mathrm{n}}\) ]
[meal eat.meal-PfvNeg-1SgSbj]
'I haven't eaten a meal since (the time when) I got here.'


\subsection*{15.2.1.6 Durative background clauses (...í:-nì 'keep being', etc.)}

Quasi-verbs bò ~ wò 'be (somewhere)' (§11.2.2.2) and sâ: 'have' (§11.5.1), along with nonstative (i.e. aspect-marking) mediopassive óbí-yó 'sit down', have unconjugated variant forms bíi:-nì '(keep) being', sí:-nì '(keep) having', and òbí:-nì '(keep) sitting' that occur as a durative ("-Dur") background construction. bí:-nì may be more closely related to bí-yó 'remain' than to bò ~ wò, but the three form a wordfamily. Subjects of. bí:-nì etc. are expressed as preverbal proclitics. These forms are attested for the Ningo dialect.

Examples from T7 are bò: ò bí:-nì ‘you-Sg keep being like that' @ 00:26, [dànì-yè ná] kè sí:-nì 'they keep holding (them)' @ 07:30, and દ́-rò nì òbíi-nì 'we remain sitting (=living) like that' @ 11:36. The final verb in ...í:-nì is preceded by a subordinated clause/VP ('while', durative, nonpast) or adverb ('thus') that is compatible with duration, plus a proclitic subject pronoun. sí:-nì combines with transitive verbs, bí:-nì with intransitives, and òbíi:-nì with both.

The Ningo speaker also produced yògí-nì 'keep coming' from yógé 'come', and dùrù-yí-nì 'keep running' from dúrú-yó 'run'. These data show that motion verbs are eligible for this construction. However, most verbs do not allow direct suffixation of -nì. Instead, a high-frequency form like bí:-nì is added to a subordinated clause or phrase containing the relevant verb. In (440), this is the same-subject clause with yá (§15.2.2.3). See also the following subsection.
\begin{tabular}{lllll} 
(440) & {\([\) [ù̀bè } & ná \(]\) & ò & bí:-nì \\
& [persist.Pfv & and.Nonpast.SS] & 2SgSbj & be-Dur \\
& 'You-Sg continue to visit (them).' (T7 @ 00:30) &
\end{tabular}

Since bí-ý 'remain' and sí-yó 'keep (having)' occur as aspect-marking forms of 'be' and 'have', respectively, it is likely that bí:-nì and síi-nì should bealysed as syncopated from /bì-yí-nì/ and /sì-yí-nì/, parallel to òbí:-ni < /òbì-yí-nì/ for 'sit'. Further evidence for this is that the Ningo speaker gave bí-yó-rà as the negation of bí:nì. Forms like yògí-nì and dùrù-yí-nì show that the tone overlay on the stem before -nì is \(\{\mathrm{L} * \mathrm{H}\}\) with only the final syllable H -toned. This suggests that the tone of the first syllable in e.g. bí:-nì has been leveled from \(<\mathrm{LH}>\) to H .

\subsection*{15.2.1.7 Durative stem in à: \({ }^{n} / \mathbf{o}:^{n}\) before bíi:-nì 'continue VPing'}

This construction uses the durative stem of the verb, an L-toned A/O-stem with final vowel lengthened and nasalized. It is closely related to the 'while' form in - \(\grave{w}^{\mathrm{n}}\) (§15.2.1.2) and the two may be identical for some speakers. For bí:-nì see the preceding subsection. Data are from Ningo.
\begin{tabular}{lll} 
a. \begin{tabular}{ll} 
kùbà:
\end{tabular} nà \(\quad\) bí:-nì \\
cultivate.Dur & 3SgSbj & be-Dur \\
& 'He continued to cultivate (=work in the fields).'
\end{tabular}
b. nà: \({ }^{\text {n }}\) kè bí:-nì
eat.Dur 3PISbj be-Dur
'They continued to eat.'
c. bò: \({ }^{\text {n }}\) ò bíi:-nì
be.Dur 2 SgSbj be-Dur
'You-Sg keep being like that.' (T7 @ 00:20)
d. gò: \({ }^{\text {n }}\) nà bí:-nì
exit.Dur 3 SgSbj be-Dur
'He/She keeps going out.'
e. sì-yò: \({ }^{\text {n }}\) kè bí:-nì
have-MP.Dur 3PISbj be-Dur
‘They keep (doing that).' (T7 @ 07:57)

The durative stem ending in à: \({ }^{1} /{ }^{:}{ }^{n}\) also occurs in the progressive construction with bǒ: 'be’ (§10.2.2.3). The durative should not be confused with H-toned purposive stems with final á ~ á:, used in combination with motion verbs (§17.5.2).

A past-time version with bí: \({ }^{\text {n }}\)-yè replacing bí:-nì is attested (442).
(442) yògè
wèlè-sà-w \({ }^{\text {n }}\)
bí: \({ }^{\text {n }}\)-yè
come.Pfv be.accustomed-Reslt-while be.Dur-Past
'He was accustomed to keep coming.' (T7 @ 21:25)
15.2.1.8 Pfv verb with \(\{\mathrm{LH}\}\) and nasalized \(\varepsilon^{n} / \hat{e}^{\mathrm{n}}\) before 'be tired'

In this construction, which emphasizes prolonged hard effort, the primary verb takes the form of an unconjugated perfective stem with \(\{\mathrm{LH}\}\) overlay and final nasalization. Data for Ningo.
a. \({ }^{L H} j \grave{j}\) l̂́ \({ }^{n}\) á:rí-yé-ỳ \({ }^{n}\), bálí-yá-ní-ỳn look.for.Pfv get.tired-MP.Pfv-1 SgSbj, see-MP-PfvNeg-1SgSbj 'I looked and looked (for them) to the point of exhaustion. (But) I didn't find (it/them).' (T6, (572))
b. \({ }^{\text {LH }}\) dùrù-yé \({ }^{\mathrm{n}}\) nì à:rì-yè run-MP.Pfv 1Pl get.tired-MP.Pfv
'We ran and ran to the point of exhaustion.'

\subsection*{15.2.1.9 Nonfinal verb with -ygà}

A form consisting of the \(\{\mathrm{H}\}\)-toned \(\mathrm{A} / \mathrm{O}\)-stem plus suffix - yg gà functions as an alternative same-subject 'while' subordinator in the textual excerpt (444).
(444) [ná là] gó:-ŋgà, [nà LHèmèngé] nǎ: èmè [3Sg too] exit(v)-while, [3SgPoss milk] 3SgSbj.Fut milk(v).Pfv 'Likewise as he goes out, he will draw his milk.' (Ningo, T7 @ 13:08)

Follow-up elicitation produced nwá:-ŋgà 'entering', únó-ŋgà 'going', kúbá-ŋgà 'cultivating’, ná:-ŋgà ‘eating’, and bíní-yó-ŋgà 'going back’.

\subsection*{15.2.2 Adverbial clauses expressing chronological sequences}

\subsection*{15.2.2.1 Perfective clause sequences (same or different subject, anterior)}

In this construction, two independently conjugated perfective clauses are juxtaposed. The subjects may be the same (445c) or different (445a-b). The final verb in the first clause has \(\{\mathrm{LH}\}\) tones. The two events are chronologically sequenced.
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{} & ìgì kílé & \({ }^{\text {LH }}\) ndě:--Ø] & úní-ỳ \({ }^{\text {n }}\) \\
\hline & [1Sg-Acc key & give.Pfv-3SgSbj] & go.Pfv-1 SgSbj \\
\hline \multicolumn{4}{|c|}{'He gave me the key and I left.' (Boui)} \\
\hline
\end{tabular}
b. [nà:!ggè \({ }^{\text {LH }}\) sòg-ìyé] [nì nè:]
[meal bring.Pfv-3PISbj] [1P1Sbj eat.meal.Pfv]
'They brought a meal and we ate.' (Boui)
c. [nà:ygè nì \({ }^{\text {LH }}\) sògé] [nì nè:
[meal 1PlSbj bring.PfvRel] [1PlSbj eat.meal.Pfv]
'We brought a meal and we ate.' (Boui)
This is distinct from the common construction with bare (i.e., unconjugated) perfective verb plus a conjugated verb (not necessarily perfective (§15.1).

\subsection*{15.2.2.2 Nonfinal verb with -sà-w \({ }^{n}\) (past, same-subject, anterior)}

In this construction, - sà \(-\mathrm{w}^{\mathrm{n}}\) is added to the nonfinal verb, which is the \(\{\mathrm{L}\}\)-toned E/I-stem and does not mark pronominal-subject category. I parse the suffix complex as resultative -sà- (§10.2.1.5) plus -w 'while' (§15.2.1.2). The final verb is perfective and has regular pronominal-subject inflection. It has \(\{\mathrm{LH}\}\) overlay (as with defocalized verbs) when it is prosodically phrased with the nonfinal verb.

The two clauses denote same-subject ("SS"), chronologically sequenced events in the past. The two verbs need not be adjacent; the final verb may be preceded by constituents belonging uniquely to its clause, like 'to Bamako' (446b).
\begin{tabular}{llll} 
a. & níná & ùnì-sà-w & n \\
& yesterday & go-Reslt-while.SS & nì \\
& 1PlSbj & LHyògé \\
'Yesterday & we went and came (back).' &
\end{tabular}
b. [nà:ygè nè:-sà-w \(\left.{ }^{\mathrm{n}}\right]\) [[bòmòkó yà] ùn-íyè [meal eat-Reslt-while.SS] [[Bamako Loc] go.Pfv-3PISbj 'They ate (a meal) and then went to Bamako.'
\(\left.\begin{array}{lll}\text { c. } & {\left[\begin{array}{ll}{[\text { cè }} & \text { címà }\end{array}\right]} & \text { màggè-sà-w }{ }^{\mathrm{n}}\end{array}\right] \quad\)\begin{tabular}{l} 
ùn-íyè \\
{\(\left[\begin{array}{ll}{[3 \mathrm{Pl}} & \text { all }]\end{array}\right.\)} \\
\begin{tabular}{l} 
unite-Reslt-while.SS \(]\)
\end{tabular} \\
'They got together and went.'
\end{tabular}

Textual examples are in (522) and (569) and in T7 @ 02:37, 04:55, 06:02, 11:20, 11:52, 11:34, 12:22, 12:51, 14:29, 17:03, 18:27, 19:23, 20:33, 21:01, and 21:25. The verbs to which -sà- \(\mathrm{w}^{\mathrm{n}}\) is added in these examples are 'come', 'take' (in the temporal sense 'starting from'), 'talk, speak', 'do', 'look at', 'block (dam up)', 'bear (fruit)', 'assemble', 'bring', and 'be accustomed'.

For similar constructions involving future rather than past time, see the following section.

\subsection*{15.2.2.3 Nonfinal verb with ŋá (nonpast, same-subject, anterior)}

This construction replaces that with -sà- \(w^{n}\) when the sequenced events have not yet occurred. The nonfinal verb is in \(\{\mathrm{L}\}\)-toned \(\mathrm{E} / \mathrm{I}\)-stem and has no pronominal-subject inflection. The final clause contains an imperfective or deontic modal (e.g. imperative) verb. If indicative, the verb may have the \(\{\mathrm{LH}\}\) (defocalized) overlay (447a).
(447)
\begin{tabular}{|c|c|c|}
\hline a. [ùnì & 11] & \({ }^{\text {LH }}\) yògò-wò- \({ }^{\text {n }}\) \\
\hline [go.Pfv & and.Nonpast.SS] & come-Ipfv-1SgSbj \\
\hline 'I will go & and come (back).' & \\
\hline
\end{tabular}

c. [[námà rì] tèmè yá] ùnù
[[meat Def] eat.meat.Pfv and.Nonpast.SS] go.Imprt
'Eat some meat and then go!' (námá)

Especially common is the phrase hǎl j \(\mathfrak{c}:\) ŋá, literally 'until taking (picking up)', in the temporal sense 'from then (until ...)'. Among several textual examples see (541), (543), and T7 @ 00:30.

One might take ŋá to be the locative postposition ŋà, but the ŋá construction occurs in Ningo as well as in Boui dialects, though yà as locative postposition does not occur in Ningo.

\subsection*{15.2.2.4 'Worked until got tired' = 'worked for a very long time'}

In the version of this construction elicited from the Boui speaker, both clauses have the \(\{\mathrm{LH}\}\) overlay on a perfective verb, and both clauses have preverbal proclitic pronouns instead of suffixes (for \(1 \mathrm{Sg}, 2 \mathrm{Sg}\), and 3 Pl subjects). hàlí 'until, to the point that' occurs at the beginning of the second clause.
\begin{tabular}{|c|c|c|c|c|c|}
\hline [wàlè & mì & \({ }^{\text {LH}}\) kàní] & [hàlí & mì & LHà:rì-yé] \\
\hline [ \(\operatorname{work}(\mathrm{n})\) & 1 SgSbj & do.Pfv] & [until & 1 SgSbj & get.tired-MP.Pfv] \\
\hline
\end{tabular} 'I worked until I got tired.' (= 'I worked to the point of exhaustion.')

The older Ningo speaker has a construction with prolonged final vowel on an unconjugated perfective verb followed by a regular inflected second verb. The subjects are coindexed and only the final clause is marked for subject. Except for the vocalic prolongation, which expresses duration, this is compatible with the regular bare-perfective construction (§15.1).
a. nòyé \(\rightarrow\)
à:rì-yè-Ø
sleep.Pfv get.tired-MP.Pfv-3SgSbj
'He/She slept a very long time.'
b. [wàlè kàní \(\rightarrow\) ] á:rí-yé-ỳ \({ }^{\mathrm{n}}\)
[work(n) do.Pfv] get.tired-MP.Pfv-1SgSbj
'I worked to the point of exhaustion.'

\subsection*{15.2.2.5 \(-\mathrm{y}^{\mathrm{n}}\) after LH-toned perfective verb}

In a single textual example, \(-\mathrm{y}^{\mathrm{n}}\) (not the 1 Sg subject suffix) follows an LH-toned perfective verb stem. The pronominal subject is expressed as a proclitic, as in relative clauses. In follow-up the speaker indicated that the context is perfective (the event has already occurred). The clause in question appears to be an add-on to a regular conditional antecedent ('if/when') with mè-nè. See ò jà:lé-ỳn in T7 @ 17:52.

The construction is possible with other verbs, as in the elicited (450), but its exact sense is elusive.
(450) [[ijiò gí] ò \({ }^{\text {LH }}\) ùní- \(\left.{ }^{\text {n }}\right]\) gìbà-nú gíré-ẁ
[[village Loc] 2SgSbj go.Pfv-when] host get.Pfv- 2 SgSbj
'Having gone to the village, you-Sg found a host (to lodge you).'

\subsection*{15.2.3 'Before ...’ clauses}

The combination of a main clause and a 'before' clause (§15.3.1 below), as in ' [before Y], X ', competes with anterior constructions ('X and then Y '), for example the future-oriented construction with ŋá (§15.2.2.3). (451a-b) illustrates how the construction with yá can express temporal priority.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{a.} & [nè: & 11] & [nì & \[
\begin{equation*}
{ }^{\text {LH}} \text { kùb-bó] } \tag{451}
\end{equation*}
\] \\
\hline & [eat.Pfv & and.Nonpast.SS] & [1PlSbj & cultivate-Ipfv] \\
\hline & \multicolumn{4}{|l|}{'We'll eat (first) then we'll cultivate (=do hoeing).'} \\
\hline & = 'We'll & eat before we culti & .' (Ningo) & \\
\hline
\end{tabular}
b. [nè
\({ }^{\text {LH }}\) kùb-bó-ỳ \({ }^{\text {n }}\)
[eat.Pfv and.Nonpast.SS]
cultivate-Ipfv-1SgSbj
'I'll eat (first) then I'll cultivate.'

The following subsections describe dedicated 'before ...' clauses.

\subsection*{15.2.3.1 'Before ...’ clause with jìmbá}
'Before ...' clauses elicited from the Boui speaker end in jìmbá. If the subject of the clause is pronominal, it is expressed as a proclitic subject pronoun immediately before jìmbá. This suggests that jìmbá behaves like an imperfective nonsubject relativeclause verb (suffix -wá). A reading along the lines of '(at the time when) X was about to VP' would be consistent with the form and the general sense. The most likely etymological source is the verb gún(ú) 'say'

The open-ended verb appears in the \(\mathrm{E} / \mathrm{I}\)-stem (i.e. in simple perfective form) with \(\{\mathrm{H}\}\)-tones, as with 'arrive' and 'eat' in (452a-c). Diachronically, the H-tone may have transferred from the subject pronominal to the preceding verb.
\begin{tabular}{|c|c|c|}
\hline a. [áyé & mì / nì & \({ }^{\text {LHj}}\) jìmbá] \\
\hline [arrive.Pfv & 1SgSbj / 1PlSbj & before] \\
\hline [[mì / nì & \({ }^{\text {LH }}\) nàlí] & ùnì-Ø] \\
\hline [[1SgPoss / 1 & lPoss friend] & go.Pfv-3SgSbj] \\
\hline 'Before I/we & rived, my/our fri & d (had) left.' \\
\hline
\end{tabular}


If the subject of the 'before ...' clause is nonpronominal, the open-ended verb takes a form homophonous with the 1 Sg simple perfective in \(-\mathrm{y}^{\mathrm{y}}\), though the subject is usually of a different pronominal category. It is unclear how to label this suffix.
(453)

'Let's go in before the rain comes (down).'
\(\begin{array}{llll}\text { b. } & {\left[\begin{array}{ll}{[b e ́-g e ̀ ~} & \text { rì }]\end{array}\right.} & \begin{array}{l}\text { yógé-ỳn } \\ \text { [child-Pl }\end{array} & \text { Def] }\end{array} \begin{aligned} & \text { come.Pfv-?? }\end{aligned}\)
'before the children come'

\subsection*{15.2.3.2 'Before ...' clause with -ó: gì}

For the older Ningo speaker, a 'before' clause has final -ó: on the verb followed by locative postposition gì (454). The 'before' clause is juxtaposed to an ordinary main clause. This construction is also used in 'until' clauses in narrative, of the type 'this went on (and on) until ...' (§15.2.1.4).
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{} & [á:mì & yòg-ó: & gì] & [nì & úm-bò] \\
\hline & [rain(n) & come-before & Loc] & [1PlSbj & go-Ipfv] \\
\hline & \multicolumn{5}{|l|}{'We'll go before the rain comes.'} \\
\hline \multirow[t]{3}{*}{b.} & [á:mì & yòg-ó: & gì] & úm-bò-y & \\
\hline & [rain(n) & come-before & Loc] & go-Ipfv-1 & gSbj \\
\hline & \multicolumn{5}{|l|}{'I'll go before the rain comes.'} \\
\hline
\end{tabular}

\subsection*{15.3 Spatial and manner adverbials}
15.3.1 Spatial adverbial relative clause ('where ...')

A transparent spatial adverbial relative clause 'at [the place where ...]' has jéĺ́ 'place' as head NP. For tonal variant jèl \(\grave{\varepsilon}^{L}\) see ( \(\S 14.2 .7\) ). The clause is normally followed by locative postposition yà (Boui dialect).
\begin{tabular}{|c|c|c|c|c|c|}
\hline (455) & [jélé & jà:\gè & nì & LHyò:-wá & rì] \\
\hline & [place & meal & 1 PlSbj & eat.meal-IpfvRel & Def] \\
\hline & \multicolumn{5}{|l|}{'at the place where we eat' (Boui)} \\
\hline
\end{tabular}

This construction is similar to temporal adverbial relative clauses (§15.2.1.1), but the temporal clauses normally do not take a locative (or other) postposition.

\subsection*{15.3.2 Manner adverbial clause ('how ...') (bání)}

The noun bání 'way, manner' is the head of a simple nonsubject relative in (456a). It is lexically \(/ \mathrm{H} /\)-toned but apparently drops to L-toned (§14.2.7) when it is immediately followed by an H-toned verbal noun (456b) or verb-participle. In (456a), bání is separated from the verb-participle by a pronominal-subject proclitic.
a. [àlìyá gì] bání ò \(\quad{ }^{\text {LH }}\) Sè:m-bá [pig Acc] manner 2 SgSbj slaughter-IpfvRel 'the way you-Sg slaughter a pig’ (sémó-)
b. [yá: bànì \({ }^{L}\) íló-wà] yé-ní-ỳ \({ }^{n}\) [there manner ascend-VblN] know-PfvNeg-1SgSbj 'I don't know how to go up there.'

\section*{16 Conditional constructions}

\subsection*{16.1 Hypothetical conditional with mè or mè-nè 'if'}

This is the standard if/then conditional. If the antecedent eventuality is a possible future event, it is expressed by a perfective (if time-bounded) or imperfective or stative verb, followed by mè 'if' (for Ningo usually mè-n \(\grave{\text { }}\) ). If the consequent denotes a resulting eventuality, it is expressed by a main clause with an imperfective verb. The consequent may also be a deontic 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. Data in this chapter are primarily from Boui.
a. yégé-m̀ mè, bàrmì kám-bò-w fall.Pfv-2SgSbj if, injury do-Ipfv-2SgSbj 'If you-Sg fall, you'll hurt yourself.' (< yégé-ẁ, bàr(ì)mí)
b. [bé-gè rì] mó-yà yógó-w-à: mè, [child-Pl Def] here come-Ipfv-3P1Sbj if, mì úm-bò-y \({ }^{\text {n }}\)
\(1 \mathrm{SgSbj} \quad\) go-Ipfv-1SgSbj
'If the children come here, I'll go.'
c. té: jó:-wò-m mè, úrúgú-yó-wò-w tea drink-Ipfv-2SgSbj if, be.sick-MP-Ipfv-2SgSbj
'If you-Sg drink (the) tea, you'll get sick.'
d. á:gá á:mí tègè-Ø mè,
tomorrow rain(n) rain.fall.Pfv-3SgSbj if,
[yálá yà] nì gó:-wò
[field Loc] 1PlSbj exit(v)-Ipfv
'If it rains tomorrow, we'll go to the field(s).'
e. érì kànì-yè-Ø mè, ...

Dem.Def do-MP.Pfv-3SgSbj if, ...
'if/when that (definite) has happened, ...' (i.e. 'after that, ...')
When the verb in the antecedent is perfective positive, the verb has its normal tones except that 3 Pl verbs are all-L-toned. ( 3 Sg perfectives are already L-toned.
(458) Perfective of 'fall'
\begin{tabular}{|c|c|c|}
\hline subject & regular & in 'if' clause \\
\hline 1Sg & yégés-y \({ }^{\text {n }}\) & yégé-m̀ mè \\
\hline 1 Pl & nì yègè & nì yègè mè \\
\hline 2Sg & yégé-ẁ & yégé-ẁ mè \\
\hline 2P1 & è yègè & è yègè mદ̀ \\
\hline 3Sg & yègè-Ø & yègè-Ø mè \\
\hline 3 Pl & yèg-1́yè & yèg-ìyè mè \\
\hline
\end{tabular}

For \(2 \mathrm{Sg}-\mathrm{w}\) assimilating to -m before \(\mathrm{m} \grave{\text { e }}\), see \(\S\) 3.4.3.1.
In the perfective negative, if the suffixal tone is falling it is raised slightly to (459), cf. §3.6.3.4. This affects \(1 \mathrm{Sg}, 2 \mathrm{Sg}\), and 3Pl.
(459) Perfective negative of 'fall'
\begin{tabular}{|c|c|c|}
\hline 1Sg & yégá-ní-y \({ }^{\text {n }}\) & yégá-ní- \({ }^{\text {n }}\) mè \\
\hline 1Pl & nì yègà̀-nì & nì yègà-nì mè \\
\hline 2 Sg & yégá-ní-ẁ & yégá-ní-m mè \\
\hline 2 Pl & è yègà-nì & è yègà-nì mè \\
\hline 3 Sg & yègà-nì-Ø & yègà-nì-Ø mè \\
\hline 3 Pl & yégà-nî: & yégà-ní: mè \\
\hline
\end{tabular}

The imperfective (positive) has no forms with final-syllable falling tone so there are no tonal changes before mè.

In the imperfective negative, if the suffixal tone is falling ( \(3 \mathrm{Sg}, 3 \mathrm{Pl}\) ) it is raised slightly to high (460).
(460) Imperfective negative of 'fall'
\begin{tabular}{|c|c|c|}
\hline 1Sg & yégó-rà-y \({ }^{\text {n }}\) & y ǵgó-rà- \({ }^{\text {n }}\) mè \\
\hline 1Pl & nì yègò-rá & nì yègò-rá mè \\
\hline 2 Sg & yégó-rà-ẁ & yégó-rà-m mè \\
\hline 2Pl & è yègò-rá & è yègò-rá mè \\
\hline 3 Sg & y ́gó-râ-Ø & yégó-rá-Ø mè \\
\hline 3Pl & yégò-r-â: & yégò-r-á: mè \\
\hline
\end{tabular}

\subsection*{16.2 Alternative or add-on 'if' particles}

\subsection*{16.2.1 'Even if ...' (hàlí ... là)}

To indicate forcefully that the antecedent eventuality will have no effect on the realization of the consequent, là 'also’ (§19.1.2) occurs with or without clause-initial hàlí 'even, until, all the way to'. là must attach to a NP or similar nonverb constituent, though pragmatically it has scope over the clause. In (461), là becomes H-toned between two L-tones (§19.1.2). Clause-final mè 'if' is optional.


\subsection*{16.2.2 'As soon as' (tán)}

As in some other Dogon and Songhay languages, tán 'only' (probably from Fulfulde) can be added at the end of a conditional antecedent. The sense is 'as soon as'. See T7 @ 01:26, 01:54, 01:58, 09:29, and 10:46. All but 09:29 are from speaker B (the younger of two Ningo speakers) in the recorded text T7.

\subsection*{16.3 Counterfactual conditional}

In counterfactual conditionals, the antecedent ends in the usual mè 'if' as in hypotheticals. Both the antecedent and the consequent are marked with the characteristic mutation of vowels to \(\varepsilon\), expressing the shift to a past-time perspective. The antecedent, if positive, has recent perfect -ś́- (morphologically the past-time form of the resultative) where a simple perfective would be expected in a normal main clause; compare the frequent use of resultative -sà- instead of simple perfective in relative clauses ( \(\S 14.4 .1\) ). The consequent is normally in the past imperfective ( \(\S 10.6 .1 .4\) ) in a sense like 'was going to VP'. The presupposition is that the antecedent eventuality was not realized.
(462) níyá [bòmòkó yà] nì \({ }^{\text {LH}}\) bě: / \({ }^{\text {LH}}{ }^{\text {ùnì-ś́ }} \quad\) mè, yesterday [Bamako Loc] 1PlSbj be.Past/go-Reslt.Past if, nì tíb-bè
1PISbj die-Ipfv.Past
'If we had been in / had gone to Bamako [focus] yesterday, we would have died (=been killed).'

\section*{17 Complement and purposive clauses}

\subsection*{17.1 Quotative complements}

\subsection*{17.1.1 Quoted indicative clauses}

Quoted indicative clauses are marked as such by several features:
- The inflectable 'say' verb (perfective gùnè-) may follow the quotation, §17.1.1.1;
- Invariable quotative enclitic wà (§17.1.1.2) follows a quotation (other than a self-quotation), preceding the 'say' verb if both are present; there are some tonal interactions between the main verb and the enclitic;
- A subject pronoun is clause-initial and is followed by its own wà particle if it is not coindexed with the subject of 'say', and it is a preverbal proclitic if it is coindexed (§17.1.1.3);

Several of these features are illustrated in (463). It has the preverbal proclitic pronominal nà since this referent is coindexed with the ascribed author (the subject of 'say').
[nà LHyògò-mà-ná wà] \({ }^{\text {LH }}\) gùné-Ø [3SgSbj come-Capac-StatNeg Quot] say.Pfv-3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) said that he \(\mathrm{x}_{\mathrm{x}}\) can't come.'

Self-quotation ('I said that ...') is not treated syntactically like other quoted clauses since it does not constitute hearsay that the speaker is not responsible for. The 'say' verb can be used, but quotative particle wà is absent, and the form of the verb and pronominal-subject inflection are as in main clauses (with suffixes for \(1 \mathrm{Sg}, 2 \mathrm{Sg}\), or 3 Pl and zero for 3 Sg ). In (464), the bracketed quotation has the same form as a nonquotative indicative clause. In fact, the 'I said' at the end often functions as a kind of optional emphatic, as when a statement is repeated forcefully.
[ámbá \({ }^{\text {LH }}\) sèmè- \({ }^{\text {n }}\) ]
[sheep slaughter.Pfv-1SgSbj] say.Pfv-2SgSbj
'I said that I slaughtered a sheep [focus].'

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.
\begin{tabular}{|c|c|c|c|}
\hline [ndégé & dàgà] & yógó-rà-w & gùnè-ẃ \\
\hline [what? & Purp] & come-IpfvNeg-2SgSbj & say.Pfv-2SgSbj \\
\hline Why & -S & say that you won't co & \\
\hline
\end{tabular}

There are no logophoric pronouns. However, there is a kind of switch-reference system in the quotative construction expressed by the form and position of pronominal subject pronouns.

TAMP inflections are not reset when a clause is quoted.
Additional features occur in jussives (quoted imperatives and hortatives), see §17.1.2.1-2.

\subsection*{17.1.1.1 'Say' verb gún(ú)}

The overt 'say' verb usually occurs in simple perfective form gùnè-. The overall paradigm is irregular, involving a mix of final-nonhigh-vowel and final-high-vowel forms (§11.3.1). The verb appears at the end of the quotation, following quotative enclitic wà if both are present. Perfective gùnè- usually occurs with a \(\{\mathrm{LH}\}\) overlay when accompanying a quotation, suggesting that the quotation itself is focalized.
a. [nà sójó wà] \({ }^{\text {LH gùné-Ø }}\) [ 3 SgSbj Dogon Quot] say.Pfv-3SgSbj ' \(\mathrm{He}_{\mathrm{x}}\) said he x 's a Dogon.'
b. [cè \({ }^{\text {LH }}\) yògò-má wà] \({ }^{\text {LH }}\) gùn-íyè [3PlSbj come-Capac Quot] say.Pfv-3PlSbj 'They \({ }_{\mathrm{x}}\) said they \(\mathrm{y}_{\mathrm{x}}\) can come.'

The 'say' verb is often omitted from quotations, since the quotative particle and other details identify a clause as quoted.

For gún(ú) and its causative with onomatopoeias, see §11.1.2.3.
17.1.1.2 Clause-final quotative enclitic wà and tonal changes in verb

This morpheme follows the quoted clause, preceding the 'say' verb if present. The enclitic is usually L-toned but appears as H -toned after imperfective verbs.
a. L-toned wà after perfective
[nà yògè / yògò-nì wà ] \({ }^{\text {LH}}\) gùné- Ø
[3SgSbj come.Pfv / come-PfvNeg Quot] say.Pfv-3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) said that he \(\mathrm{x}_{\mathrm{x}}\) came / didn't come.'
b. H-toned wá after imperfective
[nà yógó-wò / \({ }^{\text {LH}}\) yògò-rá wá] \({ }^{\text {LH gùné-Ø }}\)
[3SgSbj come-Ipfv / come-IpfvNeg Quot] say.Pfv-3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) said that he \(\mathrm{x}_{\mathrm{x}}\) will/won't come.'
c. L-toned wà after stative
[nà ígà / ìgà-nà ] wà \({ }^{\text {LH }}\) gùné-Ø
[3SgSbj stand.Stat / stand-StatNeg] Quot say.Pfv-3SgSbj
' \(\mathrm{He}_{\mathrm{x}}\) said that he \(\mathrm{e}_{\mathrm{x}}\) is standing.'
d. L-toned wà after capacitative
[nà \({ }^{\text {LH }}\) yògò-má / \({ }^{\text {LH yògò-mà-ná wà }]}\)
[3SgSbj come-Capac / come-Capac-StatNeg Quot]
LHgùné-Ø
say.Pfv-3SgSbj
'He \({ }_{x}\) said he \({ }_{x}\) can/cannot come.'
e. L-toned wà after 'it is (not)' clitics
\begin{tabular}{llll}
{\([\) nà } & sójó / sójó = lá & wà \(]\) & LHgùné-Ø \\
{\([3 \mathrm{SgSbj}\)} & Dogon / Dogon=it.is.not & Quot \(]\) & say.Pfv-3SgSbj \\
'Hex said he is / is not a Dogon.' & &
\end{tabular}

For some inflectional categories, the form of the verb before wà is the same as in nonquotative main clauses. For some others, there are tonal changes, and the positive 'it is' clitic \(=\) ẁ is omitted.
(468) Changes in verb before wà
category nonquotative 3 Sg with wà
a. no change
perfective
perfective negative
imperfective
stative negative
stative
\begin{tabular}{ll} 
yògè- & yògè wà \\
yògò-nì- & yògò-nì wà \\
yógó-wò- & yógó-wò wá \\
iggà-nà- & ígà-nà wà \\
ígà- & ígà wà
\end{tabular}
b. tonal change (hyphen marks stem-suffix boundary)
\(\{H-H L\}\) to \(\{L-H\}\)
imperfective negative yógó-râ- yògò-rá wá capacitative yógó-mâ- yògò-má wà capacitative negative yógó-má-nà- yògò-mà-ná wà

The tonal change in (468b) is from a falling to a rising pattern, in one case extending the final H into the enclitic. The shift from falling to rising is indeed a change if we take the 3 Sg inflected form in the regular paradigm as point of comparison. However, the rising tone patterns in quotations are shared by the 1 Pl and 2 Pl forms in the regular paradigms: nì yògò-rá 'we will not come', nì yògò-má 'we can come', nì yògò-mà-ná 'we cannot come'.

The verb forms in (468a) can happen to be \(\{\mathrm{LH}\}\)-toned due to clause-internal focalization.

\subsection*{17.1.1.3 Pronominal subjects (clause-initial versus preverbal proclitic)}

The form and linear position of pronominal subjects is determined by the relationship between subject of 'say' (i.e. the ascribed author of the quotation) and the subject of the quoted clause.
(469) a. If the subject of 'say' is 1 Sg , the quoted material has the form of a main clause, so that \(1 \mathrm{Sg}, 2 \mathrm{Sg}\), and 3 Pl subjects are expressed by suffixes on the predicate, see (464) in §17.1.1 above; otherwise...
b. If the subjects of 'say' and of the quoted clause are coindexed, the quoted clause has a preverbal proclitic subject pronoun;
c. If the subjects are not coindexed, a pronominal subject in the quoted clause is expressed by a clause-initial pronoun plus quotative wà.

In (470a), the 2 Sg subject of 'say' matches the 2 Sg subject of the quoted clause. The latter therefore takes the form of a proclitic (ò) directly before the verb, following the object ('sheep'). In (470b), on the other hand, the subject of 'say' is third person (Seydou), so the 2 Sg subject of the quoted clause is expressed as clause-initial ò followed by a second occurrence of quotative wà, preceding 'sheep'.
a. [ámbá ò sèmè wà] \({ }^{\text {LH }}\) gùnè-ẃ
[sheep 2SgSbj slaughter.Pfv Quot] say.Pfv-2SgSbj
'You-Sg said that you slaughtered a sheep.'
\begin{tabular}{|c|c|c|c|c|c|}
\hline b. sàydú & [ò & wà] & [ámbá & sèmè & wà] \\
\hline Seydou & \({ }^{2} \mathbf{S g}\) & QuotSbj] & [sheep & slaughter.Pfv & Quot] \\
\hline \multicolumn{6}{|l|}{\({ }^{\text {LH }}\) gùné-Ø} \\
\hline \multicolumn{6}{|l|}{say.Pfv-3SgSbj} \\
\hline 'Seydou s & d that & -Sg slau & red a & & \\
\hline
\end{tabular}

Third-person examples are in (471).

b. [nà wà] [ámbá sèmè wà] \({ }^{\text {LH }}\) gùné-Ø [3SgSbj QuotSbj] [sheep slaughter.Pfv Quot] say.Pfv-3SgSbj 'He \({ }_{x}\) said that he \({ }_{y} /\) she slaughtered a sheep.'

If the subject of the quoted clause is nonpronominal, there is no resumptive third person pronoun or other agreement (472a). We can tell that 'Seydou' is internal to the quoted clause in (472a) since there is no other subject in the quoted clause. This is true even though quotative wà is not doubled in this construction. If Seydou is the subject of 'say', as in (472b), there is at least a pronominal subject in the quoted clause.
a. [sàydú yògè wà] \({ }^{\text {LH }}\) gùn - \(-\varnothing\)
[Seydou come.Pfv Quot] say.Pfv-3SgSbj
'He/She said that Seydou has come.'
b. sàydú [nà yògè wà ] \({ }^{\text {LH}}\) gùné- \(\varnothing\)

Seydou [3SgSbj come.Pfv Quot] say.Pfv-3SgSbj
'Seydou \({ }_{x}\) said that he \({ }_{x}\) has come.'

\subsection*{17.1.2 Jussive complement (reported imperative or hortative)}

\subsection*{17.1.2.1 Quoted imperative}

A quoted imperative clause converts the original imperative into a special quoted imperative verb form (QuotImprt) used only in such quotations (§10.7.3.1). This form is based on a distinctive I-stem (§3.3.6), though the final i in most such forms is realized as \(u\) by rounding assimilation to the \(w\) of the quotative enclitic. The original addressee of the imperative appears in the quotation as a clause-initial NP or pronoun followed by quotative-subject enclitic wà, which is obligatory for any subject (nonpronominal or pronominal), but here may function as a quoted vocative. An
identical quotative enclitic wà follows the verb, which allows no pronominal-subject agreement.
a. \(\left.\begin{array}{lllll}{[\text { mì }} & \text { LHbàwá }] & \text { [ò } & \text { wà }] & \text { [yògù }\end{array}\right]\) wà \(] ~\left[\begin{array}{lll}{[1 \mathrm{SgPoss}} & \text { father }] & {[2 \mathrm{SgSbj}} \\ \text { QuotSbj] } & \text { [come.QuotImprt } & \text { Quot] }\end{array}\right.\) 'My father says for you-Sg to come.'
b. [bé-gè rì] [mì wà] [yògù wà]
[child-Pl Def] [1SgSbj Quot] [come.QuotImprt Quot]
\({ }^{\text {LH gùn-íyè }}\)
say.Pfv-3PISbj
'The children said for me to come.' (< bé-gé)

'They said for Seydou to come.'
In self-quotations, and sometimes in second-person quotations, the verb is still in quoted imperative form, but the original addressee is treated as the object of 'say' and therefore appears in accusative form.
\begin{tabular}{|c|c|c|c|}
\hline [sàydú & gì] & yògù & \({ }^{\text {LH }}\) gùnè- gr \(^{\text {n }}\) \\
\hline [Seydou & Acc] & come.QuotImprt & say.Pfv-1SgSbj \\
\hline
\end{tabular}

An original prohibitive (negative imperative) retains its prohibitive morphology and tones (§10.7.1.2) in a quotation. Suffix -lâ combines with wà as -lá wà by regular tone sandhi.
\(\begin{array}{lll}{[\text { [sàydú }} & \text { wà } & \text { [yógó-lá }\end{array} \quad\) wà \(] ~ 子 ~\left[\begin{array}{ll}\text { [Seydou } & \text { Quot] } \\ \text { [come-Proh } & \text { Quot] } \\ \text { 'He says for Seydou not to come.' (yógó-lâ) }\end{array}\right.\)

\subsection*{17.1.2.2 Quoted hortative}

A hortative ('let's VP') may also be quoted. In a regular hortative, the final syllable (or mora) is L-toned: nì dónè-y 'let's buy!'. Before quotative wà, the H-tone spreads to the end of the word (476).
(476)
\begin{tabular}{llllll} 
sàydú & [sìjá & nì & dóné-y & wà \(]\) & \({ }^{\text {LHgùń́-Ø }}\) \\
Seydou & [chicken & 1 PlSbj & buy-Hort & Quot \(]\) & say.Pfv-3SgSbj
\end{tabular} 'Seydou said, let's buy a chicken!' (Boui)

\subsection*{17.2 Factive complements}

This type of complement denotes a fully articulated proposition. True factive complements are used with 'know' (§17.2.1). They also occur in one type of complement of perception verbs ( \(\S 17.2 .2 .2\) ), as an alternative to a 'while' adverbial subordinator (§17.2.2.1).

\subsection*{17.2.1 'Know that ...' complement (headless relative)}

Factive complements of 'know (that)' take the form of headless nonsubject relatives, cf. English (the fact) that ... where the fact is often omitted. A pronominal subject is expressed as a preverbal proclitic, and the verb has the \(\{\mathrm{LH}\}\) overlay typical of verbparticiples in relative clauses.
a. [ò LHyògò-rá] nì yèy [2SgSbj come-IpfvNegRel] 1PlSbj know 'We know that you are not coming.'
b. [[bé-gè rì ] LH yògò-ní] nì yèy [[child-Pl Def] come-PfvNeg] 1PlSbj know 'We know that the children didn't come.'
c. [ámbá mì \({ }^{L H_{s}}\) sèmé \(\backslash{ }^{\text {LH }}\) sèmè-sá] yèy-â:
[sheep 1 SgSbj slaughter.PfvRel \(\backslash\)-ResltRel] know-3PlSbj 'They know that I (have) slaughtered a sheep.'
d. [ò LHyògò-wà \(\quad\) yé-ỳ \({ }^{n}\)
[2SgSbj come-IpfvRel] know-1 1 SgSbj
'I know that you-Sg are coming.' (< \({ }^{\text {LH }}\) yògò-wá)

\subsection*{17.2.2 'See (find, hear) that ...'}

There is a distinction between 'see/hear X (while) VP(-ing)' (§17.2.2.1) and 'see/hear that ...' (§17.2.2.2).

\subsection*{17.2.2.1 Direct-perception construction (\{LH\}-toned 'while ...’)}

In this construction, the complement has a verb form based on the \(\{\mathrm{LH}\}\)-toned stative or A/O-stem, with lengthened final vowel and the suffix \(-\grave{w}^{n}\). This is the regular disjoint-subject 'while' subordinate clause (§15.2.1.3). The \(-\grave{w}^{\mathrm{n}}\) is subject to
assimilation, for example appearing as [m] before b as in (478b). A pronominal subject is expressed as a proclitic pronoun (478c).
a. [sàydú
[Seydou come-while] 1P1Sbj
bàlì-yè
'We saw Seydou come/coming.'
b. [yèwù ò \({ }^{\text {LH }}\) yèwá:-- \({ }^{n}\) ] bálí-yé-y \({ }^{n}\)
[dance(n) 2 SgSbj dance-while] see-MP-1SgSbj
'I saw you-Sg dance/dancing.'
c. [nà \({ }^{\text {LH }}\) yègá:-- \({ }^{n}\) ] bálí-yé-y \({ }^{n}\)
[3SgSbj trip-while] see-MP-1 SgSbj
'I saw him/her trip (fall down).'
d. bání [kè \({ }^{\text {LH }}\) dàmá:-- \(\left.\mathrm{w}^{\mathrm{n}}\right]\) nì \({ }^{\text {LH }}\) nù:ndé dé, manner [3PlSbj speak-while] 1PlSbj hear.PfvRel Emph, [kè \(\left.{ }^{\text {LH} k a ̀ n a ́:-~}{ }^{\text {n }}\right]\) nì \({ }^{\text {LH} b a ̀ l i ̀-y e ́ ~ y a ̂: ~}\) [3P1Sbj do-while] 1PISbj see-MP.PfvRel and 'the way we have heard them speak, and (the way) we (subsequently) saw them doing' (T7 @ 16:50)

\subsection*{17.2.2.2 Recognition construction (headless relative)}
'Hear that' (hearsay) and 'see that' (involving an inference made with use of visual data) are expressed as headless nonsubject relatives.
\(\begin{array}{llll}\text { (479) } & {\left[\begin{array}{ll}\text { ò } & \text { Ltì̀̀̀-sá }]\end{array}\right.} & \text { bàlì-yè-Ø / nù:ndè-Ø } \\ & {[2 \mathrm{SgSbj}} & \text { get-ResltRel }] & \begin{array}{l}\text { see-MP.Pfv-3SgSbj / hear.Pfv-3SgSbj }\end{array} \\ & \text { 'He/She saw/heard that you have gotten (rich).' }\end{array}\)
This type of complement is identical to the factive complement of 'know' (§17.2.1).

\subsection*{17.3 Bare perfective (chain-like) complements}

The bare perfective, i.e. \(\{\mathrm{L}\}\)-toned \(\mathrm{E} / \mathrm{I}\)-stem, is the closest thing to a direct chaining form of verbs; see \(\S 15.1\).

Certain verbs occur commonly in final position in such chains, following a bare perfective clause that functions much like a complement.

\subsection*{17.3.1 'Help' (báró) with nominal or bare perfective complement}
báró 'help' is a transitive verb that takes a (usually human) object and can take a second object-like NP denoting the domain of helping. báró also means 'add', and in many (but not all) examples 'help' really means 'help by joining in'.

In (480a), the domain is expressed by a noun denoting the action, in these cases by cognate nominals ('farming', 'song'). In ( \(480 \mathrm{~b}-\mathrm{c}\) ) it is expressed by an unconjugated \(\mathrm{E} / \mathrm{I}\)-stem, identical to the 3 Sg perfective verb. If the helper participated in the activity domain, a non-causative verb is used (480b). If the helper merely facilitated an achievement by the agent, a causative verb is used (480c).
a. à:màdú mì-gí kùwò / yèw bàrè-Ø

Amadou 1Sg-Acc farming/song help.Pfv-3SgSbj
'Amadou helped me (with) farming/singing.'
b. à:màdú = yó mì-gì [[jíwà rì] jà:lı̀] bàrè-Ø

Amadou=Foc 1Sg-Acc [[house Def] build.Pfv] help.Pfv-3SgSbj
'Amadou helped me build the house.'
c. [bé-gè rì] mì-gí ìlà-mì bàrè-Ø
[child-Pl Def] 1 Sg-Acc ascend-Caus.Pfv help.Pfv- 3 SgSbj 'The children helped me go up.'
17.3.2 'Finish' (póró) with bare perfective complement
póró 'finish (an activity)' takes a bare perfective complement.
(481) [nà:ŋgè jè̀:] póré-ỳn / póró-wò-y \({ }^{n}\)
[meal eat.Pfv] finish.Pfv-1SgSbj / -Ipfv-1SgSbj
'I (have) finished / will finish eating.'
17.3.3 'Be accustomed' (wéló) with bare perfective complement
wéló 'be accustomed’ follows a bare perfective VP. wéló itself occurs in a samesubject resultative 'while' construction with 'be' as auxiliary.
a. dùrì-yè / ìlè
wèlè-sà-w \({ }^{\text {n }}\)
bò- \({ }^{\text {n }}\)
run-MP.Pfv / ascend.Pfv be.accustomed-Reslt-while.SS be-1SgSbj
'I have become (=am) accustomed to running/going up.' (Ningo)
b. [námá tèmè] wèlè-sà-w \({ }^{n}\) bò- n \(^{n}\) [meat eat.meat.Pfv] be.accustomed-Reslt-while.SS be-1SgSbj 'I have become (=am) used to eating meat.' (Ningo)
c. bé-gé wèlè-sà-w \({ }^{n}\) bò- ńn \(^{n}\)
child-Pl be.accustomed-Reslt-while.SS be-1SgSbj
'I am accustomed to children.' (Ningo)

\subsection*{17.3.4 'Begin' (déwó ~ débó) with LH-toned perfective}
déwó (Boui) or débó (Ningo) 'begin’ is a transitive verb and can take nominal (including verbal-noun) complements. For the verbal-noun type see §17.4.8.

An alternative construction is with an LH-toned perfective verb in the complement. This is the case with \({ }^{\text {LH }}\) kàní (483a), \({ }^{\text {LH }}\) tèndé (483b), and \({ }^{\text {LHà: }}\) gé (483c).
a. [[mí: rì] nàkí \({ }^{\text {LH} k a ̀ n i ́ ~ d e ̀ b e ̀-Ø] ~}\)
[[water Def] deficit do.Nom begin.Pfv-3SgSbj]
yáré-ẁ mènè
notice.Pfv-2SgSbj if
'if you-Sg notice that the water is in deficit' (T7 @ 18:02)

which.means [now Topic] be.well.done.Pfv begin.Pfv-3SgSbj if 'so that now, if it begins to turn out well, ...' (T7 @ 19:01)
c. [ájá kày] [[gèlé rì \(\quad\) gì] LHà:gé débè-Ø
[now Topic] [[place Def] Loc] arrive.Nom begin.Pfv-3SgSbj
'"Now it (=machine) has begun to arrive.' (T7 @ 19:18)

\subsection*{17.4 Verbal noun (and other nominal) complements}

For the verbal noun with suffix -wà (Boui), hardened to -bà after stop or nasal, see \(\S 4.2 .3 .1\). Complements in the form of VPs ending in the verbal noun suffix are required by several matrix-clause verbs in the fashion of English control verbs with infinitival (to \(V P\) ) complements. The logical subject of the complement VP is coindexed with the matrix subject, but is not overtly expressed.

\subsection*{17.4.1 Argument structure of verbal-noun complement}

VP constituents such as direct objects can be included in the verbal noun complement. Human direct objects take accusative gì as in main clauses.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{a.} & [[námá & \(\left.{ }^{\text {L }} \mathrm{mbò}\right]\) & té:m-bà] & yó:ní-yó-wò-y \({ }^{\text {n }}\) \\
\hline & [meat & Dem] & eat.meat-VblN] & fear-MP-Ipfv-1 \({ }^{\text {SgSbj }}\) \\
\hline & \multicolumn{4}{|l|}{'I am afraid to eat this meat.'} \\
\hline
\end{tabular}
b. [mì-gì téb-bà] yò:nì-yè-Ø [1Sg-Acc hit-VblN] fear-MP.Pfv-3SgSbj 'He was afraid to hit me.'

\subsection*{17.4.2 'Prevent' (téló) with verbal-noun complement}

This matrix-clause verb takes a verbal noun complement. The logical agent of the verbal noun appears as object of téló in the matrix clause. The complement may occur in various linear positions. As simple transitive, téló can mean 'block off (e.g. a road)', 'chop (firewood)', 'chop or slice (e.g. meat)', 'saw (gourd, to make calabashes)', and 'go out and welcome (an important arriving visitor)'. The last sense may have evolved from 'intercept', since the welcoming precedes the final arrival.
a. [mó-ŋà yógó-wà rì] á:mí mì-gí tèlè-Ø
[here come-VblN Def] rain(n) 1 Sg-Acc prevent.Pfv- 3 SgSbj
'The rain prevented me from coming here.'
b. túlé mì-gì nóyó-wà tèlè-Ø
noise 1 Sg-Acc sleep-VblN prevent.Pfv-3SgSbj
'(The) noise prevented me from sleeping.'
c. [mì \({ }^{\text {LH}}\) bàwá \(]=\) ẁ mì-gí tèlè- \(\emptyset\)
[1SgPoss father]=Foc 1 Sg-Acc prevent.Pfv- 3 SgSbj
[[bòmòkó yà] úm-bà rì]
[[Bamako Loc] go-VblN Def]
'It was my father [focus] prevented me from going to Bamako.'
There is a synonym tòrí kán(ú) 'prevent’, with kán(ú) 'do’ as auxiliary.
17.4.3 'Dare' (yàrí kán(ú)) with verbal-noun complement
yàrí plus the 'do' verb means 'dare to VP , have the nerve/effrontery to VP'.
(486) [mó-yà yógó-wà] yàrì kám-bò-l lè
[here come-VblN] daring do-Ipfv-2SgSbj Q
'You-Sg dare (= have the effrontery) to come here?' (< kám-bò-w)
17.4.4 'Consent' (áwó ~ ábó) with verbal-noun or imperfective relative

The verb here is áwó (Boui) or ábó (Ningo). If the complement has the same subject as the matrix verb, the usual verbal noun complement occurs (487).
```

yógó-wà àwè-Ø
come-VblN accept.Pfv-3SgSbj
'He/She agreed to come.'

```

If the subjects are different, a headless imperfective nonsubject relative clause with suffix -wá on the verb is used. See discussion following (401) in §14.4.2 concerning the possible relationship of imperfective nonsubject relative suffix -wá with verbal noun suffix -wà.
(488) [[bòmòkó yà ] mì \({ }^{\text {LHùm-bá] àwè- } \varnothing ~}\)
[[Bamako Loc] 1SgSbj go-IpfvRel] accept.Pfv-3SgSbj
'He/She agreed that I go to Bamako.'

\subsection*{17.4.5 'Want' (cèy ~kèy) with verbal-noun or imperfective relative}

For defective stative cèy \(\sim\) kèy 'want' and its negation see §11.2.5.2. The verb can take a NP object ('I want some sugar') or a clausal complement. If the logical subject of the complement is the same as the matrix subject, the result is an ordinary verbal noun complement (489).
úm-bà cèy-Ø
go-VblN want-3SgSbj
'He/She wants to go.'
If the subjects are disjoint, an imperfective nonsubject relative clause is used.
(490) [mì LHbàwá] [[bòmòkó yà] mì ùm-bá] cèy-Ø [1SgPoss father] [[Bamako Loc] 1 SgSbj go-IpfvRel] want-3SgSbj 'My father wants me to go to Bamako.'

\subsection*{17.4.6 'Forget' (ídí-yó) with verbal-noun complement}
ídí-yó 'forget' can take a NP complement ('I forgot his name'). A clausal complement takes verbal-noun form.
```

yógó-wà ìdì-yc̀-Ø
come-VblN forget-MP.Pfv-3SgSbj
'He/She forgot to come.'

```

\subsection*{17.4.7 ‘Be afraid to’ (yó:ní-yó) with verbal-noun complement}

An example with verbal noun is (492). Here the subjects of the two clauses are the same.
(492) [mó-yà yógó-wà] yó:ní-yó-wò-y [here come-VblN] fear-MP-Ipfv-1SgSbj 'I am afraid to come here.'

When the subjects of the two clauses are different, the complement has a prohibitive verb (cf. lest).
(493)
\begin{tabular}{lll}
{\([\) mì-gí } & nà & tèwà-láy \(\left.{ }^{\text {n }}\right]\)
\end{tabular} \begin{tabular}{l}
\({ }^{\text {LH yò:nì-yè-sà-ýn }}\) \\
{\([1 \mathrm{Sg}\)-Acc }
\end{tabular} \(\mathrm{3SgSbj}\)\begin{tabular}{ll} 
hit-Proh \(]\)
\end{tabular}\(\quad\)\begin{tabular}{l} 
fear-MP-Resit-1SgSbj
\end{tabular}
'I am afraid lest he/she hit me.'
17.4.8 'Begin' (déwó ~ débó) with verbal-noun complement
déwó (Boui) or débó (Ningo) 'begin’ and its verbal-noun complement are illustrated in (494).
(494) a. dú:rú-yó-wà déwé-y \({ }^{\text {n }}\) run-MP-VblN begin.Pfv-1SgSbj 'I began to run.' (Boui)
b. hàlí jè: yá
until take.Pfv and.Nonpast.SS
bá:ndó-bà nǎ: dèbè
grow.up-VblN 3 SgSbj.Fut begin.Pfv
'until she will begin to grow up' (Ningo, T7 @ 00:30)
déwó ~ débó also occurs in a different construction with an unusual LH-toned perfective complement (§17.3.4).

\subsection*{17.4.9 'Cease’ (díyó) with verbal-noun complement}
díyó 'leave, abandon' is usually a simple transitive verb. In the sense 'cease VPing', often expressing permanent behavior change, it takes a verbal noun complement.
(495)
kónjé-[nó:-wà]
díyé-ỳ \({ }^{n}\)
beer-[drink-VblN] leave.Pfv- 1 SgSbj
'I have stopped (= have given up) drinking beer.'

\subsection*{17.5 Purposive, causal, and obligational clauses}
17.5.1 Clauses with purposive postposition dàgá 'for' and verbal noun

A verbal noun complement, which may include non-verb constituents, combines with purposive postposition dàgá to produce a simple purposive clause ('in order to').
a. [[nà:ŋgè nó:-wà] dàgá] \({ }^{\text {LH }}\) yògè-sà-ýn
[[meal eat-VblN] Purp] come-Reslt-1SgSbj
'I came in order to eat [focus].' (Boui)
\(\begin{array}{lll}\text { b. } & \begin{array}{lll}{[j i ́ y e ́ ~} & \text { nímú-gó-wà }] & \text { dàgá] }\end{array} & \begin{array}{l}\text { Ltùní- } \\ \\ {[\text { [fire }}\end{array} \\ \begin{array}{ll}\text { 'He } & \text { extinguish-Caus-VblN] }\end{array} & \text { Purp] }] & \text { go.Pfv- } 3 \mathrm{SgSbj}\end{array}\)
17.5.2 Purposive clause with verb ending in á ~á: before motion verb

In this construction, the verb of the purposive clause ends in á (Boui) or á: (Ningo). The vocalism of the purposive verb is that of the A-stem (§3.3.6), also found in derived statives ( \(\S 10.4 .1 .1\) ). Here it is \(\{\mathrm{H}\}\)-toned. The verb of the following main clause, which may be in any inflectional category, has \(\{\mathrm{LH}\}\) overlay unless it is in a conditional antecedent as in (497d).

The attested examples involve purposive clauses preceding main-clause motion verbs. Examples from Ningo are in (497).
(497)
\(\begin{array}{llll}\text { a. } & {\left[\begin{array}{lll}\text { kérí } & \text { kérá:] } & \text { nì }\end{array} \quad \text { LHùm-bó }\right.} \\ & \text { [chopping } & \text { chop.Purp] } & \text { 1PISbj }\end{array}\) go-IpfvRel
b. [wàlè jólá:] LHyògé
[work(n) look.for.Purp] come.Pfv
'He/She came to look for work.' (Ningo)
c. [wàlè jólá:] \({ }^{\text {LH }}\) yògè̀-ý \({ }^{n}\)
[work(n) look.for.Purp] come.Pfv-1SgSbj
'I came to look for work.' (Ningo)
d. [yálá túmbúlá:] nì yògè mè-nè
[field begin.Purp] 1Pl come.Pfv if 'when we come and begin (working) a field' (Ningo, T7 @ 10:26)

Purposive verbs end in short á in Boui (498). The motion verb has \(\{\mathrm{LH}\}\).
(498)
\(\begin{array}{lll}\text { a. } & \text { [kògò } & \text { múndó-má] }\end{array} \quad \begin{aligned} & { }^{\text {LH }} \text { ùm-bò- } \text { y }^{\text {n }} \\ & \text { [hair }\end{aligned} \quad\) braid-Caus.Purp] \(\quad \begin{aligned} & \text { go-Ipfv- } 1 \mathrm{SgSbj}\end{aligned}\)
b. [nà:ygè ná:] \({ }^{\text {LH }}\) yògè̀-sà-ýn
[meal eat.Purp] come-Reslt- 1 SgSbj
'I came to eat (a meal).'
c. nóyá \({ }^{\text {LH }}\) yògè-sà- y \(^{n}\)
sleep.Purp come-Reslt- 1 SgSbj
'I came to sleep.'
The purposive stem with final á ~ á: should be distinguished from the durative stem with final à: \({ }^{\text {n }} \sim \hat{o}:^{\text {n }}\). The durative is part of the progressive construction (§10.2.2.3) and the 'continue VPing' construction (§15.2.1.7).

\subsection*{17.5.3 Causal ('because ...') clause}

\subsection*{17.5.3.1 sàbù 'because'}

Various forms derived from Arabic sabab- 'cause, reason' occur in languages of the zone, often via Fulfulde. Tiranige has a noun sàbà:bú 'cause, reason' and clauseinitial sàbù 'because'. The latter occurs in T7 @ 10:26 \& 21:39.

\subsection*{17.5.3.2 pàská 'because'}

French parce que 'because' is used regularly at least by younger speakers, as in other Malian languages. It occurs clause-initially, as an alternative to sàbù.
(499) [ijò yá] nì \({ }^{\text {LH }}\) ùm-mà-ná,
[village Loc] 1PlSbj go-Capac-StatNeg,
pàskó [òjí rì] mò:-nà-Ø
because [road Def] good-StatNeg-3SgSbj
'We can't go to the village because the road isn't good.'

For 'because of X ' with X an NP , see postposition dàgá in §8.3.

\subsection*{17.5.4 Obligational 'must' construction with kán(ú) 'do'}

In one version, this construction ends with a conjugated imperfective negative form of kán(ú) 'do'. This is preceded by a complement whose verb ends in -nì- \(\mathrm{y}^{\mathrm{n}}\), which is elsewhere the 1 Sg perfective negative, but occurs here regardless of the pronominal person of the matrix subject. The construction is therefore literally something like "X won't do [I won't VP]."
(500) [[bòmòkó yà] ùnù-nì-y \(\left.{ }^{\mathrm{n}}\right]\) kán-dà-y \({ }^{\mathrm{n}} /\) kán-dâ-Ø [[Bamako Loc] go-PfvNeg-1SgSbj] do-IpfvNeg-1SgSbj / -3SgSbj 'I/He-or-she must go to Bamako'.

In another version, the matrix verb is invariant (i.e. impersonal) kám-bò-Ø, probably in the sense 'it is not/will be done', and the complement is a conjugated positive imperfective verb.
(501) [mó-ŋà yógó-wò-y \({ }^{n}\) / yógó-wò-Ø] kám-bò-Ø
[here come-Ipfv-1SgSbj/-3SgSbj] be.done-Ipfv-3Sg
' \(\mathrm{I} / \mathrm{He}\)-or-she must come here.'

\section*{18 Anaphora}

\subsection*{18.1 Reflexive}

\subsection*{18.1.1 Reflexive object ('my head' etc.)}

To specify that the object is coindexed with the clausemate subject, a possessed form of kògò 'head' can be used. The possessor is in the relevant pronominal category. In this construction it is treated as inalienable (§6.2.2), so the pronoun precedes the noun 'head' and controls \(\{\mathrm{LH}\}\) overlay on it. The final H is dropped by tone sandhi before an H-toned word (502b). For plural categories, 'head' in this construction is not overtly pluralized (502c).
(502)
a. [nà \({ }^{\text {LH}}\) kògó] tèlè- \(\varnothing\)
[3SgPoss head] cut.Pfv-3SgSbj
'He cut himself.' or 'She cut herself.'
b. [mì \({ }^{\text {LH}}\) kògò \(]\) téĺ́ - \({ }^{\text {n }}\) [1SgPoss head] cut.Pfv- 1 SgSbj
'I cut myself.' (< mì kògó)
c. [nì \({ }^{\text {LH }}\) kògó] nì tèlè
[1PlPoss head] 1PlSbj cut.Pfv
'We cut ourselves.'

These specialized reflexive combinations differ from regular possessed forms of 'head(s)' in the latter's literal sense, where pronominal possessors usually follow the possessed NP and where plural suffixation is common.
(503)
\begin{tabular}{|c|c|c|c|}
\hline \multirow[t]{2}{*}{a.} & [kògò & mě:] & bàm-bó-Ø \\
\hline & [head & 1SgPoss] & hurt-Ipfv-3SgSbj \\
\hline & \multicolumn{3}{|l|}{'My head hurts.'} \\
\hline
\end{tabular}
b. [kògò-gè nì-wè-gé] yàw-yàw bà-â:
[head-Pl 1Pl-Poss-Pl] lightweight be-3PlSbj
'Our heads are light.'

However, the distinction between e.g. 'my head' and 'myself' is not absolute, and the (pseudo-inalienable) "reflexive" pattern mì \({ }^{\text {LH }}\) kògó is also attested in the sense 'my head'.

\subsection*{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. (504a) is therefore ambiguous, and 'his dog' has the same form there as in (504b) with first person subject.
(504)
```

a. [í:njé nè-wé] jèyè-Ø [dog 3Sg-Poss] kill.Pfv-3SgSbj
' $\mathrm{He}_{\mathrm{x}}$ killed his $\mathrm{x}_{\mathrm{x}}$ (own) dog.'
'He ${ }_{x}$ killed hisy/hery dog.'
b. [í:njé nè-wè] jéyé-y ${ }^{n}$
[dog 3Sg-Poss] kill.Pfv-1SgSbj
'I killed his dog.'

```
c. sàydú [nà \({ }^{\text {LH}}\) bàwá gì] bàlì-yè- \(\varnothing\)

Seydou [3SgPoss father Acc] see-MP.Pfv-3SgSbj
'Seydou \({ }_{x}{\text { saw } \text { his }_{x} / \text { his }_{y} / \text { her }_{y} \text { father.' }}^{\text {' }}\)

\subsection*{18.2 Emphatic pronouns}

Pronominally possessed forms of 'head' can also be used adverbially as emphatic pronouns. Specifically, these emphatics can express the exclusion of other referents as in (505).
\begin{tabular}{lllll} 
(505) & {\([\) [mì̀ } & LH \(\left._{\text {kògó }}\right]\) & mì̀ & \({ }^{\text {LH }} \mathrm{jà:lé}\) \\
& {\([1 \mathrm{SgPoss}\)} & head \(]\) & 1 SgSbj & build.Pfv \\
& 'I built (did the building) myself.'
\end{tabular}

A compound with 'head' in possessed form is illustrated in (506).


\subsection*{18.3 Logophoric pronouns absent}

There are no logophoric pronouns. Regular third person pronouns are used where most Dogon languages have third-person logophorics (in quoted matter whose ascribed author is a third person).

\subsection*{18.4 Reciprocal}

The reciprocal ('they hit/saw each other') is expressed by an intransitivizing suffixal derivation with -yó- ~ -yó- added to a transitive verb. See \(\S 9.5\) for examples. The same (or a homophonous) suffix is used as a mediopassive, see §9.4.1.

Adverbial 'together' is bó:gù ~ bó:gì (§8.4.6), cf. bò: ‘agemate'.

\section*{18.5 tìngà 'owner' as anaphor for nonspecific discourse referent}
tìngà 'owner' is a common compound final ('owner of X'), see §5.1.8. In uncompounded form it can function as a syntactically flexible anaphor for a nonspecific discourse referent that has been introduced. Compare English the guy or the fellow as anaphor for a nonspecific discourse referent like anyone, as in if anyone shows up here, tell the guy ... Examples are T7 @ 06:02 and 09:31

\section*{19 Grammatical pragmatics}

\subsection*{19.1 Topic}

\subsection*{19.1.1 Topic (kày)}

The regionally widespread topic particle kày is present in Tiranige. It implies a contrast between the topicalized NP and other possible topics from the discourse or communicative context.
```

(507) [mì kày] ún-dà-yn
[1Sg Topic] go-IpfvNeg-1SgSbj
'As for me, I'm not going.' (Boui)

```

After an \(\{\mathrm{L}\}\)-toned word (definite rì does not count here), kày shifts to H-toned káy (Boui) or káy (Ningo), unless it is followed by an H-tone in the next word as in (507). Pronouns take L-toned proclitic form before kày and therefore trigger this toneraising: (Boui) mì káy 'as for me', nà káy 'as for him'. Compare L-toned kày in e.g. sàydú kày 'as for Seydou', yé: rì kày 'as for the woman'.
kày occurs commonly in ájá kày 'now', where it is in the process of fusing. Other textual examples of the topic marker after a pronominal proclitic are T7 @ 00:15, 09:44, 09:59, 11:45, 14:13, 14:29, 14:41, 14:58 (two), 15:05, 19:56, and 20:29, It occurs after a demonstrative @ 18:32, and after a nonpronominal NP @ 16:40, 18:13, 19:53, 20:43, 21:15, and 21:30.
19.1.2 'Also, too'
19.1.2.1 'Also, too' or 'likewise' (là)

This particle is regularly added to NPs including pronouns, and to adverbial phrases such as locative PPs (508a), but not to verbs or clauses. In (508b) it is added to a cognate nominal object rather than to the verb. It may follow accusative gì (508c).

\footnotetext{
a. [bòmòkó yà là] wàlè kám-bò-y \({ }^{n}\) [Bamako Loc also] work(n) do-Ipfv-1SgSbj 'I work in Bamako too.' (Boui)
}
b. [nwé là] nó:-wò-Ø
[song also] sing-Ipfv-3SgSbj
'He/She sings too.' (Boui)
c. [bé: gì là] téwé-ỳ \({ }^{\text {n }}\)
[child Acc also] hit.Pfv- 1 SgSbj
'I hit-Past the child also.' (Boui)
Pronouns take H-toned form: mí là 'me too', ó là 'you-Sg too', ní là 'we too'. Between \(\{\mathrm{L}\}\)-toned words, là is sometimes raised to lá.
là may be added to kòndè 'later'.
a. kòndè lá yògè- \(\varnothing\)
later too come.Pfv-3SgSbj
'He/She came again.' (Boui)
b. kòndè là yógé-y \({ }^{\text {n }}\)
later too come.Pfv-1SgSbj
'I came again.' (Boui)

An NP or pronoun with là may be topicalized and set off prosodically from the following clause. In this case, là may be subject to intonational effects: prolongation, and higher than normal pitch.

In texts, là often is better translated as 'likewise' rather than as 'also, too'. In other words, the parallelism between the two relevant propositions need not be as strict as with 'also'. Relevant textual examples are (542) and T7 @ 03:51, 12:34, 13:38, 13:49, 14:08, and 20:49.

Homophony is possible between là 'also' and = là 'it is not', since the two have the same tonal behavior. Compare mí = là 'it isn't me' with mí là 'me too'. However, là 'also' typically occurs in nonfinal phrases in clauses while \(=\) là is clausefinal.

Future-habitual -lá is suffixed to an L-toned pronominal subject marker, followed by a perfective verb (§10.2.2.4). It drops to -là before H-tone.

\subsection*{19.1.2.2 ‘Too' (này)}
này in two textual passages may be either another 'too' particle or another topicalizer: T7 @ 20:56 and (twice) 21:11.

\subsection*{19.1.3 'Even' (hàlí ~ hǎl)}
hàlí ~hǎl preceding a NP X can be glossed 'even X' or 'as far/much as X', 'all the way to X ', and the like. In the sense 'even X ' it is optionally accompanied by là 'also, too', the sequence being hàlí X là.
hàlí appears as hàlì if the following word begins with an H-tone, by regular phonology. Pronouns have L-toned form after hàlí.
a. \(\left.\begin{array}{lll}{[\text { hàlí }} & \text { mì }] & \text { íló-má-y }{ }^{\text {n }} \\ & \text { even } & 1 \mathrm{Sg}\end{array}\right]\)
ascend-Capac- 1 SgSbj

'Even I can go up (=climb).'
\(\begin{array}{llll}\text { b. } \begin{array}{lll}{[\text { hàlì }} & \text { bé-gé } & \text { gì }]\end{array} & \text { téb-bò- } \varnothing \\ & \text { [even } & \text { child-Pl } & \text { Acc] }\end{array}\) hit-Ipfv-3SgSbj 'He/She even hits children.'

\subsection*{19.2 Preclausal discourse markers}

\subsection*{19.2.1 'Well, ...' (hàyà)}

Preclausal hàyà 'well, ...' occurs in Tiranige as in most languages of the area. It is preclausal, and typically marks a paragraph-like (re-)start in speech. Examples are as (523-524) and T7 @ 07:11, 07:45, 08:29, etc.
19.2.2 'But ...' (mè:)

Preclausal mè: 'but' is probably French mais, which is widely used especially by younger speakers of languages in the zone. Cf. T7 @ 20:56

\section*{19.3 'Only'}
19.3.1 tòmá \(\rightarrow\) 'only'
tòmá \((\rightarrow)\) 'only', optionally prolonged, is obscurely related to tò:mà 'one' (§4.7.1.1).
(511) [mbó tòmá \(\rightarrow\) mì-gí nà \({ }^{\text {LH}}\) ndě:-Ø
[Dem only] \(1 \mathrm{Sg}-A c c \quad 3 \mathrm{SgSbj}\) give.Pfv-3SgSbj
'He/She gave me this only [focus].'
tòmá \(\rightarrow\) is preferentially attached to a NP or similar nonpredicative constituent.
However, there is another, invariant form that is specialized for predicative use: tòmá
wò. This presumably contains the variant wò of bò 'be (somewhere)'. The variant wòis otherwise found in é wò- 'be present, be here/there'. In (512a), the subject is a preverbal proclitic, while in (512b) it is a pronominal-subject suffix on the verb.
\(\begin{array}{llll}\text { a. } & \text { ò } & \text { yógó-wò } & \text { tòmá }\end{array}\) wò 'You-Sg only come.'
b. yógé-w tòmá wò come.Pfv-2SgSbj only be 'You-Sg only came.'

\subsection*{19.3.2 tán 'only’}

This borrowing from Fulfulde is also found in some other regional languages (Dogon and montane Songhay). Textual examples in the sense 'only' after an NP or adverbial are T7 @ 11:45, 15:10, and 15:41, all spoken by speaker B (the younger of two Ningo leatherworker speakers in the recording).

In clause-final position, the combination mè tán forms conditional antecedents translatable as 'as soon as' (§16.2.2).

\subsection*{19.4 Phrase-final emphatics}

\subsection*{19.4.1 Clause-final kóy ‘sure’ (firm agreement or answer)}

The regionally widespread clause-final confirmational emphatic, in the form kóy, occurs in conversational Tiranige. 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?
\(\begin{array}{lll}\text { (513) } & \text { nùmì-yè- } \varnothing & \text { kóy } \\ & \text { be.hot-MP.Pfv-3SgSbj } & \text { Emph } \\ & \text { 'It sure is hot!' } & \end{array}\)
There are no textual examples, likely because the texts are expository and narrative.

\subsection*{19.4.2 Clause-final dé(?) (admonitive)}

Another regionally widespread clause-final emphatic takes the form dé in Tiranige, often with a glottal (dér). It has an admonitive or contradicting function. Cf. English low-pitched pragmatic now as in Be careful now!
\[
\begin{align*}
& \text { númí-yé-sà }=\mathrm{w}^{\mathrm{n}}  \tag{514}\\
& \text { hot-MP-Reslt=it.is } \quad \text { dé(?) } \\
& \text { '(Watch out,) it (e.g. pot) is hot!' }
\end{align*}
\]

Textual examples are T7 @ 16:50, 17:11, 19:59, and 20:06.

\subsection*{19.5 Greetings}

The metalinguistic terms are noun tíyá-mú 'greeting, salutation' and verb tíyá-m(ú) 'greet (sb)'. A typical four-part (ABAB) greeting cycle for the morning is (515). The grammar is somewhat abbreviated in these formulae ( 2 Sg and 1 Sg pronouns are omitted though their plurals are overt: 2 Pl è, 1 Pl nì). lè is a polar interrogative marker. ná: may be an archaic variant of náyó- 'spend the night'. mò: is 'good', but in greetings it is better glossed as 'in peace, in safety'.
\begin{tabular}{ll}
\begin{tabular}{l} 
A: ná: lé \\
è nà: lé
\end{tabular} & \begin{tabular}{l} 
'Did (you-Sg) spend the night?' \\
'Did you-Pl spend the night?'
\end{tabular} \\
\begin{tabular}{ll} 
B: àwó \(\rightarrow\)
\end{tabular} & Yes \\
\begin{tabular}{l} 
B: mò: nàyě-1 lé \\
mò: è nàyé lé
\end{tabular} & \begin{tabular}{l} 
'Did (you-Sg) spend the night well?' \\
'Did you-Pl spend the night well?'
\end{tabular} \\
A: mò: nàyè-ýn \\
mò: nì nàyé & \begin{tabular}{l} 
'(Yes) (I) spent the night well.', \\
'(Yes) we spent the night well.'
\end{tabular}
\end{tabular}

Around mid-day the sequence changes to (516) for the afternoon and evening.
A: tíyâ:
‘Greeting!’ (Sg)
tìyà-yâ:
'Greeting!' (Pl)
B: àwó \(\rightarrow\)
Yes
B: mò:-wn \({ }^{\mathrm{n}}\) dènc̀-l lé mò: è dènc̀ lé
'Yes, have (you-Sg) had a good day!'
'Yes, have you-Sg had a good day!'
A: mò̀:-wn dènè-ýn
'Yes, I've had a good day.'

If a stranger (B) arrives in the village, the sequence (517) might occur (from the Ningo speaker).
(517) A: à:só-gè welcome (to sb arriving)
\(B:\) à:wô \(\rightarrow \quad\) (reply)
A: mò: yògé-l lé 'Did you come in safety (in good health)?'
\(B\) : mò: yògè-ýn 'I came in safety. mò: è bó lé Are you-Pl in good health here?'

A: mò: nì bó 'We are in good health'
A greeting to someone who is engaged in work (i.e. any purposeful activity such as farming, drawing water, or blacksmithing) is (518). wàlè is the noun 'work'. There are two alternative replies, which can be combined.
A: èyà wàlè yà
'hello (at work)'
B: àbâ:
(reply)
èyà kà:jí yà
(reply)

A blessing bestowed on one who is about to travel is (519).


\section*{Texts}

All texts are for Ningo. T1 through T6 were dictated. T7 is a a long recorded text.

\section*{T1 Hyena, Vulture, and the Dead Body (tale)}
narrator: older speaker from Ningo
mode: dictation
(520) A: dàbìlé pìyô \(\rightarrow\)
tale
audience: sáygáláwàyá \(\rightarrow\)
[standard narrator-audience sequence at the beginning of a tale, not transparently parsable]
(521) [nà LHbàbá] màrì- \(\varnothing\),
[3SgPoss father] be.lost.Pfv- 3 SgSbj
sìnì kè LHbèjé,
convey.Pfv 3PISbj bury.Pfv,
[sìnì kè \({ }^{\text {LH }}\) bèjé] \(\quad{ }^{\text {LH }}\) wàkàtí,
[convey.Pfv 3PISbj bury.PfvRel] time
tèbù-dúbà yá bè:, vulture Exist.Dist be.Past-3SgSbj,
'His (hyena's) father was lost (=died). They (all the wild animals) took (the body) and buried (it). At the time when they took (it) and buried (it), vulture was there (up in the sky).'
[sìnì kè \({ }^{\text {LH }}\) bèjé §15.1.2, same construction as àbè nà \({ }^{\mathrm{LH}}\) sàyé in (524) below]
(522) [tèbù-dúbà rì] kè-gí è bálà-Ø,
[vulture Def] 3Pl-Acc Exist see.Stat-3SgSbj,
jágá tùmbùlè yògè-sà-w \({ }^{n}\),
lo! hyena come-Reslt-while,
[tíbó rì] dùngù-lè--Ø,
[corpse Def] bury-Rev.Pfv-3SgSbj,
'The vulture saw them. Then lo, hyena came and dug up (disinterred) the body (and devoured it).'
[existential particle with stative perception verb §10.4.1.1]
(523)
[é \(\quad{ }^{\text {LH} t u ̀ n u ́ ~} \mathrm{~g}\) ]
gì] Loc] hàyà ùjàrí-yè, well ask.Pfv-3PISbj, [ndà: pós] nà dùngù-lò-nì wà, [person all] 3SgSbj bury-Rev-PfvNeg Quot, 'After that they (the other animals) came back. Well, they asked, who dug up the body? Everyone said that it wasn't him.'
hàyà [tèbù-dúbà rì] well [vulture Def] yá: [dànà gí] yà ságà, there.Def [above Loc] Exist.Dist be.up.on.Stat-3SgSbj kè-gí bàlì-yè-Ø, 3Pl-Acc see-MP.Pfv-3SgSbj, kè-gí ùjàrí-yè, 3Pl-Acc ask.Pfv-3PlSbj, [ndà: pós] nà dùngù-lò-nì wà, [person all] 3SgSbj bury-Rev-PfvNeg Quot, tèbù-dúbà àbè nà \({ }^{\mathrm{LH}}\) sàyé, vulture receive.Pfv 3 SgSbj reply.Pfv, 'Well, vulture was up above. He saw them (when) they asked (each other), (but) everyone said it wasn't him. Vulture then spoke up.'
[àbè nà \({ }^{\text {LH }}\) Sàyé §15.1.2]
(525) [wàkàtì kè \({ }^{\text {LH }}\) dùngò-bá rì] [time 3PlSbj bury-IpfvRel Def]
yá: [dànà gí] yá: nà bé: wà, there.Def [above Loc] there.Def 3 SgSbj be.Past Quot, [wàkàtì kè \({ }^{\text {LH} d u ̀ n g u ̀-l o ̀-b a ́ ~ l a ̀] ~}\) [time 3PISbj bury-Rev-IpfvRel too] [dànà gí] nà bé: wà, [above Loc] 3 SgSbj be.Past Quot,
'(Vulture said): "I was up there when they were burying (him), and I was also up there when they were digging (him) up."
[imperfective nonsubject relative clause]
(526)
\begin{tabular}{llll} 
tùmbùlè & àbè & nà & \({ }^{{ }^{{ }^{2}} \text { sàyé }}\) \\
hyena & receive.Pfv & \(3 S g S b j\) & reply.PfvRel \\
{\([\) nà } & LHbabbá \(]\) & wà, & \\
{\([3 S g S b j\)} & father \(]\) & Quot, &
\end{tabular} [tèbù-dúbà gì] újàrà:-n-í: wà [vulture Acc] ask-PfvNeg-3PiSbj Quot, [tèbù-dúbà wà] [dámú-là wà] yà díy wà, [vulture Quot] [speak-Proh Quot] Exist.Dist leave.QuotImprt Quot, 'Hyena spoke up. It was my father. They (=animals) didn't ask vulture. Vulture should not be allowed to speak.'
[verb díyś 'leave’ (here I-stem for quoted imperative, §10.7.3.1)]
(527)
\begin{tabular}{llll} 
kúgúrí-yá-ygé & tùmbùlè & dùmbù-lè & témé-sà- \(Ø\) \\
final & hyena & bury-Rev.Pfvv & eat.meat-Reslt-3SgSbj
\end{tabular}
'So in the end hyena had dug up and devoured (the body).'
[dùmbù-lè bare perfective as first verb in a chain §15.1]

\section*{T2 Farming}
narrator: older speaker from Ningo
mode: dictation
(528)
\begin{tabular}{lll}
\begin{tabular}{l} 
góŕ́, \\
trimming ax,
\end{tabular} & \begin{tabular}{l} 
kérí \\
chopping
\end{tabular} & \begin{tabular}{c} 
kèrí-yè, \\
chop.Pfv-3P1Sbj,
\end{tabular} \\
[jéná & LH \(_{\text {wàlé] }}\) & \begin{tabular}{l} 
LH tùmbùlà-ygé,
\end{tabular} \\
[rainy.season & work(n)] & begin-Nom,
\end{tabular}
'Trimming axes. They clear (brush, in fields), (at) the beginning of the rainyseason work.'
[-ngé \$4.2.3.2]
(529)
\begin{tabular}{|c|c|c|c|}
\hline [é & \({ }^{\text {LH }}\) tùnú] & gì, & gúlá, \\
\hline [DemDef & behind] & Loc, & chopping.ax, \\
\hline [é & \({ }^{\text {LH}}\) tùnú] & gì, & áná-wàlà, \\
\hline [DemDef & behind] & Loc, & short.shaft.pick.hoe \\
\hline [é & \({ }^{\text {LH }}\) tùnú] & gì, sénù, & \\
\hline DemDef & behind] & Loc, & curved shaft shor \\
\hline
\end{tabular}
[é \({ }^{\text {LH}}\) tùnú] gì, dùbìyè \({ }^{L}\) báná,
[DemDef behind] Loc, hoe male (pick-hoe),
[é \({ }^{\text {LH}}\) tùnú] gì, dùbìyè \({ }^{\text {L }}\) yé:,
[DemDef behind] Loc, hoe female (daba),
[é \({ }^{\text {LH}}\) tùnú] gì,ónjó,
[DemDef behind] Loc, sleeved.daba,
[é \({ }^{\text {LHtùnú] gì, kó:mò, }}\)
[DemDef behind] Loc, sickle,
'In addition to that, (heavy) chopping axes, short-handled pick-hoes (with hooked shaft), axes with short curved shafts, male hoes (long pick-hoes for planting), female hoes (dabas for turning over earth), sleeved hoes (whose metal blades have sleeves that fit over the end of the handle), and sickles.'
[list of tools used in farming; discourse-definite é §4.4.1.2]


'When we have burned it, we will hoe (to shape the earth into mounds). When we have hoed, we will slash (with a pick-hoe, to plant seeds in the slash). When we have slashed (and planted), when it (=millet) has sprouted, we will weed (with a hoe).'

\begin{tabular}{ll} 
ìlì-yè-Ø & mè-n \(̨\), \\
ripen-MP.Pfv-3SgSbj & if,
\end{tabular}
\begin{tabular}{llll} 
nì-lá & [gìyò & tànà-bé] & jòlè, \\
1PISbj-Fut & {\([\) harvest(n) } & knife-child] & look.for.Pfv,
\end{tabular}
nì-là kó:ndó jòle, 1PlSbj-Fut square.basket look.for.Pfv, nì-lá tàjí jòlè, 1PlSbj-Fut straw.basket look.for.Pfv, nì-lá gìyè, 1PISbj-Futj harvest(v).Pfv,
'When it has ripened, we will look for (=go get) a harvesting knife (tied by a strap to one hand), we will look for a square basket and we will look for a straw basket. We will harvest (the millet).'
\begin{tabular}{llllll} 
nì-lá & [gònò & gí] & \begin{tabular}{l} 
màngà-là-mì,
\end{tabular} & \\
1PlSbj-Fut & [enclosure & Loc] & gather-Mult-Caus.Pfv,
\end{tabular} 'We will gather it (the harvested millet grain spikes) all up in an enclosure. We will sort (=organize) it. We will tie it into bundles. We will carry it (in baskets, on the head). We will go to the house and put it in granaries.'
\begin{tabular}{llllll} 
[égá:gú & pós] & nì-là & pángá & dènc̀ & ndè, \\
[morning & every] & 1PISbj-Fut & granary & take.out.grain & give.Pfv,
\end{tabular}
hà: érí = yò [nì \(\quad{ }^{{ }^{L H}}\) ygùré],
well Dem.Def=it.is [1PlPoss sustenance],
égá:gú kè-lá òmò-kánú kànì, morning 3PISbj-Fut breakfast make.Pfv, [dènì gí] kè-là páníngé kànì, [day Loc] 3PlSbj-Fut lunch make.Pfv, yà:gù kè-là ná:-nígé kànì, night 3PlSbj-Fut supper make.Pfv, nì-lá jè:
1PISbj-Fut eat.meal.Pfv
'Every morning we will take some (millet) out of the granary and give it (to women to cook for the day). Well, that is our sustenance (staple food). In the morning they will make breakfast, in the middle of the day they will make lunch, in the evening they will make supper. We eat (meals).'

\section*{T3 War}
narrator: older speaker from Ningo
mode: dictation
(536) kómbó, kómbó táy-bà,
war, war wage-VblN,
[kómbó \({ }^{\text {LH gònì-gé] ò-lá }}\) kàlì-yè,
[war gear-Pl] 2SgSbj-Fut get.ready-MP.Pfv,
ndégé \(=\grave{\mathrm{w}}^{\mathrm{n}} \quad\) [kómbó \(\quad\) LHgònì-gé \(]\)
be.what?=it.is [war gear-Pl]
'War, waging war. You-Sg get the instruments of war ready. What are the instruments of war?'
\begin{tabular}{|c|c|c|c|}
\hline tànà & [kómbó & \({ }^{\text {LH }}\) gòní] \(=\) yò, & \\
\hline knife & [war & gear]=it.is, & \\
\hline túmá & [kómbó & \({ }^{\text {LH }}\) gòní] \(=\) yò, & \\
\hline stick & [war & gear]=it.is, & \\
\hline sábú & [kómbó & \({ }^{\text {LH}}\) gòní] \(=\) yò, & \\
\hline spear & [war & gear]=it.is, & \\
\hline mánùbà & [kómbó & \({ }^{\text {LH }}\) gòní] \(=\) yò, & \\
\hline rifle & [war & gear]=it.is, & \\
\hline sı̀̀joòni \({ }^{\text {L }}\) & báná, & [kómbó & \({ }^{\text {LH }}\) gòní] \(=\) yò, \\
\hline horse & male, & [war & gear]=it.is, \\
\hline [dòngò \({ }^{\text {L }}\) & báná-ygà] & [kómbó & \({ }^{\text {LH }}\) gòní] \(=\) yò, \\
\hline [heart & fearless] & [war & gear]=it.is, \\
\hline dàbàrì \({ }^{\text {L }}\) & pí:jà, & [kómbó & \({ }^{\text {LHgòní] }}\) = yò, \\
\hline plan & pretty, & [war & gear]=it.is, \\
\hline á:-sùnò & [kómbó & \({ }^{\text {LH }}\) gòní] \(=\) yò, & \\
\hline blessing & [war & gear]=it.is, & \\
\hline dùwà (w) \({ }^{\text {L }}\) & pí:jà, & [kómbó & \({ }_{\text {g }}\) gòní \(=\) yò, \\
\hline blessing & pretty & [war & gear]=it.is, \\
\hline
\end{tabular}
'Knives, sticks (staffs), spears, rifles, stallions, fearless hearts, good strategies, and blessings (from God and from holy men) are instruments of war.'
[á:-sùnò 'blessing from God', distinct from dùwá~ dùwá̀ 'blessing from an imam or other holy man']

(539) là:mù ké:-yé-ẁ mè,
authority want-MP-2SgSbj if,
kómbó táy-bò-w,
war wage-Ipfv-2SgSbj,
[nàmà \({ }^{\text {LH}}\) tàgú] élò-bà ké-ẁ mè,
[others land] take.away-VblN want-2SgSbj if,
kómbó táy-bò-w, ndà: [ò \({ }^{\mathrm{LH}} \mathrm{w}\) : \(\left.:\right]\)
war wage-Ipfv, person [2SgPoss Poss]
ò-gì દ́lò-bà jòlè-Ø mè,
2Sg-Acc take.away-VblN look.for.Pfv-3SgSbj if,
kómbó táy-bò-w, war wage-Ipfv-2SgSbj,
'If you-Sg want political authority (over an area), you wage war. If you want to seize somebody else's land, you wage war. If someone tries to seize something of yours, you wage war.'
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(540) ndà: [ò ${ }^{\text {LHbèlì-gé }] ~ j e ̀:-Ø ~ m e ̀, ~}$
person [2SgPoss animal-Pl] take.Pfv-3SgSbj if,
kómbó táy-bò-w,
war wage-Ipfv-2SgSbj,
ndà: ò-gí tó:nà kànì-Ø mè,
person 2 Sg -Acc trouble do.Pfv-3Sg if,
kómbó táy-bò-w,
war wage-Ipfv-2SgSbj,
'If someone takes your livestock, you wage war. If someone makes trouble for
you, you wage war.'

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\begin{tabular}{llll} 
nà-gì & tágí-yó-bò-w & & \\
3Sg-Acc & follow-MP-Ipfv-2SgSbj & \\
[hǎl & jè: & yá \(]\) & \\
[until & take.Pfv & and.Nonpast.SS \(]\) & \\
[[nà-gí & ò & LHì̀mì-y-ó:] & gì \(],\) \\
[[3Sg-Acc & 2SgSbj & defeat-MP-before \(]\) & Loc] \(],\) \\
nà-gì & díyó-rà-w, & & \\
3Sg-Acc & leave-IpfvNeg-2SgSbj, &
\end{tabular}
'You will pursue him. From the beginning until the time when you have defeated him, you will not leave him alone.'
[-o: ‘before/until’ §15.2.1.4, §15.2.3.2]
\begin{tabular}{|c|c|c|c|}
\hline & & là] & \\
\hline g -Ac & defeat.Pfv-3SgSbj & too] & be.energetic-MP- \\
\hline -gì & ímí-yé-ẁ & mè] & dúrú-yó-bò-Ø, \\
\hline Sg-Ac & be.able-MP-2SgSb & if] & run-MP-Ipfv-3SgSbj \\
\hline  & mè-nદ̀, &  & ́qí-yó-bò-w, \\
\hline & SgSbj if, & & llow-MP-Ipfv-2 \\
\hline
\end{tabular}
'Even if he defeats you-Sg, you have courage! If you have defeated him, he runs away. When he runs away, you pursue him.'
\begin{tabular}{|c|c|c|c|c|}
\hline [kíní & gì] & ìlè-Ø & mè, & díy \\
\hline ounta & Loc] & ascend.Pfv-3SgSbj & if, & leave-IpfvNeg-2SgSbj, \\
\hline mí: & gì] & wè: -Ø & m ] & díyó-rà-w, \\
\hline water & Loc] & ter.Pfv-3SgSbj & if] & leave-IpfyN \\
\hline
\end{tabular}
[hǎl jè: yá]
[until take.Pfv and.Nonpast.SS]
[nà-gí ò ìbè gìr-ó:]] gì],
[3Sg-Acc 2 SgSbj catch.Pfv get-before]] Loc],
'If he climbs up a mountain, you don't leave him alone. If he goes into the water, you won't leave him, from the beginning until you have managed to catch him.'
[gírs' 'get' in the sense 'manage to VP, successfully complete VPing' here and in (544) just below, §15.1.3]
(544) nà-gí ìbè gíŕ-ẁ mè,

3Sg-Acc catch.Pfv
get.Pfv-2SgSbj if,
pàgè sógó-bò-w, tie.Pfv bring-Ipfv-2SgSbj, pàgè sógé-ẁ mè, tie.Pfv bring.Pfv-2SgSbj if,
[érí LHjùgú] nà-gí ímí-yé-ẁ
[Dem.Def week] 3Sg-Acc defeat-MP-2SgSbj
'If you have managed to catch him, tie him up and bring him (to your village).
When you have tied and brought him, at that time you have defeated him.'
[jùgù (cf. Boui yùgù) 'week' here in the sense 'time, moment']

\section*{T4 Travels}
narrator: older speaker from Ningo
mode: dictation

'I will tell about the places where I have gone on routes (journeys). I left here in Mali, I got off the vehicle (bus or truck) in Burkina (Faso).'
[ \({ }^{\text {LH }}\) ùnì-gé relative clause with plural -ge on the verb]
(546)

'Then I took the train, and went to Ferkessedougou. I took the train (again), I went to Bouaké there.'
[two cities in northern Côte d'Ivoire]
(547) [bók \(\varepsilon\) gì] mì \({ }^{\text {LH }}\) gwě:,
[Bouaké Loc] 1 SgSbj exit(v).PfvRel, ábíjá: \({ }^{\text {n }}\) mì \({ }^{\text {LH }}\) ùní, Abidjan 1 SgSbj go.PfvRel,
ábíjá: \({ }^{\text {n }}\) mì \({ }^{\text {LH }}\) gwě:,
Abidjan 1 SgSbj exit(v).PfvRel,
[ [gáná \({ }^{\text {LH} k e ̀ n u ́] ~ g i ̀] ~ m i ̀ ~}{ }^{\text {LH }}\) ùní, [[Ghana border] Loc] 1 SgSbj go.PfvRel,
'I left Bouaké and went to Abidjan. I left Abidjan and went to the Ghana border.'
\begin{tabular}{|c|c|c|c|c|}
\hline [gáná & \({ }^{\text {LH}}\) kènú & gì] & mì & \({ }_{\text {Hwěe:, }}\) \\
\hline [Gana & border & Loc] & 1 SgSbj & exit(v).PfvRel, \\
\hline [gánágì] & nì & \({ }^{\text {LHùní }}\) & yá:, & \\
\hline [Ghana & Loc] & 1PlSbj & go.PfvR & there.Def, \\
\hline mí: & ¢ & nì & \({ }^{\text {LHtàygé, }}\) & \\
\hline
\end{tabular} 'I left the Ghana border. When we went to Ghana there, we crossed the water (=river).'
[shift from 1Sg to 1Pl subject beginning here.]
\begin{tabular}{lll} 
móbélí & nì & LH \(_{\mathrm{j} \text { ž:, }}\), \\
vehicle & 1 PlSbj & take.PfvRel,
\end{tabular}
[tákùràdí gì] nì \({ }^{\text {LHùní, }}\) [Takoradi Loc] 1PlSbj go.PfvRel,
[tákùràdíc gì] móbélí nì LH jě:, \(^{\text {lì }}\)
[Takoradi Loc] vehicle 1PISbj take.PfvRel,
kúmá: \({ }^{\text {n }}\) sí yá: nì \({ }^{\text {LH }}\) ùní, Kumasi there.Def 1PlSbj go.PfvRel,
'We got on a vehicle and went to Takoradi. We got (another) vehicle at Takoradi and we went to Kumasi there.'
[cities in Ghana]
(550) kúmá: \({ }^{\text {n }}\) Sí móbélí nì \({ }^{\text {LH }} \mathrm{j}\) ž:,

Kumasi vehicle 1PISbj take.PfvRel,
ákárá nì \({ }^{\text {LHùní, }}\)
Accra 1PlSbj go.PfvRel,
ákárá móbélí nì LHjě: \(^{\text {a }}\),
Accra vehicle 1 PlSbj take.PfvRel,
[lómé gì] nì LHùní, ápláwô:,
[Lomé Loc] 1P1Sbj go.PfvRel, Aflao [border Togo-Ghana],
[lómé gì] nì \({ }^{\mathrm{LH}_{g}}\) gě:,
[Lomé Loc] 1PlSbj exit(v).PfvRel,
[sémé gì] nì LH ùní,
[Seme Loc] 1PlSbj go.PfvRel,
'We got on a vehicle in Kumasi and went to Accra. At Accra we took a vehicle and went to Lomé. Aflao (border crossing). We left Lomé and went to Seme (Benin-Nigeria border).'
(551) [sémé gì] [mòbèlì tó:] nì LHjě̌:, \(^{\text {g }}\) [Seme Loc] [vehicle other] 1PlSbj take.PfvRel, [lágósí gì] nì LHùní, [Lagos Loc] 1PlSbj go.PfvRel, [lágósí gì] nì \({ }^{\text {LH }}\) gwě:, [Lagos Loc] 1PlSbj exit(v).PfvRel, íbá:dá nì \({ }^{\text {LH ùní, }}\) Ibadan 1PlSbj go.PfvRel, kàdú:nà nì \({ }^{\text {LH}}\) ùní, Kaduna 1PlSbj go.PfvRel, [kánù gì] nì \({ }^{\text {LHùní, }}\) [Kano Loc] 1PlSbj go.PfvRel,
'We took another vehicle in Seme and went to Lagos. We left Lagos and went to Ibadan. We went to Kaduna and to Kano.'
[cities in Nigeria]
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(552) [kánù gì] nì ${ }^{\text {LH }}$ gwě:,
[Kano Loc] 1PlSbj exit(v).PfvRel,
móbélí nì LHjě:,
vehicle 1PISbj take.PfvRel,
bórnó éstát, yárúwá,
Borno State, Yarwa,
[màydúkùrì gì] nì ${ }^{\text {LH }}$ ùní,
[Maiduguri Loc] 1PlSbj go.PfvRel,
'We left Kano. We took a vehicle to Borno State, (and) Yarwa. We went to
Maiduguri.'
[more places in Nigeria]

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màydúkùrì móbélí nì \(\mathrm{LH}_{\mathrm{j}}^{\mathrm{z}}\) :,

Maiduguri vehicle 1PISbj take.PfvRel,
[gàmbòrí gì] nì LHùní,
[Gambori Loc] 1PISbj go.PfvRel,
[gàmbòrí gì] nì \({ }^{\text {LH }}\) gwě:,
[Gamboru Loc] 1PISbj exit(v).PfvRel,
kámérû:n, [kúsírí gì] nì \({ }^{\text {LH }} \mathrm{u} n i ́\),
Cameroon, [Kousséri Loc] 1PlSbj go.PfvRel,
[kúsírí gì] nì \({ }^{\text {LH }}\) gwě:,
[Kusiri Loc] 1PlSbj exit(v).PfvRel,
cád, [póngèlí gì] nì \({ }^{\text {LHèní, }}\)
Tchad, [Pont N'guéli Loc] 1PISbj go.PfvRel,
'We took a vehicle at Maiduguri and we went to Gamboru. We left Gambori (and went to) Cameroon. We went to Kousséri. We left Kousséri (and went to) Tchad. We went to Pont N'guéli (N'guéli bridge).'
(554)
\(\begin{array}{llll}\text { [póngèlí } & \text { gì] } & \text { nì } & { }^{\text {LH }} \text { gwě:, } \\ \text { [Pont N'guéli } & \text { Loc] } & \text { 1P1Sbj } & \text { exit(v).PfvRel, }\end{array}\) njàmínà nì \({ }^{\text {LHùní, }}\) Ndjamena 1PlSbj go.PfvRel, njàmínà yá: èbà-à nì \({ }^{\text {LH }}\) sànjè̀-bé, Ndjamena there.Def market-Loc 1PlSbj do.business-IpfvPastRel, 'We left Pont N'guéli and went to Ndjamena. There in Ndjamena we were doing business in the market.'
[ \({ }^{\text {LH }}\) sànjè̀-bé, past-time form of imperfective participle \({ }^{\mathrm{LH}}\) sànjò-bá 'do business']
(555)
\begin{tabular}{lllll} 
[sóy-gé & nì-lá & dònè \(\nearrow]\) & [nì-lá & tùľ̀ \(\downarrow]\), \\
[cloth-Pl & 1PlSbj-Fut & buy.PfvRel] & {\([1\) PlSbj-Fut } & sell.PfvRel],
\end{tabular}
[èbà tó:-gè] [bù:dù púlદ́-gé] nì-lá tùlè,
[market other-Pl] [money white-Pl] 1PlSbj-Fut sell.PfvRel,
péntír nì-lá tùlè,
paint 1PlSbj-Fut sell.PfvRel,
[kìndò-kìndò já:lì-yè-gé] nì-lá tùlè,
[image-image look-Instr-Pl] 1PlSbj-Fut sell.PfvRel,
'We would buy and sell cloth. (As for) other merchandise, we would sell silver coins, we would sell paint, we would sell mirrors.'
[cf. sj̀: 'garment'; 'silver' is also called sárdí; 'mirror' literally approximately 'image-looker', cf. instrument nominal -yé (§4.2.4)]

\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline (557) & [ \({ }^{\text {é }}\) & \({ }^{\text {LH }}\) tùnú] g & gì] & & gì] & nì & \\
\hline & [[Dem.Def & behind] L & Loc] & [Tch & Loc] & 1PlSbj & \\
\hline & kámérû:n, & [kúsírì & & gì] & nì & \({ }^{\text {LH }}\) gwě:, & \\
\hline & Cameroon, & [Koussér & & Loc] & 1PlSbj & exit(v).P & fvel \\
\hline & [márwá & gì] & nì & & \({ }^{\text {LH }}\) yògé, & & \\
\hline & [Marouwa & Loc] & 1 Pl & Sbj & come.Pf & Rel, & \\
\hline & [márwá & gì] & nì & & \({ }^{\text {LH }}\) gwě:, & & \\
\hline & [Marouwa & Loc] & 1 Pl & & exit(v).P & fvRel, & \\
\hline
\end{tabular}
'After that, we left Tchad (and went to) Cameroon. We left Kousséri and came to Marouwa. We left Marouwa.'

'We took a vehicle and went to Garoua. At Garoua we took a vehicle and went to Ngaoundéré.'

'We took a vehicle in Ngaoundéré and went to Yokadouma. We took a vehicle in Yokadouma and went to Bertoua. We took a vehicle in Bertoua and went to Musaka.'
(560) àjákày kǔ: \({ }^{\text {n }}\) nì \({ }^{\text {LH }_{j}}\) :̌:, Ajakay skiff 1 PISbj take.PfvRel, [érì yà] bàtó nì LHjě̌:, mùsàká, \(_{\text {nì }}\) [Dem.Def time] boat 1PlSbj take.PfvRel, Musaka, bícì bràzàvíl
Bichi[fort] Brazzaville,
[bràzàvíl gì] nì \({ }^{\text {LH}}\) nwě:
[Brazzaville Loc] 1PlSbj enter.PfvRel,
'We took a boat at Ajakay. At that time we took a boat (and went to) Musaka. We entered Bichi (Fort) at Brazzaville.'
(561) [bràzàvíl gì] èbà-à nì \({ }^{\text {LH }}\) sànjè-bé, [Brazzaville Loc] market-Loc 1PlSbj do.business-IpfvPastRel, sóy-gé [nì-lá dònè \(\nearrow] \quad\) [nì-lá tùlè̀], cloth-Pl [1PlSbj-Fut buy.PfvRel] [1PlSbj-Fut sell.Pfv],
 [vehicle oil] [1P1Sbj-Fut buy.PfvRel] [1PlSbj-Fut sell.PfvRel], [móbélí tònjè-gé] [nì-lá dònè \(\nearrow]\) [nìlá tùlè \], [vehicle foot-Pl] [1PlSbj-Fut buy.PfvRel] [1PlSbj-Fut sell.PfvRel],
[móbélí [kìndò-kìndò já:lì-yè-gé]]
[vehicle [image-image look-MP-Pl]]
[nì-lá dònè \(\nearrow] \quad\) nì̀lá tùlè \(\downarrow\) ],
[1PlSbj-Fut buy.PfvRel] [1PlSbj-Fut sell.PfvRel],
'We would do business in the market at Brazzaville. We would buy and sell fabric. We would buy and sell motor oil, We would buy and sell tires, We would buy and sell vehicle mirrors.'

\section*{T5 Thieves in Sigal}
narrator: older speaker from Ningo
mode: dictation
(562) [kánó gì] èndìgó nì \({ }^{\text {LH }}\) kàní, [Kano Loc] indigo 1PISbj do.PfvRel, [gàmbàrú gì] nì \({ }^{\text {LH }}\) gwě:, [Gambarou Loc] 1PlSbj exit(v).PfvRel, [[sígál 1 LHèbá] gì] nì \({ }^{\text {LHùní, }}\) [[Sigal market] Loc] 1PISbj go.PfvRel, [sígál \({ }^{\text {LHèbá] nì }} \quad{ }^{\text {LH }}\) sìgò-mí, [Sigal market] 1PlSbj descend-Caus.PfvRel, 'We did (business in) indigo (cloth) in Kano. We left Gambarou (NigeriaCameroon border) and went to the Sigal market. At the Sigal market we unloaded (our merchandise).'
(563) [[èbà \({ }^{\text {LH }}\) kùlìyé] gì] yà:gù nì \({ }^{\text {LH }}\) bì-y-yé [[market inside] Loc] night 1PlSbj lie.down-MP.PfvRel, [sóy \({ }^{\text {LH}}\) dò:ndè-gé] nì \(\quad{ }^{\text {LH}}\) dùní, [cloth bundle-Pl] 1PlSbj lay.PfvRel, [nì [nì \({ }^{\text {LHì̀-yé }]}{ }^{\text {LH }}\) nòyé \(]\), [1PlSbj lie.down-MP.PfvRel] [1PlSbj sleep(v).PfvRel], 'We lay down (to sleep) at night in the market. We put down our bundles of fabric. We lay down and went to sleep.'
[dún(ú) 'put down' is used for non-oriented objects such as bundles, compare tén̄́ 'put down, set' for vertically oriented objects such as calabashes and tables]

(565)


We got up (in the morning) and looked. They had stolen the merchandise, two bundles. We went into the town and informed (them) at (the house of) the village chief.'
(566)
\begin{tabular}{|c|c|c|c|}
\hline [nì & \({ }^{\text {LH }} \mathrm{j}\) j̀lé \({ }^{\text {c }}\) & [nì & bàlì-yà-nì], \\
\hline [1PlSbj & look.for.PfvRel] & [1PISbj & see-MP-PfvNeg] \\
\hline ¢́-rò & màrí-yè & ég-gè & káỳ, \\
\hline thus & be.lost.Pfv-3PISbj & Dem.Def-Pl & Top, \\
\hline hàlí & yò:] nì & bàlì & \\
\hline [until & today] 1PISbj & see- & P-PfvNeg \\
\hline
\end{tabular}
'We searched (but) we didn't find (them). They were lost in that way. (Even) up until today we haven't found (them).'
[ég-gè for érì-gè 'those (definite)', §4.4.1.2; topic particle kày §19.1.1]

\section*{T6 Thieves in Ndjamena}
narrator: older speaker from Ningo
mode: dictation
(567) [cádì gì] là, njàmínà,
[Tchad Loc] too, Ndjamena má:gé gélé mì \({ }^{\text {LH}}\) bàlì-yé, difficulty place 1 SgSbj see-MP.PfvRel,
'In Tchad too, in Ndjamena, a place where I saw (experienced) trouble.'
(568) égá:gú [dèn tò:mà] [èbà gí] mì \({ }^{\text {LH }_{n w}}\) ̌:,
morning [day one] [market Loc] 1 SgSbj enter.PfvRel,
[kélé-ŋgé mè:-ŋgé \(] \quad\left[\begin{array}{lll}\text { inì } & \text { LHì̀:bá } \quad \text { gì }]\end{array}\right.\)
[money-Pl 1SgPoss-Pl] [[1PlPoss pocket] Loc]
yà sé-yn, [èbà gí] mì \({ }^{\text {LH}} \mathrm{nwž:}\),
Exist.Dist have.Past- 1 Sg Sbj, [market Loc] 1 Sg Sbj enter.Pfv,
'One day I went into the market in the morning. I had my money in my pocket. I went into the market.'
[< dèw \({ }^{n}\) 'day']
(569) [[[èbá rí] \({ }^{\text {LH}}\) kùlìyé] gì] mì \({ }^{\text {LH }}\) ùnó:- wn \(^{\text {n }}\),
[[[market Def] inside] Loc] 1 SgSbj go-while, kàn-gè [túnú gì yá] [gíró gì yà] yògè-sà-w \({ }^{\mathrm{n}}\), thief-Pl [behind Loc and] [front Loc and] come-Reslt-while, mì-gí kè \({ }^{\text {LH}} k e ̀ m i ̀-y \varepsilon ́, ~, ~\) 1Sg-Acc 3PlSbj bump-MP.PfvRel,
'As I was going (walking) inside the market, thieves came, both behind and in front (of me) and they jostled me.'
[ùnó:-(ウ̀n \({ }^{n}\) §15.2.1.3; yògè-sà-w \(W^{n}\) §15.2.2.2]
(570)
\begin{tabular}{|c|c|c|c|c|}
\hline [[númíyé & sè:-ygé nì:ngà ] & yà] & & \\
\hline [[hand & digit-Pl two] & Inst] & & \\
\hline [[jì:bá & m :] ] gì] & númíyé & kè & \({ }^{\text {LH}}\) tùní, \\
\hline [[pocket & 1SgPoss] Loc] & hand & 3PlSbj & ut.in.PfvR \\
\hline [kélé-ygé & mè:-ŋgé] & kè & \({ }^{\text {LH }}\) kàmí, & \\
\hline [money-Pl & \(1 \mathrm{SgPoss}-\mathrm{Pl}]\) & 3 PlSbj & steal.Pfv & \\
\hline
\end{tabular} 'With two fingers, they put their hand(s) in my pocket. They stole my money.'
(571) [jì:bá mě:] mì tábé-ỳ \({ }^{\text {n }}\), [pocket 1 SgPoss] 1 SgSbj touch. \(\mathrm{Pfv}-1 \mathrm{SgSbj}\), kélé-ŋgé ór-à:, kàmì sìní-yè, money-Pl not.be-3PlSbj steal.Pfv take.away.Pfv-3PlSbj, 'I felt (in) my pocket. There was no money. They stole it and took it away.'
(572) kè-gí mì \({ }^{\text {LHtàgì-yé, }}\) 3Pl-Acc 1SgSbj follow-MP.PfvRel, jò \(\varepsilon^{n}\) á:rí-yé-ỳ \({ }^{n}\), bálí-yá-ní-y \({ }^{n}\) look.for.Pfv get.tired-MP.Pfv-1SgSbj, see-MP-PfvNeg-1SgSbj
'I pursued them. I looked and looked (for them) to the point of exhaustion. (But) I didn't find (it/them).'
\[
\text { [j̀̀lén á:Tí-yé-ìn } \text { §15.2.1.8] }
\]

\section*{T7 Conversation}
recorded in Ningo end January 2017
A: Amadou Toloba
B: Boubacar Toloba
note: This recording was made by the Mali project manager (Minkailou Djiguiba) in the absence of the linguist. Portions of it are of low intelligibility due to wind but much of it is clearly intelligible. A's speech is clearer than B's.

00:00
A : tòn
tal
\begin{tabular}{lllll}
{\([[y e ́: ~\)} & gób-bà \(]\) & \({ }^{\text {LH tòní }}\) & nì & \({ }^{\text {LH}}\) tùmbùlò-bá,
\end{tabular}
[[woman claim- VblN ] \(\operatorname{talk}(\mathrm{n})\) ] 1Pl begin-IpfvRel,
'We'll come in order to begin talking about asking for a woman (=arranging a marriage).'
[á: purposive with motion verb §17.5.2; existential è before imperfective (implies a brief delay); compare tònì túmbúlá: nì \({ }^{\text {LH }}\) yògò-bá 'we come in order to begin talking'; -bá in \({ }^{\text {LH}}\) tùmbùl̀̀-bá is nonsubject imperfective relative §14.4.2]

00:04
A: bé:
child
premier,
nàl-ìyè mè-nદ̀,
first, come.Pfv-2SgSbj if,
kúmíyè
calabash
ò
LHìmá,
kò:ní-gè
2 SgSbj be.able.Rel,
cotton-Pl \(2 \mathrm{SgSbj} \quad\) be.able.Rel,
wè: á: ò-gí LHìmì-yà-mí-Ø pós,
thing God 2 Sg-Acc be.able-MP-Caus.Pfv-3SgSbj at.all,
'When a child (=girl) is born, firstly, if you-Sg come, you can afford (to give) a calabash, you can afford (to give) some cotton (with seeds), anything at all that God has made you able (to give).'

00:15
A: [ò-lá gò-mì] [ò-lá ndè:]
[2SgSbj-Fut exit(v)-Caus.Pfv] [2SgSbj-Fut give.Pfv]
á: kwè:-Ø mè-nè
God raise.Pfv-3SgSbj if,

[1Sg Top] [2SgPoss child Def] claim.Pfv-1SgSbj,
'You will take it out and give it (to the girl's parents). If God has raised (her), I claim your child (as bride for my son).'

00:20
A: ع́-rò tágí-yó-bò-ẁ,
thus follow-MP-Ipfv-2SgSbj,
bon é-rò tágí-yé-ẁ mè-nè,
well thus follow-MP.Pfv-2SgSbj if,
bò: \({ }^{\text {n }}\) ò bí:-nì,
be.Dur 2 SgSbj be-Dur,
'You-Sg will continue like that. You keep being like that,' [bí:-nì §15.2.1.6]

00:26
A: dénì kè:lé ò pós
day goods 2 SgSbj obtain.PfvRel at.all, [ò-lá sìnì] [ò-lá kè:lé nà-gí kà:n-dè], [2SgSbj-Fut bring.Pfv] [2SgSbj-Fut goods 3Sg-Acc do-Benef.Pfv],
'Any day (=whenever) you have acquired some goods, you will bring (it) and make wealth for her.'
[benefactive derivative §9.4.2.1]
00:30
A: [tùbè
[persist.Pfv and.Nonpast.SS]
[tùbè
ná]
ò bí:-nì,
[persist.Pfv and.Nonpast.SS]
2 SgSbj be-Dur,
ò bí:-nì,
hàlí jè: yá bá:ndó-bà nǎ: dèbè,
until take.Pfv and.Nonpast.SS grow.up-VblN 3SgSbj.Fut begin.Pfv,
'You keep persisting (=continue to visit them), you keep persisting, until she will begin to grow up.'

00:35
A: á: nà-gí kwè: dìyè-Ø mè-nè, [ájá kày], God 3 Sg-Acc raise leave.Pfv-3SgSbj if, [now Topic], [náfá rì] \({ }^{\text {Ltùmbùlì-yè- } \grave{w}^{n} \text { kànì-Ø mè-nè, }}\) [usefulness Def] begin-MP-while be.done-3SgSbj if, ò-lá ùnì, 2SgSbj-Fut go.Pfv, ò-lá [[nà LHbà:-gé rì] gì] tù:rè, 2SgSbj-Fut [[3SgPoss father-Pl Def] Acc] inform.Pfv, 'If God has left (=finished) raising her, now, when she has begun to be useful, you will go and inform her fathers (i.e. her father and brothers).'

00:46
A: [bà:-gé-rì gì] tù:rè mè-nદ̀, [father-Pl-Def Acc] inform.Pfv if, [è-lá dàmì-yè] [pâ: \({ }^{\text {n è-lá kànì-yè }],}\) [2PISbj-Fut talk-Recip.Pfv] [understanding 2PISbj-Fut do-Recip.Pfv], 'When (you) speak to the fathers, you-Pl will have a discussion, you-Pl will come to an agreement.'

00:50
\(\begin{array}{lllll}\text { A: dàmì-yè } & \text { pâ: } \\ \text { talk-Recip.Pfv } & \text { understanding(n) } & \text { è } & \text { kànì-yè } & \text { mè-nદ̀, } \\ & \text { do-Recip.Pfv } & \text { if, }\end{array}\)
ò-gí òjì ndìy-yè mè-nè,

2Sg-Acc road give-3PlSbj if, ò-là wó:lè-gé dònè, 2SgSbj-Fut kola.nut-Pl buy.Pfv, 'When you have had a discussion and come to an agreement, when they have authorized you (to proceed), you will buy kola nuts.'

\section*{00:55}

A: [wó:lè-gé rì] dònè ndé-ẁ mè-nè,
[kola.nut-Pl
Def] buy.Pfv
give.Pfv-2SgSbj if,
[wó:lè-gé rì] àbè tèmì-yè mè-nè
[kola.nut-Pl Def] take.Pfv chew.on.Pfv-3PlSbj if,
'When you have bought and given out the kola nuts, when they have taken and chewed the kola nuts,'
[áwó~ ábó 'take (sth given)']

00:59
A: érí= yó [bà:-gè \({ }^{\text {LH }}\) wò:lè-gé], Dem.Def=Foc] [father-Pl kola.nut.Pl], mà \(\rightarrow \quad\) ć-rò = lá, or Dem.Def-manner=it.is.not,
'That [focus] is the fathers' kola. Is it not thus?'

01:03
A: háyà, [bà:-gè \({ }^{\text {LH}}\) wò̀:lè-gé] ndé-ẁ mè-nè,
well, [father-Pl kola.nut-Pl] give.Pfv-2SgSbj if,
[ájá kày] [yé: rì],
[now Topic] [woman Def],
ò-gí ndí:-y \(=\grave{w} \quad\) bìlè-Ø,
2 Sg -Acc give-Pass=it.is become.Pfv-3SgSbj
'Well, when you have given the father's kola, now the woman, she has been given (=betrothed) to you.'
[stative passive \(-y \hat{\varepsilon}=\grave{W}\) (Ningo) or \(-y \hat{\varepsilon}=\grave{W}^{n}\) (Boui) §10.4.1.2]
01:09
A: góbá
claim(v).Purp come-IpfvRel-Pl be-3PlSbjPast
bángílí-yò = b-à:, yógó-bò-ngè ór-ìy-yè mè-n là 冗
go.back-MP=Past-3PlSbj come-IpfvRel-Pl not.be-3Pl.Past if too
B: kòndì-yè
bend-Pfv.3PlSbj
A : kòndì-yè
bend-Pfv.3PISbj
A:'If newcomers (=rivals) had been coming to claim (the girl), they would
(have to) go back. On the other hand if there were no (=rivals) who came, ...
B: ‘They have turned back.'
A: 'They have turned back.'
[purposive á: §17.5.2; bìy-yغ̀ probably < bíyó 'be' §11.2.2.2; 'bend (intr),
become sharply bent' = 'turn (and go back)']
01:16
B: [ék kày] [ò \({ }^{{ }^{L H}}\) wě: \(=\) ẁ \(]\) bì-yò-bó-Ø,
[Dem.Def Topic] [2SgPoss Poss=be] remain-MP-Ipfv-3SgSbj,
'So that one (=girl) will remain yours.'
[< érì kày]

01:18
B: [ò \({ }^{\text {LH}}{ }_{W}\) ̌̌: \(\left.=\grave{\mathrm{w}}\right]\) bì-yò-Ø mè-nè,
[2SgPoss Poss=be] remain.Pfv-MP-3SgSbj if, àmàlí-ngè
in.law-Pl
dé:ndà
ò-lá kùwè,
2 SgSbj -Fut cultivate.Pfv,
daytime 2 SgSbj-Fut cultivate.Pfv, [dàbì-yè]-kúwá ò-lá kùwè, [hide]-cultivation 2 SgSbj -Fut cultivate.Pfv, 'If she remains yours, you will do (collective) farm work for the parents-inlaw. You will do farm work in the daytime (=publicly), and you will do secret farm work (=inconspicuously).'
[kùwè, -kúwá with medial wfor speaker B (but bfor the older speaker A)]

01:26
B: [dàbì-yè]-kúwá
[hide]-cultivation [dàbì-yè]-kúwá
[hide]-cultivation [ájá kày] [kéléngè \({ }^{\text {LH }}\) dàbàré] ò jòlò-wá, [now Topic] [marriage plan] 2SgSbj ask.for-IpfvRel,
'When you have done farm work secretly, as soon as you have done farm work secretly, the plan for the marriage that you ask for.'
[imperfective nonsubject relative -wá~ -bá \$14.4.2]

\section*{01:32}

B : dénì-gè ò \({ }^{\text {LHgìré }}\) wô., day-Pl 2 SgSbj get.PfvRel or, énání ò-gí kè \({ }^{\text {LH }}\) ndé: wô:, month 2 Sg -Acc 3 PlSbj give.PfvRel or, wòy-gè ò-gí kè \({ }^{\text {LH}}\) ndě: wô:, year-Pl 2Sg-Acc 3PlSbj give.PfvRel or,
'The days (dates) that you get, the month that they give you, or the years that they give you.'
[wô: §7.2.1.3]

01:37
\(B\) : wòy-gé gwè:-Ø mè, year-Pl exit(v).Pfv-3SgSbj if, [ájá kày] [kéléngé rì] kéléndé-ẁ, [now Topic] [marriage Def] perform.marriage.Pfv-2SgSbj, 'When the (specified) years have elapsed, now you-Sg have performed the marriage ceremony.'

01:40
\(\mathrm{B}:\) kéléngé tà ggè mè, marriage pass.Pfv-3SgSbj if, kéléngé [ájá kày] kéléndé-ẁ \(\nearrow\), marriage [now Topic] perform.marriage.Pfv-2SgSbj, jé:-sây [ndà-gé rì póy] màngà-lí-y-yè, so.then [person-Pl Def all] assemble-Mult-Recip.Pfv-3PlSbj, 'When the marriage has passed, (and) now you-Sg have performed the marriage ceremony, then all the people have assembled.' [cf. perfective negative mángá-lí-yà-n-i:̀]

01:47
B: [ò
[2SgSbj want.Rel all] [now Topic] [ò yá] [ò \({ }^{\text {LH}} \mathrm{tò}\)-gé yà \(]\) è dàmì-yè, [2Sg and] [2SgPoss kinsman-Pl and] 2PlSbj discuss-Recip.Pfv, 'Whatever you want now, you-Sg and your kin, you-Pl have discussed (it) together.'
[ \({ }^{\text {LH }}\) kèy-yá(406b) in §14.4.2; singular tògù 'kinsman']

01:51
B: [[kéléngé rí] gì] è òbì-yè, \(\left[\begin{array}{lll}{[m a r r i a g e} & \text { Def }] & \text { Loc }] ~ 2 P 1 S b j ~ s i t-M P . P f v, ~\end{array}\right.\) [[káná rí] gì], [[doing(n) Def Loc],
'You have sat during the marriage ceremony, during the activities,"

01:54
B: [ \({ }^{\text {LH }}\) yògò-wá
rì]
[come-IpfvRel
Def]
\(\begin{array}{lllll}\text { [ájá } & \text { kày] } & \text { [dàbì-yè]-kúwà- } & & \text { [dàbì-yè]-kúwà }\end{array}\) rì]kùwè mè tán, cultivate if only, 'Coming (from that), now, as soon as the secret farming has been done,'

01:58
B: [[ní
rí] gì]
[[mother Def] Loc]
ò-là [ní:ndí nì] nì:ndè,
2SgSbj-Fut [accompany.Nom Def] accompany.Pfv,
[kéléngé rì] \({ }^{\text {LH} k e ̀ l e ̀ n d e ̀-s a ́ ~ m e ̀ ~ t a ́ n] ~}\)
[marriage Def] perform.marriage-Reslt if only]
ò-là [ní:ndí rì] nì:ndè, 2SgSbj-Fut [accompany.Nom Def] accompany,
'The mother (of the bride), you-Sg will accompany her (back). When the marriage ceremony has been performed, you will accompany (her kin, back to where they came from).'
[cognate nominals §11.1.2.5-6]
02:03
B: [ní:ndí
[accompaniment
\(\begin{array}{lll}\text { rì] tàngè-Ø } & \text { mé, } \\ \text { Def] } & \text { pass.Pfv-3SgSbj } & \text { if, }\end{array}\)
déní-gé nà LHùm-bà-gé, [dènì-gè síyélé]=ẁ, day-Pl 3 SgSbj go-IpfvRel-Pl [day-Pl eight]=it.is,
'When the accompaniment has passed, the days when she (=bride) goes, it is eight days.'
[the bride spends a week in her husband's home, then returns to her mother]
02:08
B: [nì
\({ }^{\text {LH }}\) ndà-gé
kà] [dènì-gè síyélé] \(=\) ẁ,
[1PlPoss person-Pl Def Topic] [day-Pl eight]=it.is,
\(\left[\begin{array}{lll}{[\text { nì }} & { }^{\text {LH }} \text { sòjò-gé } & \text { rì }] ~ y a ̂:] ~ —, ~\end{array}\right.\)
[[1PlPoss Dogon-Pl Def] chez-,
\(\left[\begin{array}{lll}{[n i ̀ ~ L H} \\ j a ̀ y-g e ́ ~ r i ̀ ~\end{array}\right]\) yâ:] [dènì-gè síyélé] \(=\grave{\mathrm{w}}\),
[[1PlPoss leatherworker-Pl Def] chez] [day-Pl eight]=it.is,
'As for our people (leatherworker caste), (it's) eight days. For our Dogon-.
For us leatherworkers, it's eight days.'

02:14
B: [[sójó-gé rì] yâ:] mè, [dènì-gè kùlèy \({ }^{n}\) ] = yò, [[Dogon-Pl Def] chez] if, [day-Pl six]=it.is, [[kómé-gé rì] ŋâ:] mè, [dènì-gè tá:ndí] = yò, [[slave-Pl Def] chez] if, [day-Pl three]=it.is, 'If ( \(=\) it concerns) the (freeborn) Dogon, it's six days. If (it concerns) the slaves, it's three days.'
[here the speaker distinguishes 'Dogon' from his own leatherworker caste; in other contexts he used 'Dogon' to include this caste, see @ 15:03]

02:18
B : érì
Dem.Def exit(v).Pfv-3SgSbj if, yá: mbé: gwè:-Ø mè, there.Def here exit(v).Pfv-3SgSbj if, gélé nà \({ }^{\text {LH }}\) gwě: place 3 SgSbj exit(v).PfvRel
yá: [[nà \(\left.\quad{ }^{\text {Lbà̀: }}\right] \quad{ }^{\text {LH }}\) gìbá-à \(]\), there.Def [[3SgPoss father] house-Loc],
'If she has left that (place), if she has come (here) from there, the place that she left (to come) here, there at her father's house.'
[emend by omitting mbé:]
02:24
\(B\) : dènì-gè tá:ndí -,
day-Pl three -
[dènì premier \({ }^{\text {LH}}\) nàngá] [dèn tò:mà] nǎ: nàyè,
[day first on.day] [day one] 3SgSbj.Fut spend.night.Pfv,
'Three days-. The first night (of the eight-day marriage ceremony), on one day she will spend the night (at her own home).'
[cf. dèn(i) \({ }^{L}\) díl̄́ 'first day'; 3Sg nă: parallel to \(2 S g\) ò-lá etc.; the bride "flees" back to her mother's house]

\section*{02:27}

B: [dèn \({ }^{\mathrm{L}}\) ní: ŋgá-nú \({ }^{\mathrm{H}}\) dé \({ }^{\text {LH }}\) nàngá]
[day two-Ord day on.day]
[dènì-gè tá:ndí] nă: nàyè,
[day-Pl three] 3SgSbj.Fut spend.night.Pfv,
'The second day (=time), on that day, she will spend three nights (at home).'

02:30
B: [dèn tá:ndí-nú \({ }^{H}\) dé \({ }^{\text {LH }}\) nàngá]
[day two-Ord day on.day]
[dènì-gè kè:jò] nă: nàyè,
[day-Pl four] 3SgSbj.Fut spend.night.Pfv,
'The second day (=time), on that day, she will spend four nights (at home).'
02:32
B : [dè
[day four-Ord] day on.day] [dènì-gè kùlèy] nă: nàyè, [day-Pl six] 3SgSbj.Fut spend.night.Pfv, 'The fourth day (=time), she will spend six nights (at home).'

02:34
B: [dèn kúléy-nú] \({ }^{\mathrm{H}}\) dé \({ }^{\text {LH }}\) nàngá] gwè:-Ø mè-nè
[day-Pl six-Ord] day on.day] exit(v).Pfv-3SgSbj if, [dènì-gè sô:y] nǎ: nàyè, [day-Pl seven] 3SgSbj.Fut spend.night.Pfv,
'The sixth day, when she goes out (to her mother's house), she will spend seven nights (at home).'

02:37
 thus thus thus until take-Resit-Ant.SS
[kéléngé rì] nǎ: tàngè, [marriage Def] 3SgSbj.Fut pass.Pfv,
'(It goes on) like that, like that, like that, until the marriage ceremony will pass.'

02:40
B: kéléngé tàngè-Ø mè-nè, marriage pass.Pfv-3SgSbj if, [ájá kày] [dù:-gè [nà \({ }^{\text {LH }}\) wè:--ygé] rì], [now Topic] [running(n) [3SgPoss Poss-Pl] Def], dù:-gé, àmàlì nàlì nǎ:-, running(n)-Pl, in.law companion 3SgSbj.Fut nàlì nă: sìnì, companion 3 SgSbj .Fut convey.Pfv,
'When the marriage ceremony has passed, now her movements (between her home and her husband's house), the in-laws (bride's kin) will take a companion (young female friend).'
['her movements' phrased as "movements [her things]"; a young girl at least 10 years old is brought to accompany the bride at the husband's home during the first week]

02:47
B: nàlì sìnì-Ø mè-nદ̀, \(\begin{array}{ll}\text { companion } & \text { convey.Pfv- } 3 \mathrm{SgSbj} \\ \text { [nàlì } & \text { ní:ygá-nú] } \quad \text { nǎ: }\end{array} \quad\) sìnì, [companion two-Ord] 3SgSbj.Fut convey.Pfv,
'When she has taken the companion (there), she will take a second companion (there).'

02:49
B: [nàlì̀ ní:ngá-nú] sìnì-Ø mè-nè, [companion two-Ord] convey.Pfv-3SgSbj if, [nàlì tá:ndú-nú] nǎ: sìnì, [companion three-Ord] 3SgSbj.Fut convey.Pfv,
'When she has taken the second companion (there), she will take a third
companion.'

02:50
B: [nàlì̀ tá:ndú-nú] sìnì-Ø mè-nè, [companion three-Ord] convey.Pfv-3SgSbj if,
[hàlí kày], [hàlí kày]
[until Topic], [until Topic]
[ànjì-né rì] [ájá kày]
[remain-Nom Def] [now Topic]
[bà: \({ }^{\text {LH gìbá-à }] ~ y o ̀ g e ̀-~} \varnothing\),
[father house-Loc] come.Pfv-3SgSbj
'When she has taken the third companion (there), until-, the rest (of the time)
she comes to her father's house.'
02:55
B: [bà: \({ }^{\text {LH gìbá-à }] ~ g w e ̀:-Ø ~ m e ̀, ~}\) [father house-Loc] exit(v).Pfv-3SgSbj if, [dè: nǎ: sìnì] [nòbè nǎ: sìnì], [elder.sib \(3 \mathrm{SgSbj} . F \mathrm{Fut}\) convey.Pfv] [younger.sib \(3 \mathrm{SgSbj} . F u t\) convey.Pfv], 'When she leaves her father's house, she will bring her elder sister and her younger sister.'

03:00
B: nòbè
gwè:-Ø mè, [bǎ:
rì]
younger.sib exit(v).Pfv-3SgSbj if, [father Def]
[ájá kày]- [ájá kày]
[now Topic] [now Topic]
[érí \({ }^{\text {LH}}\) pàmú rì kày] ì̀gè- \(\varnothing\),
[Dem.Def matter Def Topic] end(v).Pfv-3SgSbj,
'When the younger sister has gone out, the father now- Now that matter is finished.'

03:05
B: [ájá kày] wè: kànì-Ø mè,
[now Topic] thing be.done.Pfv-3SgSbj if,
[ìndèrì-gé-r-gè],
[baptism-Pl-Def-Pl],
'Now, if anything (else) happens, those baptisms (i.e. naming ceremonies),'
[ìndèrí < Fulfulde, cf. Tiranige bé: \({ }^{\text {LH inní 'child's name'] }}\)

03:08
B: [ò \({ }^{\text {LH}} k\) kèy-yá] ò \(\quad{ }^{\text {LH} k a ̀ m-b a ́, ~}\)
[2SgSbj want.Rel] 2 SgSbj do-IpfvRel, [ná: gíré-ẁ mè] sém-má-ẁ,
[bovine get.Pfv-2SgSbj if] slaughter-be.able-2SgSbj, 'You-Sg do what you want. If you've got a cow (or bull), you can slaughter
(it).'
03:11
B: [á:ná gíré-ẁ mè] sém-má-ẁ, [sheep get.Pfv-2SgSbj if] slaughter-be.able-2SgSbj,
[á:ná gírá-nú-ẁ mè, [sheep get-PfvNeg-2SgSbj if,
[ùnà gíré-ẁ mè] sém-má-ẁ,
[goat get.Pfv-2SgSbj if] slaughter-be.able-2SgSbj, 'If you've got a sheep, you can slaughter (it). If you haven't got a sheep, (then) if you have a goat, you can slaughter (it).'

03:15
B: [ndà: póy] bání nà \({ }^{\text {LH}}\) ìmá \({ }^{\text {LH }}\) tòró, [person each] manner 3 SgSbj be.able.Rel extent,
દ́-rò \(\varepsilon\)-rò \(\varepsilon\)-rò
thus thus thus
'Each person, according to what he-or-she can afford. (It goes on) like that.'
03:20
A: bon, [ájá kày] érí á: ò-gí nèwní kànì-Ø,
well, [now Topic] Dem.Def God 2Sg-Acc provide(n) do.Pfv-3SgSbj, á: ò-gì bé: ndè:-Ø, God 2Sg-Acc child give.Pfv-3SgSbj,
'Well, now, God has blessed you with that. God has given you a child.'
[cf. Fulfulde verb newne '(God) lighten (burden)']
03:25
A: [pìndì jwè:-Ø] mè-nè, [belly become.full.Pfv-3SgSbj] if, bò: \({ }^{\text {n }}\) nà bíi:-nì, bò: \({ }^{\text {n }}\) nà bí:-nì, be.Dur 3 SgSbj be-Dur, be.Dur 3 SgSbj be-Dur, 'If she has become pregnant, she stays (like that) for a time.'

03:29
A: [hàlí
jè:
ná]
[until take.Pfv and.Nonpast.SS],
[[pìndí rì] kùnè-Ø] yà:rì-yè mè-nè,
[[belly Def] become.half.ripe.Pfv-3SgSbj] feel-MP.Pfv-3PISbj if, 'Eventually, when they (=people) observe that the belly has become half-ripe (=has hardened).'

03:31
 there.Def [[3SgPoss father] house-Loc] 3SgSbj.Fut go.Pfv, '(Among) some (people), her (=bride's) custom, she will go there to her father's house.'
[ǹ ní< rì ní; níhere is a kind of topicalizer §6.5.4]
03:36
A: [àmbìlè-gé-r-gè] yá: \({ }^{\text {LH }}\) nàlò-bó-Ø, [certain-Pl-Def-Pl] there give.birth-Ipfv-3SgSbj,
'(Among) some (people), it's there (at her father's house) [focus] that she gives birth.'
[focalized non-subject 'there' with defocalized \{LH\}-marked verb]
03:38
A: [àmbìlè-gé-r-gè] lá \(\nearrow\),
[certain-Pl-Def-Pl] also,
mbé: [bànà \({ }^{\text {LH }}\) gìbá-à:], mbé: \({ }^{\text {LH }}\) nàlò-bó- \(\varnothing\), here [man house-Loc] here give.birth-Ipfv-3SgSbj,
'On the other hand, (among) some other (people), here in the husband's house,
it's here [focus] that she will give birth.'

03:41


03:47
A: ká:n-dé-ẁ mè-nè, do-Benef.Pfv-2SgSbj if, ò-lá [[[bà: \({ }^{\text {LH gìbá }] ~}{ }^{\text {LH pǎy }] ~ g i ̀] ~}\) 2SgSbj-Fut [[[father house] old.person] Acc] ò-lá ùn-ì tù:rè, 2 SgSbj -Fut go-and inform.Pfv
'When you have done that (for her), you will go and inform the oldest man in your father's house(hold).'

03:51
A: páỳ
rì, nà-lá
old.person Def, 3 SgSbj-Fut [[nà \({ }^{\text {LH }}\) ndà-gé] gì] nǎ: tù:rè, [[3SgPoss person-Pl] Acc] 3SgSbj.Fut speak.Pfv, nǐ: rì, ò-lá mother Def, 2 SgSbj-Fut -
'The oldest man, he will likewise speak to (=inform) his people (=kin). The mother, you-Sg will-,

03:55
A: é [[è \({ }^{\text {L nì̀:] gí] è-lá tù:rè, }}\) 2Pl [[2PlPoss mother] Acc] 2PlSbj-Fut speak.Pfv, \(\begin{array}{lll}{[\text { è }} & \text { nì:] = yó } & { }^{\text {LH}} \text { kànì-yé } \\ {[2 P 1 P o s s} & \text { rì, }\end{array}\) [2PIPoss mother]=it.is do-MP.PfvRel Def.
[[yé:-gé \({ }^{\text {LH}}\) pàmú \(\left.\quad \mathrm{r}\right]\) gì] nǎ: tù:rè, [[woman-Pl matter Def] Loc] 3SgSbj.Fut speak.Pfv,
'You-Pl, you will speak to (=inform) your-Pl mother. (As for) what concerns your-Pl mother, she will speak to (=inform) the women's contingent.'

04:00
A: [è póy] tù:rì-yè tù:rì-yè \({ }^{\text {LH }}\)
[2Pl all] speak-Recip.Pfv speak-Recip.Pfv
é kànì mè-nè,
Dem.Def be.done.Pfvif,
'You all have spoken to (=informed) each other, when that has been done,'

04:02
A: [ájá kày] [nà \(\quad{ }^{\text {LH }} \mathrm{n}\) nàè-sá \(\quad\) rì kày] [now Topic] [3SgSbj give.birth-ResltRel Def Topic] nú:ndí-yé = ẁ kànì, hear.Pfv-Pass=it.is do.Pfv,
'Now it has happened that it has been heard that she has given birth.'
04:04
A: sì:já-gè nà-gí kè-lá sèmì-rè, chicken-Pl 3Sg-Acc 3PlSbj slaughter-Benef.Pfv, dènì-gè só:y, kè-lá nà-gí òbì-rè, day-Pl seven, 3PlSbj-Fut 3Sg-Acc sit-Tr.Pfv,
'They will slaughter chickens for her. They will have her sit (=rest) for seven days.'
[benefactive §9.4.2.1]
04:09
A: nà-lá àlàndì-yè, àlàndì-yè- \(\varnothing\) mè-nè,
3SgSbj-Fut rest(v)-MP.Pfv, rest(v)-MP.Pfv-3SgSbj if, [[dènì-gè só:y] [ \({ }^{\mathrm{H}}\) dé nà \({ }^{\text {LH}}\) kìb-bá \(\quad\) rì \(] \quad{ }^{H}\) dé \({ }^{\text {LH }}\) nàngá] [[day-Pl seven] [day 3 SgSbj complete-IpfvRel Def]] day on.day] \({ }^{\text {LH }}\) yà:gú rì, night Def,
'She will rest. When she has rested, the night of the day on which the seven days have been completed ( \(=\) on the night of the seventh day),
04:15
A: [ìjó rì \(]\) [kè-lá tòndè] [kè-lá tù:rè],
[village Def] [3PlSbj-Fut go.around.Pfv] [3PlSbj-Fut inform.Pfv], [[mà:ní \(\left.\left.{ }^{\text {LH}} \mathrm{bě}:\right] ~{ }^{\text {LHìní }}\right]\) ágá égá:gú = yò, [[So.and.so child] name] tomorrow morning=it.is,
'They will go around the village speaking (to people): the baptism (naming ceremony) of So-and-so's child is tomorrow in the morning.'

04:20
A: tù:rì-yè mè-nè, [ndà-gé rì pós] yògè yá, inform.Pfv-3PlSbj if, [person-Pl Def all] come.Pfv and.Nonpast.SS, égá:gú kè-lá màngà-lí-y-yè, morning 3PlSbj-Fut assemble-Mult-Recip.Pfv-3PISbj,
'When they have spoken (that), everybody comes and assembles in the morning.'

04:23
A: yògè màngà-lì-y-yè mè-nè
come.Pfv assemble-Mult-Recip.Pfv-3PlSbj if,
ùnà ò \({ }^{\text {LHìmá }}\),
goat 2 SgSbj be.able,
á:ná ò LHìmá,
sheep \(2 \operatorname{SgSbj}\) be.able,
ná: ò \({ }^{\text {LHìmá, }}\)
bovine 2 SgSbj be.able,
'When they have come and assembled, (if) a goat [focus] is what you have, (if) a sheep [focus] is what you have, (if) a bovine (cow or bull) [focus] is what you have,'

04:30
A: yògè
come.Pfy
màygà-lì-y-yè
mè-nદ̀,
come.Pfv
assemble-Mult-Recip.Pfv-3PISbj
if,
\({ }^{\text {LH }}\) yògò-bò-gé rì là \(\nearrow\), yò:gè \({ }^{L H}\) sǎ:, come-IpfvRel-Pl Def too, millet have.Rel, [[nà \({ }^{\text {LH yò:gé }] ~ y a ̀] ~}{ }^{\text {LHyògò-bó-Ø, }}\) [[3SgPoss millet] Inst] come-Ipfv-3SgSbj,
'When they have come and assembled, those who come too, (any-)one who has millet, he comes with his millet.'

04:37
A: sá:nù-gè \({ }^{{ }^{L H}}{ }_{\text {sǎ:, }} \quad\) [nà \(\quad{ }^{\text {LH }}\) sà:nú] yà \(] \quad{ }^{\text {LH }}\) yògò-bó-Ø, soap-Pl have.Rel, [[3SgPoss soap] Inst] come-Ipfv-3SgSbj, sì:já-bè \(\quad{ }^{L_{H}}\) sǎ:, chicken-child have.Rel, \(\left[\begin{array}{lll}\text { nà } & { }^{\text {LH }} \text { sìjà̀-bé } & \text { yà }]\end{array}{ }^{\text {LH }}\right.\) yògò-bó- \(\varnothing\), [[3SgPoss chicken-child] Inst] come-Ipfv-3SgSbj,
'(Any-)one who has soap (balls), she comes with her soap. (Any-)one who has a small chicken, he comes with his small chicken.'

04:42
A: hêy [ndà: póy]
hey! [person every]
wé:-kè:lé [nà yâ:] yà:fí \({ }^{\text {LH }}\) kànì-sà pós, goods \(\quad[3 \mathrm{Sg}\) chez] simple do-ResltRel all [yògè yá] ò̀-gí [[nà \({ }^{\text {LHìmá }] ~}{ }^{H L}\) kènú \(]\) [come.Pfv and.Nonpast.SS] 2Sg-Acc [[3SgSbj means] limit] nǎ: kà:n-dè, 3SgSbj.Fut do-Benef.Pfv,
'Hey, everybody, whatever thing or goods that are simple (=readily available) at his place, he-or-she will come and do for you as much as he-or-she can afford.'

04:47
A: è-lá òbì-yè, indèrí rì, [ìní rí] è-lá ìnì, 2PISbj-Fut sit-MP.Pfv, baptism Def, [name Def] 2PlSbj-Fut name(v),
 [[[2PlPoss grandfather] Acc] 2PlSbj name(v)-IpfvRel] nà \({ }^{\text {LH}}\) bìlé wô:,
3 SgSbj become.Pfv whether,
'You-Pl will sit down, (at) the baptism, you-Pl will bestow the name (of the baby). It (=the name) may be what you name (=call) your paternal grandfather.'

04: 52
A: [[[]
\begin{tabular}{|c|c|c|c|c|}
\hline [[[è & \({ }^{\text {L }}\) èjiji] & gí] & è & \({ }^{\text {LHiènì-bó] }}\) \\
\hline [[[2PlPoss & grandmother] & Acc] & 2PlSbj & name(v)-IpfvRel] \\
\hline nà & \({ }^{\text {LH }}\) bìlé & ô:, & & \\
\hline
\end{tabular}

3 SgSbj become.Pfv whether,
'Or it (=the name) may be what you name (=call) your maternal grandmother.'
[sèjì 'grandmother', with \(\{L\}\) rather than \(\{L H\}\) possessum overlay in Ningo (102a) in §6.2.2.1]

04:53


04:55
A: [ò \(\quad{ }^{\text {LH} k o ̀ g o ̀-s e ̀: y g e ́] ~ i ́ n i ́ ~ o ̀ ~} \quad{ }^{\text {LH} k e ̀ y-y a ̀ ~ p o ́ s, ~}\) [2SgPoss personally] name 2 SgSbj want.Rel all, [bà: \({ }^{\text {LH }}\) gìbá-à \(]\) dàmì-yè-sà- \(w^{n}\)
[father house-Loc] talk-Recip-Reslt-while.SS
gélé pâ: \({ }^{\text {n }}\) è pós, place understanding(n) 2PlSbj do-Recip.PfvRel all, [ìní rì] è-lá ìnì, [name Def] 2PlSbj-Fut name(v).Pfv,
'Any name that you-Sg personally want. Wherever (=however) you-Pl have discussed at the father's house (i.e. with your kin) and done (=decided). You-Pl will bestow the name.'
[ \({ }^{L H}\) kògò-sè: \(\left.\eta g e ́ ~ § 18.2\right] ~\)

05:01
A: [ìní rì è è ìnì mè-nદ̀, [name Def] 2 PlSbj name(v).Pfv if,
[bèlí rì ] è-lá sèmè,
[animal Def] 2PlSbj-Fut slaughter.Pfv, 'When you-Pl have bestowed the name, you-Pl will slaughter the animal.'

05:04
A: [bèlí rì \(]\) sèmì-yè mè-nè,
[animal Def] slaughter.Pfv-3P1Sbj dùwá:w è-lá kànì, dedication 2PlSbj-Fut do.Pfv,
'When they have slaughtered the animal, you-Pl will make the (Muslim)
dedication to God.'
[formal pronunciation is dù̀á:?ùu]
05:06

'When you-Pl have done the dedication, the animal that has been slaughtered,' [emended at speaker's request from plural \({ }^{\text {LH }}\) sèmì-yह́-gè on tape]

05:09
A: nèjì-yò-gè bíyó-b-à:, tà:rí-gè bíyó-b-à:,
cousin-Pl be-Ipfv-3PlSbj, respect.relation-Pl be-Ipfv-3PlSbj, hêy, sàgò-gè bíyó-b-à:
hey, griot-Pl be-Ipfv-3P1Sbj
'Collateral kin (uncle, aunt, cousin, nephew, niece) may be there. People in (interethnic) respect relationships (to you) may be there. Hey, griots may be there.'
[sister's children and the others mentioned have priority claims to the meat]
05:14
A: ndá: \({ }^{H}\) ò-gí ìmà pós, yògè- Ø mè-nè, person 2 Sg-Acc be.able.Rel all, come.Pfv-3SgSbj if, [[námá rì] kày] jó:ré pós órà-Ø, [[meat Def] Topic] stinginess all not.be-3SgSbj,
'Any person who has (social) power over you, if he-or-she has come, there is no stinginess regarding meat.'
[ndá: \({ }^{H}\) §14.2.7; ìmà with no \(\{L H\}\) overlay]
05:18
A: [[ndá: \({ }^{H}\) ò \({ }^{\text {LH }}\) kèy-yá pós] gì] ndó-bò-ẁ, [[person 2 SgSbj want.Rel all] Acc] give-Ipfv-2SgSbj, [ó \({ }^{\text {LHtà:kàlèmmé] ò-gì ímá là] }}\) ćlá-bò-Ø, [2SgPoss neighbor] 2Sg-Acc be.able.Rel also] dispossess-Ipfv-3SgSbj
'You give (meat) to anyone you-Sg want. Your neighbor who has power over you will also take (meat) away from (you).'

05:24
A: غ̀lè-Ø mè-nè, [námá rì] pánígé kè-lá kànì, dispossess.Pfv if, [meat Def] lunch 3PlSbj-Fut do.Pfv, [pánígé rì] gò-mì-yè mè-nè, [lunch Def] exit(v)-Caus.Pfv-3PISbj if, pánígé kè-lá kànì, lunch 3PISbj-Fut do.Pfv,
'When he has taken (it) away from (you), they will make lunch out of the meat. When they have taken out (some meat) for lunch, they will make lunch.'

05:30
A:
\begin{tabular}{|c|c|c|c|}
\hline [pánígé rì] & \multicolumn{2}{|l|}{ìlè-Ø} & \multirow[t]{2}{*}{mè-nદ̀, if,} \\
\hline [lunch Def] & be.cooke & Pfv-3SgSbj & \\
\hline [éw \({ }^{\text {n }}\) [[bà: & \({ }^{\text {LHgìbá }}\) & \(\mathrm{r}]\) gi] & \({ }^{\text {Lbò:-gè }}\) \\
\hline [2Pl [[father & house & Def] Loc] & be.Rel-Pl] \\
\hline [nìmbò-gè & nìmbò-gè & grúppú & grúppú \\
\hline [agemate-Pl & agemate-Pl & group & group, \\
\hline \({ }^{\text {LH}}\) kànì-yè-gé & \(\mathrm{r}]\) & gi] & pós, \\
\hline do-RecipRel-Pl & Def] & Loc] & all, \\
\hline
\end{tabular}
'When the lunch is cooked (=done), you-Pl who are in the father's house, all the groups (of men) who are agemates of each other (and of the baby's father),'

05:35
A: [[ìjó rì póy] gì], [[ndà: póy] yà:]
[[village Def all] Loc], [[person all] chez]
[kè LHgùmá] kè-lá sìnì, kè-lá ndè:,
[3PlPoss bowl] 3PlSbj-Fut convey.Pfv, 3PlSbj-Fut give.Pfv, 'All through the village, everyone will take their wooden eating bowls to everyone's place and give away (the food).'

05:41
A: númá-ndí-yó-là [ò káỳ],
fast-Inch-MP-Proh [2Sg Topic],
[kè-lá sìnì \(\nearrow] \quad\) [kè-lá ndè: \(\downarrow]\),
[3PlSbj convey.Pfv [3P1Sbj-Fut give.Pfv],
[unintelligible comment to other speaker],
'Don't-2Sg be (too) fast! They will take (them) around and they will give
(food) away.'
[command is addressed to speaker B, who was trying to start a new line of discourse]

05:45
A: kè-lá sìnì, kè-lá ndè:,
3PlSbj-Fut convey.Pfv, 3PlSbj give.Pfv,
[[ndà: póy] gì] ndìy-yと̀ mè-nદ̀,
[[person all] Acc] give.Pfv-3PlSbj if, kè-lá nè: ノ, kè-lá dùwá kà:n-dè \(\downarrow\), 3P1Sbj-Fut eat.Pfv, 3PlSbj-Fut dedication do-Benef.Pfv,
'They will take (them) around and they will give (food) away. When they have given (it) to everyone, they will eat, and they will do a dedication (to God) for (the child).'

05:51
A: [bé: rì] á: kwè:-Ø bìlè-Ø mè-nè, [child Def] God raise.Pfv become.Pfv-3SgSbj if, [ò \({ }^{\text {LH}} \mathrm{b}\) ě:] nà \({ }^{\text {LH bǎ: ndà-gè yàrì-yè } \nearrow \text {, }}\) [2SgPoss child] 3 SgSbj be.Rel person-Pl recognize.Pfv-3PlSbj, 'If God has already raised the child (to around seven years old or older), the people recognize what your-Sg child is.'

05:54
A: [ndà-gè póy] nà-gí dùwá ká:n-dó-b-à: 冗, [person-Pl all] 3Sg-Acc dedication do-Ben-Ipfv-3PlSbj, [[nà \({ }^{\text {LH}}\) bà:] \({ }^{\text {LH}}\) gìbá \(]\) yárí-yé \(=\grave{\mathrm{w}}\) bìlè-Ø \(\searrow\), [[3SgPoss father] house] recognize-Pass=it.is become.Pfv-3SgSbj, 'All the people will do the dedication for him. His-or-her father's house (=parentage) has come to be recognized.'
[implies the tenuous social position of a child whose father is not known to the community; yé = ̀̀ passive stative §10.4.1.2]

05:58
A : [nà
[3Sg chez] prestige=Foc become.Pfv-3SgSbj,
àlhámdùlillá:hì [ò ŋâ: là] tèdà:gú = yò bìlè-Ø, praise.to.God [2Sg chez also] respect=it.is become.Pfv- 3 SgSbj 'His position has become socially accepted. Praise God, your-Sg position also has become respectable.'

06:02
A: [tìngà \(\quad{ }^{\text {LH}}\) bě:] \({ }^{\text {LH }}\) ìndèrí, yé: jó:-bà jè:-sà- \(w^{n}\), [owner child] baptism, woman take-VblN take-Reslt-Ant.SS, hàlí jè: yá [bé: rì], until take.Pfv and.Nonpast.SS [child Def],
ह́-rò nì kànì \({ }^{\mathrm{LH}}\) Wèlè-sá, thus 1 PlSbj do.Pfv be.accustomed-Reslt, 'The baptism of the fellow's child, from (the time of) taking the woman (=since the marriage), until (having) a child, that [focus] is what we are accustomed to do.'

06:08
A: દ́-rò kànì-yè̀ mè-nદ̀, [bé: rì] bà:ndè-Ø mè-nè, thus do.Pfv-3PlSbj if, [child Def] grow.up.Pfv-3SgSbj if, àlhámdùlìláa:hì, bò: \({ }^{\text {n }}\) nà bí:-nì, praise.to.God, be.Dur 3 SgSbj be-Dur,
'When they have done like that, when the child has grown up, praise God, he (child) continues like that.'

06:13
A: hàlí jè: yá,
until take.Pfv and.Nonpast.SS,
[[bé-gé \({ }^{\text {LH} b e ̀ n a ̀-ŋ g a ́] ~ g i ̀] ~ n a ̌: ~}\) [[child-Pl middle] Loc] 3 SgSbj .Fut enter.Pfv,
'Until he (=child) will go in among (other) children.'
06:16
A: tá:-jó:-bà
pants-take-VblN
àyè-Ø
arrive.Pfv-3SgSbj
\(m \check{\text { menè, }}\)
àlhámdùlillá:hì àràbíl-á:làmí:ná,
praise.to.God Lord,
[[bà: \({ }^{\text {LHgìbá] }}\) gì] ò-lá tù:rè, [[father house] Loc] 2 SgSbj -Fut speak.Pfv,
'When he reaches (the time for) wearing pants (i.e. circumcision), praise God the Lord, you (=child's father) will inform (paternal kin) in the father's house.'

06:19
 [1Sg Topic] [1SgPoss child] pants take-Caus-VblN want- \(1 \mathrm{Sg} \operatorname{Sbj}\), él-là \(\rightarrow\) [díló \(\quad{ }^{\text {LH}}\) tà \(\left.{ }^{2} g e ́\right] \quad\) tòró \(=\) ẁ, Dem.Def-too [before pass.PfvRel] like=it.is,
' "Me, I want to have my child wear pants (=be circumcised)." That too, it's the same way (=procedure) as it happened before.'
['that too' fused < /érí là/ ; 'my child' can also be accusative in this context;
'I want' </kéy-y \({ }^{\mathrm{n}} /\) )
06:25
A: [[ìndèrí \(\quad{ }^{\mathrm{LH}_{\mathrm{W}}}\) :̌̌:] rì] bání \(\quad{ }^{\mathrm{LH}}{ }^{\text {tàngé }}\) tòró \(=\mathrm{w}\), [[baptism thing] Def manner pass.PfvRel like=it.is, [bà: \({ }^{\text {LHgìbá] ò-lá tù:rè } \nearrow \text {, }}\) [father house] 2 SgSbj -Fut speak.Pfv,
'It's the same way as the baptism happened. You will speak to (your) paternal kin.'

06:29
A: [ndà-gè [bó: gì] ò \({ }^{\text {LH }}\) bà:-gé \(]\)
[person-Pl [midst Loc] 2SgSbj be.Rel-Pl]
yá: ò-lá dàmì-yè,
there.Def 2 SgSbj-Fut speak-Recip,
'The people who you are among, you will speak there with each other.'
06:31
A: dàmì-yè pâ: \({ }^{\text {n }}\) è kànì-yè mè-nદ̀, speak-Recip.Pfv understanding(n) 2PlSbj do-Recip.Pfv if, bé-gé sà:-gè, tó:-gé yá b-à: mè-nè, child-Pl have.Rel-Pl, other-Pl Exist.Dist be-3PlSbj if,
'When you-Pl have spoken to each other and come to an agreement. Those who have children, if there are others (who have children) over there,'

06:36
A: [è póy] è-lá dàmì-yè pâ:n
[2Pl all] 2PlSbj-Fut speak-Recip.Pfv understanding(n)
è-lá kànì-yè, è-lá màngà-mì, 2PlSbj-Fut do-Recip.Pfv, 2PISbj-Fut assemble-Caus.Pfv,
'You all will speak to each other and come to an agreement. You will get assemble (them).'

06:39
A: è màngà-m mè-nè, kòjì-gè è-lá tògè, 2PISbj unite-CausPfv if, stem-Pl 2PlSbj-Fut pick.up.Pfv,
'When you-Pl have assembled (them), you will go gather stems (in the bush or fields),'
[stems of millet and sorghum and/or of tall grasses (Andropogon, Chrysopogon) for use in thatching]

06:41
A: [kòjì-gé rì \(]\) tògì-yè mè-nè, [stem-Pl Def] pick.up.Pfv-3P1Sbj if, [gùlú-gé yà] [kàká-gé yà] kè-lá kànì, [round.hut-Pl and] [square.hut-Pl and] 3PlSbj-Fut make.Pfv,
'When they have gathered stems (in the bush or fields), they will construct round and square thatch huts.'

06:44
A: [kóndí \({ }^{\text {LH}} \mathrm{bà:}\) :-gé yà \(]\), [kóndí \({ }^{\text {LH }}\) dè:-gé yà], [circumcision father-Pl and], [circumcision elder.sib-Pl and], pós è-lá kilá:sè kànì
all 2PISbj-Fut organize do.Pfv
[hǎl nǎ: tèndè],
[until 3SgSbj.Fut be.well.made.Pfv],
'The circumcision fathers and the circumcision elder brothers, you-Pl will organize them well.'
[one or more of the fathers stays with the circumsion novices; the previously circumcised elder brothers of the novices are also involved in the procedures; kìlá:sè < French classer]

06:50
A: ह́y-gè
Prox-Pl
yò:
hàybì
kám-bò,
ह́y-gè
guarding(n)
do-Ipfv,
'These (fathers and elder brothers) will be on guard duty (watching over the novices) today. These (others) will be on guard duty tomorrow.'
[Én-gè < Éní-gè ; < hàybí]
06:54
A: jà:ŋgè \({ }^{\text {LH}}\) kàm-bò-gé 1 là \(\nearrow\),
food do-IpfvRel-Pl Def too,
kè-lá nà:ŋgè-[kám-bó-gé] = ẁ \(\searrow\),
3PISbj-Fut food-[do-IpfvRel-Pl=it.is,
'Those (women) who make (=cook) the food, they will be the food-makers.'
[definite rì syncopated and assimilated to 1]
06:57
A: [[kóndí Lbà:] gúní-yé rì],
[[circumcision father] say-MP.Rel Def],
nà \(=\) w \(^{\mathrm{n}} \quad[\) kè-gí kóndí kám-bó rì \(]\), \(3 \mathrm{Sg}=\mathrm{Foc} \quad[3 \mathrm{Pl}-\mathrm{Acc}\) circumcision do-IpfvRel Def],
'The one whom they call "circumcision-father," he [focus] is the one who will circumcise them.'

06:59
A: érì kóndí kànì-Ø mè-nદ̀, Dem.Def circumcision do.Pfv-3SgSbj i \(\begin{array}{lllll}\text { érì }=\text { yò } & \text { yárá } & \text { kè } & { }^{\text {LH gùm-bá }} & \text { rì] } \\ \text { Dem.Def=Foc } & \text { circumcisor } & \text { 3PlSbj } & \text { say-IpfvRel } & \text { De }\end{array}\) Dem.Def=Foc circumcisor 3PlSbj say-IpfvRel Def]
'When that one has done the circumcision, that one [focus] is what they call "yárá" (circumcisor).'

07:02
A: yárá tàngè- Ø mè-nè, [[ét \(\quad{ }^{\text {LH tùnú }] ~ g i ̀], ~}\) circumcisor pass.Pfv-3SgSbj if, [[Dem.Def behind] Loc], [[kóndí \({ }^{\text {Lbà: }] ~ i ̀ g i ̀-r i ̀-y e ̀] ~ b i ́-y o ́-b o ̀-Ø, ~}\) [[circumcision father] stand-Tr.Pfv-3P1Sbj] remain-MP-Ipfv-3SgSbj, 'When the circumcisor passes, after that, they then appoint (another) circumcision-father.'
['after that' < érì tùnú gì ; bí-yó-bò-Ø 'it may be']
07:08
A: [[é \({ }^{\text {LH}}\) tùnú \(\left.] ~ g i ̀\right], ~\)
[[Dem.Def behind] Loc],
[[kóndí \({ }^{\text {LH dě:] ig̀̀̀rì-yと̀] bí-yó-bò-Ø, }}\) [[circumcision elder.sib] stand-Tr.Pfv-3PISbj] remain-MP-Ipfv-3SgSbj, 'After that, they then appoint (another) circumcision-brother.'

07:11
A: hàyà [ndà: pós] [ájá kà]
well [person all] [now Topic]
[[wálé nà kàm-má] \({ }^{\text {LH}}\) kènú],
[[work(n) 3SgSbj do-CapacRel] limit],
'Well, each person does (=contributes) as much work as he-or-she can.'
07:13
A: \(\varepsilon\)-rò kè-lá ìgì-rè ìgì-rè kè-lá kànì, thus 3PlSbj-Fut stand-Tr stand-Tr 3PlSbj-Fut do.Pfv, [[kóndí \({ }^{\text {LH}} \mathrm{b}\) bè-gé] rì] [é-rò hàybí kànì yá] [[circumcision child-Pl] Def] [thus guarding(n) do.Pfv and.Nonpast.SS] sì-yò-b-â:, have-MP-Ipfv-3PISbj,
'In that way they will keep appointing (them). They will keep guard over the circumcision novices in that way.'
[sí-yó 'keep (having)' §11.5.1]

07:18
A: [[kóndí \(\quad\) LHbè-gé \(]\) gélé \({ }^{\text {LH bǎ: rì }] ~ g i ̀] ~ l a ̀, ~}\) [[circumcision child.Pl] place be.Rel Def] Loc] also, nèmè ábó-r-à:, sàbú nèmè nwè:-Ø mè-nè, dirtiness accept-IpfvNeg-3PISbj, because dirtiness enter.Pfv-3SgSbj if, [nà \({ }^{\text {LH}}\) tòrrá] kùnú-m bǒ:-Ø, [3SgSbj trouble] much be-3SgSbj, 'Furthermore, they don't allow dirtiness in the place where the circumcision novices are, because if dirtiness got in (there), its trouble (=the trouble it causes) would be great.'
[kùnú-m (332b) in §11.4.1.1]
07:24
A: ndá: \({ }^{H}\) hò:lí \({ }^{\text {LH }}\) kànì-yè-gé \(\nearrow\), [kè \({ }^{\text {LH} k o ̀ g o ́] ~ i ̀ m a ̀-g e ̀, ~}\) person trust(n) do-MP.Rel-Pl, [3PlPoss head] be.able.Rel-Pl, dání-yó-má-gè, ég-gè = yò hold-MP-be.able.Rel-Pl, Dem.Def-Pl=Focus kè-gí dàyì-yè yà ] sí-yó-bò-Ø, 3Pl-Acc hold-MP.Pfv and.Nonpast.SS] have-MP-Ipfv-3SgSbj,
'People who are trustworthy, who have self-control, who can guard (the novices), it's those [focus] who keep holding them (=in their custody).'
[hò:Ií 'trust (n)'; ìmà-gè without \{LH\}]
07:30
\(\begin{array}{llll}\text { A: [dàyì-yè } & \text { yá] } & \text { kè } & \text { sí:-nì, } \\ \text { [hold-MP } & \text { and.Nonpast].SS } & \text { 3PlSbj } & \text { have-Dur, }\end{array}\) [hál jè: yá] [yòntèŕ́ nǎ: kìbè], [until take.Pfv and.Nonpast.SS] [week 3SgSbj.Fut be.complete.Pfv]
'They keep holding (them), until a week will have elapsed.' [sí:-nì §15.2.1.6]

07:33
A: ỳ̀ntè
week be.complete.Pfv-3SgSbj if,
mí: dú-yó-b-à:,
water bathe-MP-Ipfv-3PlSbj
'When a week has elapsed, they will bathe.'

07:37
A: mí:
water
dù-y-yè
mè-nદ̀,
bèlì-gè
animal-Pl be.able.Rel-Pl owner-Pl Def,
bathe-MP.Pfv-3PISbj
if,
'When they have bathed, the fellows who can afford animals,' ['owner' following a human relative clause \$14.2.6]

07:40
\begin{tabular}{|c|c|c|c|c|}
\hline A: [ná: & ò & \({ }^{\text {LH}}\) ìmá & m ] & sémí-ró-má-ẁ, \\
\hline [cow & 2 SgSbj & be.able & if] & slaughter-Ben-be.able-2SgSbj, \\
\hline [ùnà & ò & \({ }^{\text {LHièmá }}\) & m ] & sémí-ró-má-ẁ, \\
\hline [goat & 2 SgSbj & be.able & if] & slaughter-Ben-be.able-2SgSbj, \\
\hline ò-lá & & mì-rè & & \\
\hline 2 SgSbj & & aughter- & & \\
\hline
\end{tabular}
'If a cow [focus] is what you can afford, you can slaughter it for (them). If a
goat [focus] is what you can afford, you can slaughter it for (them). You will slaughter (something) for (them).'

07:45
A: érí = yò gíró-gíró mí:-dú-yó-bá rì,
Dem.Def=Foc ahead-ahead water-bathe-MP-VblN Def, hàyà [é \({ }^{\text {LH}}\) tùnú] gwè:-Ø mè-nè, well [Dem.Def behind] exit(v).Pfv-3SgSbj if, 'That [focus] is the very first bathing (for the novices). Well, when that (=bathing) is over and done with,'

07:49


07:54
A: [ìmà pós] kè-lá sèmì-rè,
[ability all] 3PlSbj-Fut slaughter-Benef.Pfv,
[kè LHìmà pós] sèmì-rì-yè mè-nè,
[3PlPoss ability all] slaughter-Benef.Pfv-3PISbj if,
'They slaughter whatever (they) can for (them). When they have slaughtered whatever they can for (them),'
[benefactive derivative §9.4.2.1]

\section*{07:57}

A: sì-yò:y kè - sì-yò:y kè bí:-nì, have-MP.Dur 3PISbj - have-MP.Dur 3PISbj be-Dur, hál [jè: ná] nó:-gú - [nó:-gú \({ }^{\text {LH } d e ̀ n i ́] ~}\) until [take.Pfv and.Nonpast.SS] entrance - [enter-Repet.Nom day] kè-lá dògè, 3PISbj-Fut set.Pfv
'They keep having that, until they will set the re-entry date.'
[repetition derivative §9.3.1 and its nominalization §4.2.3.4]
08:02
\begin{tabular}{|c|c|c|}
\hline A: [nó:-gú & \({ }^{\text {LH }}\) dèní] & dògì-yè \\
\hline [enter-Repet.Nom & day] & set.Pfv-3PlSbj \\
\hline [nó:-gó-bá & rì] & àyè-Ø \\
\hline [enter-Repet-VblN & Def] & arrive.Pfv-3SgS \\
\hline
\end{tabular}
'When they have set the re-entry date, (and) when the (day of) re-entering has arrived,'

08:05


08:10
A: [ [[3SgPoss person] place be.Rel all] 3SgSbj.Fut come.Pfv, [ò-gí bàrò-mà pós] nǎ: bàrè, [2Sg-Acc help-be.able.Rel all] 3SgSbj.Fut help.Pfv,
'Wherever his relative may be, he-or-she will come. Anyone who is able to help you will help (you).'

08:14
A: è-lá màngà-lì-yè [ìjó rì pós],
2PlSbj-Fut assemble-Mult-Recip.Pfv [village Def all], è màngà-lì-yè mè-nè, 2PISbj assemble-Mult-Recip.Pfv if,
'You-Pl will assemble the whole village. When you have assembled (it),'
08:18
A: [ájá kà] [kóndí \({ }^{\text {LH }}\) nò:-gí rì \(\nearrow\) ] [now Topic] [circumcision enter-Repet.Nom Def], [érí yà] [kóndí \({ }^{{ }^{\mathrm{LH}}} \mathrm{n} w\) ě:], [Dem.Def Inst] [circumcision song], [yá: ùnì yá] kè-lá nwè:, [there.Def go.Pfv and.Nonpast.SS] 3PISbj-Fut sing.Pfv,
'Now, (at) the circumcision re-entry, at that (time) they will go there (to the huts) and they will sing the circumcision song.'

08:22
A: kè-lá [kè \(\quad{ }^{\text {LH }}\) sò:ndò-bà-gé \(]\) sò:ndè, 3PlSbj [3PlPoss salute.idols(v)-IpfvRel-Pl] salute.idols(v).Pfv, kè-lá [kè \({ }^{\text {LH}}\) kàm-bà pós] kè-lá kànì, 3PlSbj [3PlSbj do-IpfvRel all] 3PlSbj-Fut do.Pfv,
'They will go and salute (in song) the ones they salute. They do everything that they (have to) do.'
[só:ndó expresses paying tribute (in song) to animist idols at altars that have been set up for circumcision rituals]

08:25
A: kè-lá dìmì-yè,
3PISbj-Fut form.line-MP.Pfv,
\begin{tabular}{|c|c|c|c|}
\hline kòndì-pálá & kè-là & gíró & wù \\
\hline umcision.leader & 3PlSbj-Fut & in.front & align.Pfv, \\
\hline dì-ś́ & kè-lá & & àgì-rと̀, \\
\hline rcumcision-deputy & 3PlSbj- & & follow-T \\
\hline
\end{tabular}
'They will form a line. They will place the circumcision leader (one of the novices) at the front. They will have the circumcision deputy (another novice) come after (the leader).
[-pálá and -sé:rí are not attested in other compounds]
08:29
A: hày
well swing.arms-while thus enter-Repet-Ipfv-3P1Sbj,
nò:-gì-yè̀ mè-nè, enter-Repet.Pfv-3PISbj if,
'They re-enter (the village) swinging their arms. When they have re-entered,' [same-subject \(-\grave{W}^{n}\) 'while' after \(\{L\}\)-toned \(A / O\)-stem §15.2.1.2]

08:33
A: [[[ìjó rì \(]\) LHàmìrí] yà:]
[[[village \(\quad\) Def] chief] chez]
[kè-lá ùnì] [kè-lá tìyà-mì],
[3PlSbj go.Pfv] [3P1Sbj-Fut send-Caus.Pfv]
'They go to the village chief's place and greet (him).'
08:35
\(A\) : gùy-yè mè-nદ̀,
exit(v).Pfv-3PlSbj if,
[kóndí \({ }^{\text {LH}}\) bà:-gé] [kè-lá ùnì] [kè-lá tìyà-mi],
[circumcision father-Pl] [3PlSbj-Fut go.Pfv] [3PlSbj-Fut send-Caus.Pfv], 'When they have left (the chief), they go and greet the circumcision fathers.'

08:39
A : gùy-yè mè-nè,
exit(v).Pfv-3PlSbj if,
[[sò:lò póy] ùnì yá] [kè-lá tiyà-mì],
[[neighborhood all] go.Pfv and.Nonpast.SS] [3PlSbj-Fut greet-Caus.Pfv], 'When they have left (there), they go to all of the quartiers (of the village) and greet (elders)'

08:42
A : gùy-yè
mè-nદ̀,
exit(v).Pfv-3PlSbj
\({ }^{\mathrm{L}}\) wù:jò̀-w \({ }^{\mathrm{n}} \quad\) [[ìjó rì pós] kè-lá tòndè],
swing.arms-while [[village Def all] 3PISbj-Fut walk(v).Pfv],
'When they have left (there), they go around the entire village (to greet other elders) with arms swinging.'

08:45
A: tóndé-tónd \(\varepsilon\) kànì-yè mè-nè, [ájá kày],
walk(v)-walk(v) do.Pfv-3P1Sbj if, [now Topic]
[lgélé yá: kè-gí sìgò-mí-yè ] \(\left.{ }^{\text {LHggèĺ́ }} \mathrm{r}\right]\) gì, [[place there.Def 3Pl-Acc descend-Caus.Pfv-3P1Sbj] place Def] Loc, 'When they have done the walking around, in the place where they (=adults) have lodged them (novices),'
[after leaving the circumcision huts, the novices are grouped into a communal
lodging in the village; 'descend' = 'lodge in, spend nights (in a dwelling)' as in local French]

08:49
A: hàyà
[ \(\left[\begin{array}{ll}\text { gíbá } & \mathrm{r}]\end{array}\right.\)
gì]
well [[house Def] Loc]
[érí yà] yá: kè-gí \(\quad{ }^{\text {LH }}\) sìm-b-â:,
[Dem.Def Inst] there.Def 3Pl-Acc convey-Ipfv-3PlSbj, 'Well, that [focus] is when they (=adults) take them (=novices) to (their)
homes.'
[< sín(ú) 'convey']
08:52
A: yá:
there.Def
sìnì-yè
mè-nદ̀, [ndà:
pós]
[ n à
convey.Pfv-3PISbj
if, [person all]
\(\begin{array}{lllll}{[[\text { nà }} & \left.{ }^{\text {LH }} \text { sj̀y-gé }\right] & \text { nà } & \text { LHgò-m-bá } & \text { pós }] \\ {[[3 S g P o s s} & \text { clothes-Pl }] & 3 S g S b j & \text { exit(v)-Caus-IpfvRel } & \text { all }]\end{array}\)
[ [3SgPoss clothes-Pl] 3 SgSbj exit(v)-Caus-IpfvRel
all]
nǎ: gò-mì,
3SgSbj-Fut exit(v)-Caus.Pfv,
'When they have taken (them) there, each one (=novice) will take off his
clothing that he takes off'.

08:56
A: nǎ: bèjè \(\nearrow\), kè-lá àlàndì-yè,
3SgSbj.Fut store(v).Pfv, 3PlSbj-Fut rest(v)-MP.Pfv,
[pánígé yògè- Ø mè \(\nearrow\) ] [kè-lá nè: \(\nearrow\) ],
[lunch come.Pfv-3SgSbj if] [3PlSbj-Fut eat.Pfv],
[kè \({ }^{\text {LH }}\) nà:nìgé] yògè- Ø mè là \(\nearrow\) ] [kè-lá jè:] \(\searrow\), [3PlPoss supper] come.Pfv-3SgSbj if also] [3PlSbj-Fut eat.Pfv], 'He will store it (=clothing) away, (then) they (=novices) will rest. When lunch comes, they will eat. Likewise when their supper comes, they will eat.'

09:02
A: nè:-nè: pòrì-yè mè,
(iteration)-eat.Pfv finish(v).Pfv-3PlSbj if,

[[Dem.Def place Def] Loc] rest(v)-MP-while be-Ipfv-3PlSbj, 'When they have finished eating, they will be resting in that (same) place.'

09:06
A: [bì:mà̀ tó:-gé] [kè ŋâ:] yá b-à: mè-nè, [visitor other-Pl] [3Pl chez] Exist.Dist be-3P1Sbj if, kè-là [bó: gì] bìyè, [hál jè: yá] 3PlSbj-Fut [together Loc] remain.Pfv, [until take.Pfv and.Nonpast.SS] [èbà LHjùgú] nǎ: kànì, \(^{\text {jug }}\) [market week] 3SgSbj.Fut be.done.Pfv, 'If there are some visitors (out-of-town circumcision novices) among them, they will remain together (with the loal novices), until a week has elapsed.'
[bó: gì 'together' (\$8.4.6);]

09:12
A: [èbà LHjùgú rì] wè:-Ø mè-nè, [market week Def] be.complete.Pfv-3SgSbj if, bí:má bò-Ø mè, [dàmì-yè yá] visitor be-3SgSbj if, [speak-Recip.Pfv and.Nonpast.SS] 'When the week has elapsed, if a visitor is there, they speak with each other.'

09:15
A: [kè póy] [ùnì ŋá] [3Pl all] [go.Pfv and.Nonpast.SS] [bó: gì] kè-lá nì:ndè sìnì, [together Loc] 3PlSbj-Fut accompany.Pfv convey.Pfv, 'They all go together to accompany him (=visitor) back (home).' [nì:ndè sìnì is a verb chain (§15.1.1)]

09:17
A: [yá
\begin{tabular}{llllll} 
[yá: & là] & [ùnì & yá] & & \\
[there.Def & also] & [go.Pfv & and.Nonpast.SS] & \\
[yà:gú & tò:mà \(\nearrow]\) & [yà:g-gé & nì:ygà] & kè-lá & nàyè, \\
[night & one] & [night-Pl & two] & 3PlSbj-Fut & spend.night.Pfv,
\end{tabular} 'There too (in the visitor's village) they will go and spend one or two nights.' [yà:gù 'night' and plural yà:g-gè, become yà:gú and plural yà:g-gébefore numerals]

09:20
A: [tò: yá bò-Ø mè]
[another Exist.Dist be-3SgSbj if]
él = là kè-lá nì:ndè sìnì,
Dem.Def=also 3PlSbj-Fut accompany convey.Pfv
[yà:gú tò:mà \(\nearrow\) ] [yà:g-gé nì:ngà] kè-lá nàyè,
[night one] [night-Pl two] 3PlSbj-Fut spend.night.Pfv, 'If another (out-of-town novice) is there, that one too they will accompany back (home). They will spend one or two nights (there).'
[tò: 'another' is here L-toned in indefinite absolute form, compare modifying adjective tó: 'other'; él=là < /érì là/ ]

09:24
A: hàyà [érí yà] nì:ndè-nì:ndè
well [Dem.Def Inst] (iteratiion)-accompany.Pfv convey.Pfv-3PlSbj, ìngì-yè mè-nદ̀, finish.Pfv-3PISbj if,
'Well, at that point they have accompanied (the out-of-town novices) back (home). When they have finished (doing that),

09:27
A: hàyà [érí yà] \({ }^{\text {LH }}\) sà:ndì-yò-b-â:,
well [Dem.Def Inst] disperse-MP-Ipfv-3PlSbj,
'Well, at that point [focus] they will disperse.'
09:29
A: sà:ndì-y-yè̀ mè tán,
disperse-MP.Pfv-3PlSbj if only, hàyà [érí ìngè- \(\varnothing\), well [Dem.Def matter] finish.Pfv-3SgSbj
'When they have (finally) dispersed, that matter (=circumcision activity) is finished.'

09:31
A: [tìng
[owner also] 3 SgSbj be-Dur, [hál jè: yá] [nà \({ }^{\text {LH }}\) kèlè̀gé] nǎ: yògè, [until take.Pfv and.Nonpast.SS] [3SgPoss marriage], 3 SgSbj come.Pfv, 'The fellow (=circumcised boy) keeps on. Eventually, (time for) his marriage will come.'

09:34
A:

'As for (in) our zone, (as) it has already been stated (above), that [focus] is how it keeps turning (repeating itself).'
['place', unpossessed singular gélé and plural gélé-gé, has an \(\{L H\}\) overlay
before definite rì, implying a covert possessor, in this case 1Pl; likewise
[LH gèlè̀-gé rì pśy] gì @ 14:36 below]
09:36
A: mhm, [ó là] [ò \({ }^{\text {LH }}\) dàmí] nà gó:-gì-y \({ }^{\mathrm{n}}\),
\(\mathrm{mhm}, \quad[2 \mathrm{Sg}\) also] [2SgSbj talk(n)] 3 SgSbj exit(v)-Repet-Hort, [mì \({ }^{\text {LH}}\) tòmá] dám-bó nà bì-yò-lá:ỳn \({ }^{\text {n }}\), [1Sg only] speak-Ipfv 3 SgSbj remain-MP-HortNeg, 'Mhm, you-Sg too, may your words come out! It mustn't be just me who speaks!’
[said by \(A\) to his interlocutor B; ó là 'you too' based on H-toned independent pronoun ó, distinct from \(2 S g\) future ò-lá; gó:-gì-y \({ }^{n}\) third-person hortative (§10.7.3.3) with 3 Sg subject; hortative negative -lá: \({ }^{n}\) § \({ }^{\text {§ }}\) 10.7.2.2]

09:40
B: દ́-rò \({ }^{\text {LH}}\) bì-yò-bò- Ø já:it̀, thus remain-MP-Ipfv-3SgSbj indeed,
[ááá tònì ò \({ }^{\text {LH }}\) dàmí] \({ }^{\text {LHt tòró] }}\) jà:jé
[now talk(n) 2 SgSbj speak.PfvRel] like] D
ह́-rò \(=\) ẁ \(\quad\) já:tì,
thus=it.is exactly,
'That is exactly how it still is, like the words that you said now, Diadié. It's exactly like that.'
[Diadié is an alternate personal name for A]

09:44
B: [nì káy] [nì \({ }^{\text {LHgàndá }}\) rì pós] દ́-rò nì \(\quad{ }^{\text {LH bǒ: }}\) [1Pl Top] [1PlPoss country Def all] thus 1PlSbj be, 'As for us, (in) our entire land that (way) [focus] is how we are.'

09:47
B: [ég gì] gwè̀:-Ø mè,
[Dem.Def Loc] exit(v).Pfv if, ní-w \({ }^{\text {n }} \quad\) [lyò: \(\left.\quad{ }^{\text {LHtàgú }} \mathrm{r}\right] \quad\) gì \(] \quad{ }^{\text {Lbò:-gé }} \quad\) rì \(]\) 1Pl-Indep [[today earth Def] Loc] be.Rel-Pl Def] [ndà: àmbìlè-gé],
[person certain.one-Pl],
'If it goes beyond there, we who are on today's soil (=land), some people,' [ég gì < /érì gì /]

09:52
\(B\) : nà:-ngè-gír-gé yâ:, ùnà-gír-gé yâ:, cow-Pl-herder-Pl and, goat-tend.Agent-Pl and, à:nà-gír-gé yâ:, kàlmà-kání-gé yâ:, sheep-tend.Agent-Pl and, clear.field-do.Agent-Pl and, tòn-tómí-gé yâ:, érò nì \({ }^{\text {LH}}\) bǒ:, planting(n)-plant(v).Agent-Pl and, thus 1 PlSbj be,
'(They are) cowherds, and goatherds, and sheep-herds, and field clearers, and planters. That [focus] is how we are.'
[cf. kàlmá kánú 'clear (a field)', tô(w) \({ }^{n}\) tómó 'plant, sow' (by slashing earth with a pick-hoe and dropping seeds into the slash)]

09:59
B: [nì káỳ \(\begin{array}{lllll}{\left[\begin{array}{ll}\text { nì } & \text { LH gàndá } \\ \mathrm{r}\end{array}\right]} & \text { gì }]\end{array}\)
[1Pl Top] [[1PlPoss country Def] Loc] [[wàlè póy] nì sà:-nà] sèwánà tów \({ }^{\mathrm{n}}\), [[work(n) all] 1PlSbj have-Neg] other.than sowing, 'As for us (here) in our land, we don't have any work other than planting.' [sèwánà 'except, other than', cf. Arabic siwa:]

10:02
\(B\) : [jéná rì yà \(\nearrow\) ], [kùbó rì yà \(\nearrow\) ], [rainy.season Def and], [farming(n) Def and], [tón dì yà \(\nearrow\) ] [gíyó rì yà \(\nearrow\) ], [planting(n) Def and], [harvest(n) Def and], 'The rainy season, and farming, and planting, and harvesting.'

10:09
B: érí nì pòrè mè, غ̀règè nì sém-bò, Dem.Def 1 PlSbj finish.Pfv if, rice 1 PlSbj reap-Ipfv, érí nì pòrè mè, nì mbé: [ndà: ámbìlè-gè] Dem.Def 1PlSbj finish.Pfv if, 1 Pl here [person certain.Pl] 'When we have finished that, we reap the rice (with a sickle, kó:mi). When we have finished that, some of us here,'

10:15
B: [ ह́-rò là \(\nearrow\) ] [wàlè ká] [wàlè nì \({ }^{\text {LH} k a ̀ n-d a ̀] ~ w e ́ n i ́, ~}\) [thus too] [work(n) Topic] [work(n) 1PlSbj do-IpfvNegRel] be.little, wéní dù, be.little ??,
'In that way too, as for work, there are few (available) jobs that we don't do.' [sense of dù is unknown]
10:20
\(B\) : sàfé which.mean ájá [jùgù ámbìlè-gé] tón-gé \(\quad\) Lòmà-w \({ }^{\text {n }}\) nì bí-yó-bò, \(\quad[\ldots]\) planting(n)-Pl slash.to.sow-while 1 PlSbj remain-MP-Ipfv, (unintelligible) 'That means, now, on some occasions we are engaged in planting.'
\(\left[<\right.\) French ça fait ; \(\left.<t \hat{\jmath} W^{n} \sim t \hat{\vartheta}^{\prime \prime}\right]\)

\section*{10:26 (change of speaker)}

A: [tô \({ }^{\text {n }}\) dì] bànì \({ }^{\text {L }}\) túmbúló-bá rì,
[sowing Def] manner begin-IpfvRel Def], sàbù, él-là \(\rightarrow\) yálá túmbúlá: nì yògè mè-nè, because, Dem.Def-too field begin.Purp 1 PISbj come.Pfv if,
'The way we begin the planting.' Because, when we also come in order to begin (working) a field,'
[bání 'manner' here L-toned as relative head (394) in §14.2.7; purposive á: §17.5.2]

10:32
A: premier, kérí = yó nì \({ }^{\text {LH }}\) kèrò-bá,
firstly, clearing(n)=Foc 1PlSbj clear.field-IpfvRel, kérí nì kèrè mè-nè, nì-lá sùbè, clearing(n) 1PISbj clear.field.Pfv if, 1P1Sbj-Fut burn.Pfv, 'Firstly we do the clearing. When we have done the clearing, we will burn (it).'
[clearing a new field involves cutting bushes and shrubs by slashing at an angle with a trimming hatchet (górô); cf. kàlmá 're-clearing an existing field’]

10:39
A: nì sùbè mè-nè, [ájá kày] [hál jè: yá]
1PlSbj burn.Pfv if, [now Top] [until take.Pfv and.Nonpast.SS] tów \({ }^{\mathrm{n}}\) nǎ: yògè, tów \(\grave{\mathrm{w}}^{\mathrm{n}}\) nìlá tònદ̀, planting(n) 3SgSbj.Fut come.Pfv, planting(n) 1PlSbj-Fut plant(v).Pfv, 'When we have burned, now eventually the (time for) planting will come. We will plant (millet).'
[ \(\hat{\imath}{ }^{n} \sim\) tó \(\grave{W}^{n}\) 'planting' describes a man making rows of slashes in the earth with a long pick-hoe, followed by a second person (perhaps a child) who drops seeds (millet or sorghum) into the disturbed earth and tamps down with the foot; since about 1990 plowing (verb tólló) has become common between clearing and planting]

10:46
B: [tô \({ }^{\mathrm{n}}\)

'When we have done the planting, as soon as the planting (=what we planted) has sprouted, we will do the cultivating.'
[dì <rì; kùbj̀ can be a general term for 'growing (crops)', but refers more specifically to thinning out the seedlings and later on weeding around the growing plants, by bending down and pulling a short-handled hoe (daba) in to oneself]

10:53
B: [kùbó rì] nì kùbè mè-nè, [cultivation Def] 1PISbj cultivate.Pfv if, [kùbó rì] nì kúb-bò mè, [cultivation Def] 1PlSbj cultivate-Ipfv if, [kùbó \(1 \begin{array}{ll}\text { là } \rightarrow \text { ] } & \text { kùbò } \\ \text { tò:mà }=\text { là, }\end{array}\) [cultivation Def also] [cultivation one]=it.is.not, [kùbò-gè nì:ggà] = wò, [cultivation-Pl two]=it.is,
'When we have done the cultivating, when we cultivate, the cultivation isn't (just) one (round of) cultivation, it is two (rounds of) cultivation.'

10:58
B: [kùbò premier] gwè:-Ø mè-n \(\begin{aligned} & \text { - }\end{aligned}\)
[cultivation first]
[kùbò premier]
[cultivation first]
sàmbò
gwè.-Ø
exit(v).Pfv-3SgSbj
gwè:-Ø mè-nè, exit(v).Pfv-3SgSbj if, nì-lá sàmbè,
second.cultivation 1PISbj-Fut do.second.cultivation.Pfv,
'When the first cultivation has exited (=ended), we will do the second round of cultivation.'
[the first round involves thinning out as well as weeding; by the time the whole field has been worked in this way, it is almost time to begin the second round (less laborious than the first), which consists of removing weeds with the daba]

11:02
B: [sàmbó
[second.cultivation
rì] gwè:-Ø mè-nè —,
[unintelligible]
B: [sàmbó
[second.cultivation Def] 1PlSbj-Fut do.second.cultivation.Pfv,
'When the second cultivation has exited (=ended) -. [interruption] We will do the second round of cultivation.'

11:06
B: [sàmbó
rì] -,
[second.cultivation Def] —, [sàmbó
[second.cultivation
rì]
Def] exit(v).Pfv-3SgSbj if,
[ájá kày] [yò:gé rì] ìlí-y-yè, [now Top] [millet Def] ripen.Pfv-MP-3PISbj,
'When the second cultivation has exited (=ended), now the millet has ripened.'
[pearl millet (Cenchrus americanus, ex-Pennisetum glaucum), the main cereal staple; there is a long wait after the second cultivation (July-August) before the millet ripens (late October); terms for crops are generally plural in form, cf. (36) in §4.1.1.2]

11:09
B: દ́-rò yá: dànjà \(=w^{n} \quad\) nì \({ }^{\text {LH }}\) Sìyò-bó, thus there check(v)=while 1PISbj keep-Ipfv, [hál jè: yá] gìyò nǎ: gwè:, [until take.Pfv and.Nonpast.SS] harvest(n) 3SgSbj.Fut exit(v).Pfv-3SgSbj, 'We will keep checking there (=the field), until (time for) the harvest will come out (=appear).'
[sìyò-bó, compare bìyò-bó 'is' and bì-yò-bó 'remains'; in this passage 'exit (v)' means 'come out, appear' hence 'begin' rather than 'end']

11:11
\(B\) : [gìyó rì] gùy-yè mè, [harvest(n) Def] exit(v).Pfv-3PlSbj if, [gìyó rì] pòrè-Ø mè, [harvest(n) Def] finish.Pfv-3SgSbj if, 'When they have begun harvesting, when the harvest has finished,'

11:14
B: túgúrá, núgúló-bà là, núgúló-bà-gé, 2nd.best.millet, choose-VblN also, choose-VblN, ángá \(\quad{ }^{\text {LH }} \mathrm{b}\) ह̀l 1 - \(\grave{w}^{\text {n }} \quad{ }^{\text {LH }}\) bǒ:, how.many? equal(v)-while be,
'Second-quality millet, a sorting also, the sortings (=grades), there are how many (=several) of them.'
[millet grain spikes are graded by quality as sélé (best), túgúrá (second), bèndè-bèndé (third), búgújú (last); cf. also sùgùmé 'early millet (roasted briefly and eaten)'; 'how many? ' used rhetorically to imply 'several'; stative-like bélé bò- 'equals, amounts to, is as much as', here in a variant of the 'while' construction §15.2.1.2-3]

11:16
B: sélé-gé, nì núgúló-bò, túgúrá-gé nì núgúló-bò, best.millet-Pl, 1PlSbj choose-Ipfv, 2nd.best.millet-Pl 1PISbj choose-Ipfv, bèndè-bèndé-gé nì núgúló-bò, 3rd.best.millet-Pl 1PISbj choose-Ipfv,
'We select (=separate) the top-quality millet, we select the second-quality millet, we select the third-quality millet.'

11:20
B: [hál jè:-sà-w \({ }^{n}\) ] érí gwè:-Ø mè-nè, [until take-Reslt-while] Dem.Def exit(v).Pfv-3SgSbj if, nì-lá màngà-mì, nì-là gíbà-à jè: nwè:, 1PISbj-Fut unite-Caus.Pfv, 1PISbj-Fut house-Loc take.Pfv enter.Pfv, 'Eventually, when that (work) is finished, we will gather up (the harvested millet) and we will take (it) into the house (=village).'

11:25
B: nì-là páygá gànì, [páygá gì là] 1PISbj-Fut granary put.in.Pfv, [granary Loc also] séyò-gè séyò-gè séyò-gè ángá \(\quad{ }^{\text {LH}} \mathrm{b}\) ह̀lé \(-\grave{w}^{\mathrm{n}} \quad{ }^{\text {LH}} \mathrm{bǒ}\) :, layer-Pl layer-Pl layer-Pl how.many? equal(v)-while be,, 'We will store it in a granary. Also, in the granary there are several layers (of millet grain spikes).'

\section*{11:29}
\(B\) : sèyò \({ }^{\mathrm{L}}\) dè \(\rightarrow\) yà \(\nearrow\), sèyò \({ }^{\mathrm{L}}\) páy yà \(\nearrow\), sèyò \({ }^{\mathrm{L}}\) s \(\varepsilon\) ǵ \(\varepsilon\) yà \(\searrow\), layer elder.sib and, layer older and, layer younger and, 'The elder-sibling layer, and the senior layer, and the junior layer.'
[these modifiers refer elsewhere to relative ages of siblings, other kin, and animals]

11:31
B: [é-rò sì-yè ná]
[thus have-MP.Pfv and.Nonpast.SS
દ́-rò [màngà-mà: \({ }^{\mathrm{n}}\) ]-màngà-mà: \({ }^{\mathrm{n}}\) nì \(\quad{ }^{\text {LH }}\) sì-yò-bó,
thus [(iteration)]-unite-Caus.Dur 1PlSbj have-MP-Ipfv,
'Thus we keep (it) and thus we keep collecting it (grain, in the granary).'
[durative stem (§15.2.1.7), iterated]
11:34
B: [hál jè:-sà-w \(\left.{ }^{\mathrm{n}}\right] \quad\left[\begin{array}{lll}\text { nì } & \left.{ }^{\text {LH }} \text { kòrè̀:jì-gé }\right] & \text { gì }]\end{array}\right.\)
[until take-Result-while] [[1PlPoss family-Pl] Loc]
દ́-rò ह́-rò kànì-Ø mè-nè,
thus thus be.done.Pfv-3SgSbj if,
'Eventually, in our families, when it has been done like that,'

11:36
B: ع́-rò nì òbíi:-nì, thus 1PlSbj sit-Dur, pálángá [ndà: ámbìlè], úbú báló-bò-Ø, dry.season [person a.certain], manure gather-Ipfv-3SgSbj,
'We remain sitting (=living) like that. In the dry season, one person collects manure,'
[manure is collected and sold for use as fertilizer in the next rainy season]

11:40
B: [ndà: ámbìlè], béléngé á:ló-bò, [person a.certain], hay rake.in-Ipfv, [ndà: ámbìlè], gíbá-gé nà \({ }^{\text {LHùnjjò-bá, }}\) [person a.certain], house-Pl 3SgSbj build-Ipfv, 'Another person rakes in fodder. Another person builds houses [focus].' [grass is raked up in the bush for sale as dry-season fodder (hay)]

11:45
B: [ndà: ámbìlè], tó \({ }^{\text {w }}{ }^{\text {n }}\) nà \({ }^{\text {LH }}\) tòm-bá, [person a.certain], planting \(3 \mathrm{SgSbj}^{\text {plant(v)-Ipfv, }}\)
 thus [1Pl Top] [[1PlPoss land Def] Loc] [é-rò tán] nì \({ }^{\text {LHòbá, }}\) [thus only] 1 PlSbj sit.Stat,
'Another person prepares for planting. That [focus] is how we sit (=live) in our land.'
[reference here is not to sowing, just arranging mounds in the field with a pick-hoe so that when rain comes one can quickly sow the seeds]

11:52
A: bon, érí kání-yé \(=\) ẁ bìlè- \(\varnothing \quad\) mè-nè, well, Dem.Def do-Pass=it.is become.Pfv- 3 SgSbj if, jè:-sà-w \({ }^{\mathrm{n}}\) gíbà-à jè: nùy-yè mè-nè take-Reslt-while house-Loc take.Pfv enter.Pfv-3P1Sbj if,
'Well, when that has already been done, when they have taken (the millet) and gone into the house (=village),'

11:56
A: [ájá kày] [nì \({ }^{\text {LH}}\) nò̀:-bá \(]\) gírí-y \(\varepsilon\) = \(=\) w kànì- \(\varnothing\),
[now Top] [1PlSbj eat-VblN] get-Pass=it.is be.done.Pfv-3SgSbj, [nò:-bá rì] gírí-yé= ẁ kàni-Ø mè-nè, [eat-VblN Def] get-Pass=it.is be.done.Pfv-3SgSbj if,
'Now what we eat (=our food) has already been gotten. When the food has already been gotten,'

12:01
A: égá:gú pós, pàygà-déní yèy-yá: = wò, morning all, granary-take.out.ration.Agent know-Pass.Rel=it.is, nǎ: ùnjùgè \(\nearrow\), nǎ: pángá dènè \(\searrow\), 3Sg.Fut get.up.Pfv, 3 SgSbj.Fut granary take.out.ration.Pfv,
'The person charged with taking out the day's grain rations from the granary is known (to everyone). He will get up and he will take out the daily ration from the granary.'
[this is a great responsibility, since the person (usually a man) who takes out the rations each morning must calculate how long the supply will last in an environment where only one grain harvest occurs each year; yèy-yá: = wò §10.4.1.3]

12:06
A: páng
take out ration-VblN
[è LHà̀:nì-gé yà], [è \({ }^{\text {LH}}\) pànì-gé yà],
[2PlPoss dinner-Pl and], [2PlPoss lunch-Pl and],
[è \({ }^{\text {LH }}\) tàjìikò:jòlí yà \(]\), [érí \(\quad{ }^{\text {LH }}\) jàté] \(=\) yò,
[2PlPoss morning.food and], [Dem.Def calculation]=it.is,
'What he takes out from the granary, (it's) your-Pl dinner, and your lunch, and your breakfast. It's the calculation of that (and not beyond).'
[the term for 'breakfast' on the recording is a Fulfulde loan; the Tiranige equivalent is òmう̀-kánú]

\section*{12:13}

A: [ndà-gè nú:]=yó \({ }^{H}\) bó: mè \(\nearrow\), [ndà-gè nú:] LH \(_{\text {jàté, }}\) [person-Pl five]=Foc be if, [person-Pl five] calculation, [ndà-gè pìyòlù] = yò \({ }^{H}\) bó: mè \(\nearrow\), [ndà-gè pìyòlù] \({ }^{L H}{ }_{j}\) àté, [person-Pl ten]=Foc be if, [person-Pl ten] calculation, [ndà-gè nì:ngà] =à \({ }^{H}\) bó: mè \(\nearrow\), [ndà-gè nì:ngà] \({ }^{L H}\) jàté, [person-Pl two]=Foc be if, [person-Pl two] calculation, [ndà: tò:mà] =à \({ }^{H}\) bó: mè \(\nearrow\), [ndà: tò:mà] \({ }^{L H}\) jàté, [person one]=Foc be if, [person one] calculation,
'If five people [focus] are there, an amount calculated for five people. If ten people [focus] are there, an amount calculated for ten people. If two people [focus] are there, an amount calculated for two people. If one person [focus] is there, an amount calculated for one person.'
[subject focalization with \(\{H\}\) overlay on verb §13.1.1.5]

\section*{12:22}

A: [ájá kày] [[[[ndà: póy] gi] [[dènì \({ }^{\text {LH} k u ̀ l i ̀ y e ́] ~ g i ̀] ~}\) [now Top] [[[[person all] Acc] [[day inside] Loc]
ò-gí \({ }^{\text {LH}}\) nà:-m-bó rì] \({ }^{\text {LH}} k\) kèní rì] jàté kànì-sà-w \({ }^{\text {n }}\) 2Sg-Acc eat-Caus-Ipfv Def] limit Def] calculation do-Reslt-while pâ: \({ }^{\text {n }}{ }^{\text {LH} k a ̀ n i ̀-y e ́ ~ r i ̀, ~}\) understanding(n) do-Recip.PfvRel Def,
'Now, (the fact) that it is understood (by everyone) how to calculate the maximum (=total amount) of what you-Sg, (or rather) each person, will be fed during the day.'
['you-Sg' is in apposition to 'each person'; definite kání-yé rì from passive kání-yé \(=\grave{W}]\)

12:27
A: [égá:gú pós] [pàygà-déní là]
[morning all] [granary-take.out.ration.Agent also]
ér = yò [nà \(\quad{ }^{\text {LH }}\) wàlé], ná-w \({ }^{\mathrm{n}}\) ùnjìgè- \(\varnothing \quad\) mè-nè, Dem.Def=Foc [3SgPoss work(n)], 3Sg-Indep get.up.Pfv-3SgSbj if, [páygá dénó-bá rì]=yò [nà \({ }^{\text {LH }}\) wàlé], [granary take.out.ration-VblN Def]=Foc [3SgPoss work(n)],
'Every morning, the person charged with taking out the day's grain rations from the granary, that [focus] is his job. When he gets up (in the morning), taking out the day's grain rations from the granary [focus] is his job.'

\section*{12:34}

A: [bèl-gè \({ }^{\text {LH }}\) tìngá \(], \quad\left[\begin{array}{ll}\text { ná } & \text { là }\end{array}\right]\) yùlì-yè- \(\varnothing \quad\) mè-nè, [animal-Pl owner], [3Sg too] wake.up-MP.Pfv-3SgSbj if, [nà \({ }^{\text {LH}}\) bèl-gé] \(=\) ẁ \(\quad\) nà \(\quad{ }^{\text {LH }}\) wàlé], [3SgPoss animal-Pl]=Foc [3SgPoss work(n)],
'An animal owner (=herder), he likewise, when he wakes up, (taking care of) his animals is his job.'
[singular bèlì 'livestock animal']
12:38
A: [[bèlì-gé rì] gì] nǎ: ùnì, nǎ: jà:lè, [[animal-Pl Def] Loc] 3SgSbj.Fut go.Pfv, 3SgSbj.Fut look.at.Pfv, kòbòjì-gè yá b-à: mè-nદ̀, nǎ: gò-mì, tick-Pl Exist.Dist be-3PlSbj if, 3SgSbj.Fut exit(v)-Caus.Pfv,
'He will go among the livestock animals (in the bush), he will check (them). If there are ticks, he will remove them.'

12:43
A: kòbòjì-gè ór-à: mè-nè, úrú-gá bò lè \(\nearrow\), tick-Pl not.be-3PlSbj if, disease-Char be-3SgSbj Q , nǎ: jà:lè, 3SgSbj.Fut look.at.Pfv, 'If there are no ticks, he will check whether there is a sick one.'

12:47
A: úrú-gá órà-Ø mè-nè, [kè póy] nò:-gì-yè lé, disease-Char not.be-3SgSbj if, [3Pl all] come-Repet.Pfv-3PlSbj Q , nǎ: jà:lè, 3SgSbj.Fut look.at.Pfv, 'If there is no sick one, he will check whether all of them have come back (from pasture, to the pen).'
[cf. è nò:-gè lé 'whether you-Pl have come back']
12:51
A: nò:-gì-yè̀ mè-nè, [[nà \({ }^{\text {LH} k i ̀ l o ́] ~ g i ̀] ~ n a ̌: ~ —, ~}\) come-Repet.Pfv-3P1Sbj if, [[3SgPoss pen] Loc] 3SgSbj.Fut—, [kè póy] jà:lè-sà-w \({ }^{\text {n }}\) tàykí kànì-Ø mè-nè, [3P1 all] look.at-Reslt-while inspection do.Pfv-3SgSbj if,
'When they have come back, in his pen, he will-. When he has visited and verified (the presence of) all of them.'

12:56
A: [nà \({ }^{\text {LHèm-bá] bò-Ø mè-nè, }}\)
[3SgSbj milk(v)-VblN] be-3SgSbj if,
nàlè-sà bò-Ø mè-nદ̀, nǎ: èmè,
give.birth-ResltRel be-3SgSbj if, 3 SgSbj.Fut milk(v).Pfv
'If there is one (=a cow) for him to milk, if there is one who has calved, he will milk (it).'
[compare ná: ém-bà 'cow for milking, (a) milk cow' (vache laitière); plural nàlè-sà-gè b-à:]

12:59
A: [bé: rì] kèlì-yè-sà bò:-Ø mè-1 là ,
[child Def] not.want-MP-ResltRel be-3SgSbj if also,
nǎ: bàrè [hál jè: yá]

3SgSbj.Fut help.Pfv [until take.Pfv and.Nonpast.SS]
[bé: rì] nǎ: àrè nǎ: bèlè, [child Def] 3SgSbj.Fut suckle.Pfv 3SgSbj get.Pfv,
'Likewise if there is one (=a cow) who has rejected a (newborn) calf, he will help (the calf) until the calf will suckle and get enough (milk).'
[i.e. he will draw milk from the reluctant cow's udder directly into the calf's mouth]

13:04
A: màngà-m-Ø mè-nè,
unite-Caus.Pfv-3SgSbj if,
nǎ: [nà bèlì-gé] ò:rí kànì,
3SgSbj.Fut [3SgPoss animal-Pl] taking.to.pasture do.Pfv, gúlà-à nǎ: gwè:,
the.bush-Loc 3SgSbj.Fut exit(v).Pfv,
'When he has assembled (the cattle), he will take his animals out to pasture, he will go out into the bush.'
[ò:rí (< Fulfulde) denotes getting a herd up and taking it to pasture; gúló 'the bush, the outback', locative gúlà-à \(\S 8.2 .3 .1]\)

13:08
A: [ná là \(]\) gó:-ŋgà, [nà \({ }^{\text {LHèmèngé }] \text { nǎ: }} \begin{aligned} & \text { nàmè } \nearrow \text {, }\end{aligned}\) [3Sg too] exit(v)-while, [3SgPoss milk(n)] 3SgSbj.Fut milk(v).Pfv, nă: jè: [hál jè: yá] 3SgSbg.Fut consume.Pfv [until take.Pfv and.Nonpast.SS] nǎ: pìlè \(\searrow\), 3 SgSbj be.sated.Pfv,
'Likewise as he goes out, he will draw his milk. He will consume (=drink) until he is full (=sated).'
[-ngà 'while' §15.2.1.9; nó: 'consume' can mean 'drink' as here, or 'eat (a meal, or anything not requiring heavy chewing)]

13:13
A: [nà
[3SgPoss
nè:
LHèmèngé] [èmè
[milk(v).Pfv
yá]
consume
pìlè-Ø mè-nz̀,
nǎ: be.sated.Pfv-3SgSbj if
[nà jò \({ }^{\text {LH}}{ }^{\text {tònt }}{ }^{\text {n }}\) ]

3SgSbj.Fut [3SgPoss gourd] look.for.Pfv, nǎ. [nà \({ }^{\text {LH }}\) mǐ:] gànì 3SgSbj.Fut [3SgPoss water] put.in.Pfv,
'When he has drunk his milk to satiety, he will look for his gourd. He will put his water in it.'
[a small, fully necked gourd, not sawed in half as a calabash, is used to carry liquids]

13:17

[water sack] 3 SgSbj have.Rel if also, nǎ: [nà \(\quad{ }^{\text {LH}}\) mì:-jèmb \(\left.\varepsilon\right] ~ g a ̀ n i ̀, ~\)
3 SgSbj.Fut [3SgPoss water-sack] put.in.Pfv,
'On the other hand if a waterskin [focus] is what he has, he will put it in his waterskin.'
[a goatskin water bag; < mè-nغ̀ là]
13:20
A: [nà \({ }^{\text {LH}}{ }_{l i ̀ w n d u ́] ~ n a ̀ ~}{ }^{\text {LH }}\) sǎ: mè, [3SgPoss forked.staff] \(3 \operatorname{SgSbj}\) have if, nǎ: jè:, 3SgSbj.Fut take.Pfv, 'If his forked staff [focus] is what he has, he will take (it).'

13:22
A: ná:-ŋgé nà \({ }^{\text {LH}}\) gìrò-wá mè-l là, cow-Pl 3 SgSbj take.to.pasture-IpfvRel if too, [nà \({ }^{\text {LH} k u ̀:-t u ̀ m a ́] ~ n a ̌: ~ j e ̀:, ~}\) [3SgPoss Diospyros-staff] 3SgSbj.Fut take.Pfv, nǎ: [[nà \(\quad{ }^{\text {LH }}\) nà:-ŋggé] gì] tàgì-yè, 3SgSbj.Fut [[3SgPoss cow-Pl] Acc] follow-MP.Pfv, 'Likewise when he is going to take the cows to pasture, he will take his staff of Diospyros wood, he will follow them.'
[kú: (Ningo) or kúgú (Boui), the tree Diospyros mespiliformis (of the ebony botanical family), whose wood is favored by Fulbe herdsmen for staffs]

13:27
A: [[kèró rì] gì] gwè:-Ø mè-nè,
[[savanna \(\quad\) Def] Loc] exit(v).Pfv-3SgSbj if, [gélé bèlè-ŋgè \({ }^{\text {LH}} \mathrm{bà:} \mathrm{pós]} \mathrm{nà}{ }^{\text {LH }}\) jà:lò-bá, [place fodder-Pl be.Rel all] 3 SgSbj look.at-IpfvRel, 'When he has gone out into the savanna, a place where there is lots of grass [focus] is what he will visit.'

13:31
A: [nà \({ }^{\text {LH}}\) bèlì-gé] gélé rè:ní \(\quad{ }^{\text {LH }}\) kàm-bá, [3SgPoss animal-Pl] place protection do-IpfvRel, géĺ́ kè jè: \({ }^{\text {LH gìrò-bá, }}\) place 3PlSbj eat.Pfv get-IpfvRel,
'A place where his animals will be safe. A place where they can get food (=pasture).'

13:33
A: gélé kè \({ }^{\text {LH }}\) pìlò-bá, gélé rè:ní kè \({ }^{\text {LH}} k\) kàm-bá, place 3PlSbj be.sated-IpfvRel, place safety 3PlSbj do-IpfvRel, gélé kè \({ }^{\text {LH }}\) pìlò-bá, place 3Pl be.sated-Ipfv,
'A place where they graze to satiety. A place where they are safe. A place where they graze to satiety.'

13:38
A: yá: gwè:-Ø mè-nદ̀, nò:-gè-Ø mè-nè,
there.Def nò:-gè-Ø come-Repet.Pfv-3SgSbj if also, house-Loc=it.is if also, 'When he has left (there), when he has come back, likewise when he has come back, if it's at the house,'

13:42
A: [[è \(\quad{ }^{\text {LH }}\) gìbà-gòmbòló] gì] táwè \(\quad\) kándí-yé \(=\) ẁ \(\quad{ }^{\text {LH }}\) bǒ:, [[2PlPoss house-courtyard] Loc] perhaps repair-Pass=it.is be, úbú nà jàmù-lá:ỳ, manure 3 SgSbj be.ruined-HortNeg,
'Perhaps your-Pl courtyard has been fixed up nicely. The manure must not be spoiled.'
[i.e. with space in the courtyard for the animals]
13:46
A: [[ò LHyàlá] gí]= yò mè-nè, \([[2 \operatorname{SgPoss} \quad\) field \(] \quad\) Loc \(]=i t . i s \quad\) if, [lyálá í] gì] nǎ: òbì-yè, [[field Def] Loc] 3SgSbj.Fut sit-MP.Pfv 'If it's in your-Sg field, it will sit in the field.'

13:49
A: [[yálá f́] gì] òbì-yè-Ø mè-nè, úbú rì, [[field Def] Loc] sit-MP.Pfv-3SgSbj if, manure Def, nà \(=\hat{w}^{\mathrm{n}}\) sé:ygé, sé:ygé là, nà \(=\hat{w}^{\mathrm{n}}\) úbú, \(3 \mathrm{Sg}=\mathrm{Foc}\) grain, grain too, \(3 \mathrm{Sg}=\mathrm{Foc}\) manure,
'When it has sat in the field, the manure, it is grain, and grain likewise, it is manure.'
[i.e. an abundant supply of manure as fertilizer in the field guarantees a good grain harvest]

\section*{13:55}

A: úbú sà:-nà, sé:ngé gíd-dà-Ø, manure have-StatNegRel, grain get-IpfvNeg-3SgSbj, sé:ngé sà:-nà, [úbú rì] gíd-dà-Ø, grain have-StatNegRel, [manure Def] get-IpfvNeg-3SgSbj,
'One who doesn't have manure doesn't get any grain. One who doesn't have grain doesn't get any manure.'
[< gírs' 'get']

14:00
A: [kè \({ }^{\text {LH }}\) nì:ngá \(] \quad\) kè \(=\) w \(^{\text {n }} \quad[\) bó: gì \(]\) úm-bò, [3Pl two] \(3 \mathrm{Pl}=\) it.is [together Loc] go-Ipfv, bèìi-gè̀ \({ }^{\text {LH}}\) tì̀ngá \(\nearrow, ~ y a ́ l a ́ ~ \quad{ }^{\text {LH}}\) tìnggá \(\downarrow\), animal-Pl owner, field owner, kè \(=\) ẃ nì: tò:mà, kè \(=\) ẃ bà: tò:mà, \(3 \mathrm{Pl}=\mathrm{Foc}\) mother one, \(3 \mathrm{Pl}=\mathrm{Foc}\) father one,
'The two of them go together. An owner of animals (=herder), (and) an owner of a field (=farmer), they have the same mother, they have the same father.'
[i.e. they are joined at the hip, since the farmer depends on manure]
14:08
A: ò [bèlì-gè \({ }^{\text {LHtìngá }}\) ri], [[yálá r] gì] ó: óbí-yó-bò, 2Sg [animal-Pl owner Def], [[field Def] Loc] 2Sg.Foc sit-MP-Ipfv, \(\begin{array}{lll}\text { [yálá } & { }^{\text {LH}} \text { tì̀gá } & 1]\end{array}\) [field owner Def] also, \(\left[\begin{array}{ll}\text { ná là }] \quad[[b e ̀ l i ̀-g e ̀ ~ & { }^{\text {LHtìngá }} \text { ri] gì] nà }=\text { wn }^{n} \quad \text { jóló-bò, }\end{array}\right.\) [3Sg too] [[animal-Pl owner Def] Acc] 3Sg=Foc look.for-Ipfv
'You the owner of animals, it's you-2Sg [focus] who will sit (=live) in the field (with your cattle). Likewise the owner of a field, he likewise, it's he (Focus) too will seek out the owner of animals.'

14:13
A: è nì:ŋgà pós, é \(=w^{n}\) [bó: gì] wàlè kám-bò, 2Pl two all, 2Pl=Foc [together Loc] work(n) do-Ipfv, \(\left[\begin{array}{ll}\text { nì } & \text { káỳ }] \quad\left[\begin{array}{llll}\text { nì } & { }^{\text {LH }} \text { gàndá } & \mathrm{r}] & \text { gì }] \text {, }\end{array} \text {, } \mathrm{ll} \text { ( }\right.\end{array}\right.\) [1Pl Top] [[1PlPoss country Def] Loc], と́rò nì LHjù:ndé, [ér gì] nì \({ }^{\text {LH}}\) bǒ:, thus 1PlSbj encounter.Pfv, [Dem.Def Loc] 1Pl be,
'Both of you (=herder and farmer), you-Pl work together. As for us, (here) in our land, that [focus]'s how we found (=inherited) (it), that [focus]'s what we are (still) in.'
[i.e. that's the way it has always been]

14:19
A: hàlí ájá,
even now,
[wé: \({ }^{\mathrm{H}}\) [[kè \(\left.{ }^{\text {LH}} \mathrm{bènàngá}\right]\) gì] nwè:] bò-Ø mè-1 là, [thing [[3P1 middle] Loc] enter.PfvRel] be-3SgSbj if too, nì-lá dàmì-yè \(\nearrow\) nìlà pá: \(\grave{w}^{\mathrm{n}}\) kànì-yè, 1PlSbj-Fut speak-Recip.Pfv, 1PlSbj-Fut understanding(n) do-Recip.Pfv, 'Even now, similarly if there is something ( \(=\) a problem) that enters (=arises) between them, we will discuss it together, we will make (=come to) a mutual understanding.'

\section*{14:24}

A: [twé: \({ }^{{ }^{L H}}{ }_{\text {sǎ: }}\) rì] gì, nì-lá [nà \({ }^{\left.{ }^{L H} t w e ̌:\right] ~ n d e ̀:, ~}\) [falsehood have.Rel Def] Acc, 1PlSbj-Fut [3SgPoss falsehood] give.Pfv, [tó:nó sà:-ná r] gì —, [truth have-StatNegRel Def] Acc-,
[tó:nó \({ }^{{ }^{L H}}{ }_{\text {sǎ: }}\) rì] gì, nì-lá [nà \({ }^{\text {LH }}\) tò:nó] ndè:, [truth have.Rel Def] Acc, 1PlSbj-Fut [3SgPoss truth] give.Pfv,
'We will decide (=judge) who is in the wrong. The one who isn't right [false start]-. We will decide who is in the right.'
[for the phrasing 'give his falsehood' and 'give his truth', cf. French donner raison à, donner tort à]

> 14:29

A: દ́-rò pâ: \({ }^{\text {n }}\) kànì-yè-sà- \(w^{n}\), द́-rò nì jù:ndé, thus understanding(n) do-Recip-Reslt-while, thus 1PlSbj encounter.Pfv, [nì káỳ] ع́-rò nì \({ }^{\text {LH}} \mathrm{bǒ}: ~[h a ̀ l i ́ ~ a ́ j a ́] ~ t a ́ f o ̂ ̀ ~ w ~, ~, ~\) [1Pl Top] thus 1 PlSbj be.Rel, [until now] as.of.now
'As they make (=come to) mutual understandings, that [focus]'s how we found (=inherited) (it). As for us, that [focus]'s what we are in even now.'

14:36 (other speaker for one segment)


14:41
 [country [1PlPoss thing] Def] Loc] thus 1PlSbj be, [1Pl Top] \(\left[\begin{array}{lll}{[n i ̀ ~} & \left.{ }^{\text {LH }} \text { dè::-ngé }\right] & \text { gì }]\end{array}\left[\begin{array}{llll}\text { nì } & \left.{ }^{\text {LH }} \mathrm{mb} \text { b̀̀:-gé }\right] & \text { gì }]\end{array}\right.\right.\) [[1PlPoss elder.sib-Pl] Loc] [[1PlPoss grandfather-Pl] Loc] [[nì \({ }^{\text {LH }}\) dè:-ngé \(] \quad{ }^{\text {LH}}\) dè:- ng gé là \(] ~ \varepsilon ́-r o ̀, ~\) [[1PlPoss elder.sib] elder.sib too] thus, \(\begin{array}{lllllll}{[[\text { nì }} & \left.{ }^{\text {LH }} \text { dè:- }- \text { ggé }\right] & { }^{\text {LH }} \text { dè:-ygé } & \text { là }] & \text { é-rò } & \text { nì } & \text { jù:ndé, } \\ {[[1 P l P o s s ~} & \text { elder.sib] } & \text { elder.sib } & \text { too }] & \text { thus } & 1 P 1 S b j & \text { encounter.Pfv, }\end{array}\) 'In our country, that [focus]'s how we are. Among our elder brothers, among our grandfathers, among the elder brothers of our elder brothers (=our paternal ancestors) too it was lke that, among the elder brothers of our elder brothers (=our paternal ancestors) too, that [focus]'s how we found (=inherited) (it).'

14:50
A: [[gàndá \(\quad \mathrm{r} \quad\) pó \(\rightarrow\) ] gì] ह́-rò nì \({ }^{\text {LHbǒ: }}\)
[[country Def all] Loc] thus 1PISbj be, én-nǎy \({ }^{\text {n }}\) hàlí yò:, [[ájá nà \({ }^{\text {LH }}\) dàmí] \(\quad{ }^{\text {LH }}\) tòró] that.other until today, [[now 3 SgSbj speak.PfvRel] like] sàfé [tònì pós] [nà LHànjìné] yá bò-Ø, which.means [talk(n) all] [3SgPoss remainder] Exist.Dist be-3SgSbj, 'In our land, that [focus]'s how we are. That is, even today, like what he said now, each (segment of) talk has its remainder (=complement).'
[i.e. we can't say everything; én-năyn 'that (other one)', see also @ 16:20 below, is a somewhat opaque combination including demonstrative érì, also in én-nà \(=\hat{W}^{n}\) 'it's that (other one)', with obviative function, in this passage shifting to a different time frame; sàfé \(=\) French ça fait \(]\)

\section*{14:58 (change of speaker)}

B: [nì ká] [nì \({ }^{\text {LH }}\) dàm-bá] [ \({ }^{\text {ég }} \quad\) gì] \({ }^{\text {LH }}\) nànìyé]
[1Pl Top] [1PISbj speak-IpfvRel] [[Dem.Def Acc] step.over.PfvRel]
[tòn(ì \()^{\mathrm{L}}\) tó: kà] nì sà:-nà, [talk(n) other Top] 1PlSbj have-StatNeg [gàndá [nì \({ }^{{ }^{\text {LH}}} \mathrm{W}\) ̌̌:] rì] gì], érí bó, [country [1PlPoss thing] Def] Loc] Dem.Def be,
'As for us, what we are saying, what(ever) goes beyond that, we have no other (=further) words (to say). In our country, that [focus] is there.'

15:03
B: [nì ká] sójé-gé pós,
[1Pl Top] Dogon-Pl all,
[nì \({ }^{\text {LH}} \mathrm{b}\) èlì̀-gé] yà \(\nearrow\), [nì \({ }^{\text {LH }}\) nà:--ŋgé \(]\) yà \(\nearrow\),
[1PlPoss animal-Pl] Inst, [1PlPoss cow-Pl] Inst,
[nì \({ }^{\text {LH}}\) ùnà-gé] yà \(\nearrow\), [nì \({ }^{\text {LHà:nà-gé }] \text { yà } \searrow \text {, }}\)
[1PlPoss goat-Pl] Inst, [1PlPoss sheep-Pl] Inst,
'All of us Dogon (people), with our animals, with our cows, with our goats, (and) with our sheep.'

15:10
B: nì-là mí: jà:-mì,
1PlSbj-Fut water consume-Caus.Pfv,
nì-lá [kèrò gí] gwè:,

[[1PlPoss animal-Pl] Acc only] 1PlSbj follow.Stat,
'We will let them (=animals) drink water. We will take them out to the (wooded) savanna. We just follow our animals.'

15:15
B: [[nì mè-nè, jéná:gú rì \({ }^{\text {LHèlì-gé] }}\) [[1PlPoss animal-Pl] exit(v).Pfv-3PlSbj if, rainy.season Def, [bèlì-gè]-gírí tồ: \(\nearrow\), [animal-Pl]-take.to.pasture.Agent apart, [kùbè-ndè]-kúbí tồ: 】, [cultivate-Nom]-cultivate.Agent apart,
'When the animals go out, in the rainy season, a herder and a farmer are separated.'
[ X tô: \(\nearrow Y\) tồ: \ 'X and Y are apart (separated or distinct)', parallelistic construction with intonational closure §8.4.5.1]

\section*{15:21}

B: [kùbè-ndè]-kúbí
[cultivate-Nom]-cultivate.Agent yàlà-[dání-yí] field-[guard-MP.Agent] too apart, [nà \({ }^{\text {LH }}\) dò:ygè-bé:] yà \(\nearrow\), [nà \({ }^{\text {LH }}\) yàlá] wè: \({ }^{\text {LH } k a ̀ m-b a ́ ~ y a ̀ ~} \searrow\), [3SgPoss watchman-child] and, [3SgPoss field] thing do-IpfvRel and, 'A farmer and a field-guardian are also separated. Its (=field's) watchman, and what is done in his field.'
["watchman-child" need not be a child]

15:28
\(B\) : émágé rì yà \(\nearrow\), yò:gé rì yà \(\nearrow\), èrègé rì yà \(\searrow\), sorghum Def and, millet Def and, rice Def and, ég-gè pós [ájá kày], ájá [nì \({ }^{\text {LH }}\) gàndá r] gì] Dem.Def-Pl all [now Top], now [1PlPoss country Def] Loc] [ég-gè pós] \({ }^{\text {Lkùbà-w }}{ }^{\mathrm{n}}\) érò nì \({ }^{\mathrm{LH}_{\text {sǎ:, }} \text {, }}\) [Def.Dem-Pl all] cultivate-while thus 1PlSbj have,
'The sorghum, and the millet, and the rice. All those now, now in our land, all those [focus] we cultivate and have (=get) like that.'

15:36
B: hǎl nwà:lá, èrègè kúb-bà ànìyá nì è kání-sà, even this.year, rice cultivate-VblN intention 1PlSbj Exist do-Reslt,
[ér gì] nànì-yè-Ø mè,
[Dem.Def Acc] step.over-MP.Pfv-3SgSbj if,
[èrègé 1 là] tèndè-Ø mè,
[rice Def too] be.well.made.Pfv-3SgSbj if,
'Even this year we are planning to do rice-farming. If it goes beyond that, if the rice too turns out well,'
[nwà:lá, apparently dialectal for nò: 'this year']
15:41
B: [yò:gé r yà], [yò:gé r là] [millet Def and], [millet Def too]
 [1PlPoss sustenance Def too], [ér là] [ygù:rè tán] nì LH \(_{j}\) òl̀̀-bá, [Dem.Def too] [sustenance only] 1PlSbj look.for.IpfvRel, 'With the millet, the millet too, our sustenance too, that too, it's just sustenance [focus] that we look for.'
[millet is the traditional staple cereal; rice can be consumed in place of millet, or sold]

15:45
 [morning midday all] [sustenance [1PlPoss thing]], ér = yò nì jòlò-bá, Dem.Def=Foc 1PISbj look.for.IpfvRel,
'Every morning and afternoon, our sustenance, that [focus] is what we look for.'

15:47
B: [á: \({ }^{\text {LH }}\) sàgú] [è \({ }^{\text {LH }}\) sàgú] póy, [God trust] [2PlPoss trus] all, [én nà] yá: kè \(\quad{ }^{L^{L}}\) sě:,
[Dem.Def too] there.Def 3P1Sbj have.PastRel,
'Trusting in both God and you (yourselves), that too is what they had there,' [< érì là]

15:52 (change of speaker)
A: bon, [èrègè \({ }^{\text {LH }}\) yàlá] nà \({ }^{\text {LH }}\) gùné rì,
well, [rice field] 3 SgSbj say.PfvRel Def, sàbú, [ \({ }^{\text {LH }} \mathrm{g}\) g̀l̀̀-gé rì \(]\) ájá tô:-tồ:, because, [place-Pl Def] now apart-apart,
'Well, the rice field that he talked about, because the (various) places are different from each other now.'

15:59

[[long.ago thing Def] and] [[today thing Def] and] tòmà-ggà kárá = là, same exactly it.is.not,
'The situation of the old days and the situation of today are not quite the same.'
[kárá or iterated kárá-kárá 'exactly', a kind of intensifier for tòmà-ŋgà 'same']
16:02
A: [èrègè LHyàlá] díló, [bùrgù gí=lá mè] ór-દ̀:, [rice field] long.ago, [ B Loc]=it.is.not if] not.be.Past-3PlSbj, ááá mbé: [èrègè \({ }^{\text {LH }}\) yàlá] kám-bà \({ }^{\text {L }}\) dèbì-yè, now here [rice field] do-VblN begin.Pfv-3PlSbj,
'In the past, there was no rice field, except at Bourgou. Now they have begun making a rice field here (near Ningo).'
[Bourgou here is a rice-growing zone near the Niger River that is flooded annually]

16:08
A: sàbù ìjò-gè mbé: [[nì \({ }^{\text {LH }}\) gèlć \(]\) gì] \({ }^{\text {LH }}\) bò:-gé rì pós, because village-Pl here [[1PlPoss place] Loc] be.Rel-Pl Def all, [èrègè \({ }^{\text {LH }}\) yàlá] kám-bà \({ }^{\text {L dèbì-yè, }}\) [rice field] do-VblN begin.Pfv-3PlSbj
'Because all of the villages that are here near us, they have begun making rice field(s).'

16:12
A : àmbìlé-gè [bò:rè [dé: yà pìyòlù]] gíró-b-à: \(\nearrow\), certain-Pl [sack [forty and ten]] get-Ipfv-3PlSbj, àmbìlé-gè [bò:ré tè:mèdèrè] gíró-b-à: Л, certain-Pl [sack hundred] get-Ipfv-3P1Sbj, àmbìlé-gè hàlí [bò:ré té:mé-n nì:ทgà] gíró-b-à: \(\searrow\), certain-Pl even [sack hundred two] get-Ipfv-3P1Sbj,
'Some people get (=produce) fifty sacks (of rice). Some people get one hundred sacks. Some others even get two hundred sacks.'
[refers to 100-kilo sacks of unshelled rice; '200' has extra -n, cf. (72a)]

16:20
A: hàyà én-nǎy \({ }^{n}\) ájá á:mì tègè-Ø mè-nè, well that.other now rain(n) rain.fall. \(\mathrm{Pfv}-3 \mathrm{SgSbj}\) if, [mí: rì] gélé \({ }^{\text {LH}}\) Sìgò-wá rì, [water Def] place descend-IpfvRel Def,
'Well, if it has rained now, (in) the place where the water has come down (from the cliffs),'
[for én-nǎyn see comment @ 14:50 above]

16:24
A: [[[cò:fòl-gé rì] gélé \(\begin{array}{lll}\text { LHbǎ:] rì }]\end{array}\)
[[[stream.bed-Pl Def] place be.Rel] Def]
[gélé mí: \({ }^{\text {LHììì-yò-bá] [gòbòlò }{ }^{L} \text { kúnjú-gé rì], }}\) [place water stop-MP-IpfvRel] [pool.bed old-Pl Def],
'(In) the place where the stream beds are, (in) the place where (rain-)water stops, (in) the old pool beds,'
[cò:fǒl~ cò:fôlí denotes a humid, forested area where rainwater drains slowly; góbóló is a natural depression where the rainwater forms pools; bóndó (see below) denotes a deeper pond bed, whether natural or dug up for bricks]

16:28
A: yá: [bòndò \({ }^{\mathrm{L}}\) kúnjú-gé \({ }^{\text {Lbày-gé rì] yà, }}\) there.Def [deep.pond.bed old-Pl big-Pl Def] Inst, [ájá kà] [érí-gè là] téló-bà Ldèbì-yè, [now Top] [Dem.Def too] block-VblN begin.Pfv-3PlSbj,
'There, with the large old pond beds. Now (in) those (places) too they have begun damming.'
[i.e. building up small earth "dikes" with pick-hoes to retain rainwater'; noun plus two adjectives §6.3.3.1]

16:31
A: [kè-lá ùnì] [kè-lá [bò: \({ }^{\text {La }}\) bíní-bíní \(]\) kànì], [3PlSbj-Fut go.Pfv] [3PiSbj-Fut [dike big-big] do.Pfv], kè-là [mí: rì] tèlè, 3PISbj-Fut [water Def] block.Pfv, 'They will go and make big (earth) dikes. They will block the water (flow).'

16:35
A: [mí: rì] tèlì-yè mè-nè, [water Def] block.Pfv-3PlSbj if, [èrègé rì] kè-lá kùbè, [rice Def] 3PlSbj-Fut cultivate.Pfv, 'When they have blocked the water flow, they will cultivate the rice.'

16:40
A: kúbí-yé= ̀̀ kànì-Ø mè-nè, kóy \({ }^{L H}\) sòb-bó rì, cultivate-Pass=it.is do.Pfv- 3 SgSbj if, grass sprout-IpfvRel Def, [kóy rì káỳ] nà-gì géyé-bò pòmpí yá s-à:, [grass Def Top] 3Sg-Acc kill-Ipfv pump(n) Exist.Dist have-3PISbj, [érí yà] kè-lá gèyè,
[Dem.Def Inst] 3PlSbj-Fut kill.Pfv,
'When the rice has been cultivated, grass that sprouts (=weeds), as for the grass (=weeds), they have pumps (=aerosol prays) that kill it. They will kill it with that.'
[herbicide is sprayed to kill weeds in the rice fields]
16:47
A: [érí yà] gèy-yè mè-nè,
[Dem.Def Inst] kill.Pfv-3PlSbj if,
\(\left[\begin{array}{lll}{[k u ̀ b o ́ ~} & \left.\text { t] }{ }^{\text {LH}} \text { tùnú }\right] ~ g i ̀, ~\end{array}\right.\)
[[cultivation Def] behind] Loc,
'When they have killed (it) with that, after the cultivating,'

16:50
A: bán manner [3PlSbj speak-while] 1PlSbj hear.PfvRel Emph, [kè \({ }^{\text {LH} k a ̀ n a ́:-w ~}{ }^{\mathrm{n}}\) ] nì [3P1Sbj do-while] 1PISbj see-MP.PfvRel and,
'The way we have heard them speak, and (the way) we (subsequently) saw them doing.'
[i.e. they did what they had said they would do; LH-toned A/O-stem of verb in 'while' complement of direct perception verb §17.2.2.1; yâ: after conjuncts (first yâ: replaced by emphatic particle)]

16:52
A: kè-là [bò̀ré rì], èrègè gànì, 3PlSbj-Fut [sack Def], rice put.in.Pfv, غ̀règè gànì-Ø mè-nè, rice put.in.Pfv-3SgSbj if, kè-lá [sìnì yá] 3PlSbj-Fut [convey.Pfv and.Nonpast.SS]
[[mí: \({ }^{\text {LH} k u ̀ l i ̀ y e ́] ~ g i ̀] ~ k e ̀-l a ́ ~ t u ̀ n i ̀, ~}\) [[water inside] Loc] 3PlSbj-Fut put.in.Pfv,
'They will put rice (seeds) (in) sack(s). When they have put rice in (them), they will take them and put (the rice) in the water.'
[seeds are packed in sacks and left in water for 3 days to germinate, then planted in the rice field; gán 'put in' denotes pouring grain or liquids into a container, tún 'put (in)' is more general]

17:00
A: [hál jè: yá] kémó-gé nǎ: kànì, [until take.Pfv and.Nonpast.SS] point(n)-Pl 3SgSbj do.Pfv, kémó-gé kànì-yè mè-nè, point(n)-Pl be.done.Pfv-3PlSbj if,
'Eventually it makes sharp points (=rice sprouts). When they (=sprouts) have made sharp points,'

17:03
A: gélé yá: kè-w \({ }^{n}\) tèlè-sà-w \({ }^{n}\) kè \({ }^{\text {LH }}\) kùbè-sá, place there.Def 3Pl-Indep block-Reslt-while 3PlSbj cultivate-ResltRel, \(\left[\begin{array}{llll}\text { kj́y gè } \grave{\varepsilon ́}^{L} & \text { géy-yé-Ø } & \text { r] gì, }\end{array}\right.\) [grass place kill-Pass.PfvRel Def] Loc,
'There where they have dammed and cultivated, in the place where the grass (=weeds) have been killed,'
[second gélé 'place' in this segment is \(\{L\}\)-toned as relative head noun
directly before passive; \(<g \varepsilon\) y-y \(\varepsilon=\grave{W}\) 'be killed']
17:05
A: [[[gèlé r] gì] sìnì yá]
[[[place Def] Loc] convey.Pfv and.Nonpast.SS]
[èrègé rì] kè-lá àmì,
[rice Def] 3PlSbj-Fut sprinkle.Pfv,
[èrègé rì] àmì-yè mè-nè, nǎ: sòbè,
[rice Def] sprinkle.Pfv-3P1Sbj if, 3 SgSbj.Fut sprout(v).Pfv, 'They will take the rice (seeds) to the place (=rice field) and scatter it (by tossing it). When they have scattered the rice, it will sprout.' [the seeds are scattered by tossing into the already inundated rice field]

\section*{17:11}

A: sòbè-Ø mè-nè, sprout(v).Pfv-3SgSbj if, kòndè [tòrrà \({ }^{\text {L }}\) tó:] [hǎl tò \(\rightarrow\) mà] sà:-nà- \(\varnothing\), later [annoyance other] [even one] have-StatNeg-3SgSbj, sèwánà [èrègé rì] á:mì dé?, other.than [rice Def] rain(n) just,
'When it has sprouted, afterwards it doesn't have even one other problem, except rain (for) the rice.'
[exaggerated prolongation of tò \(\rightarrow\) mà for rhetorical effect]
17:18
A: á:mì dàyì-y-yè, [èrègé rì] sòbè-Ø, rain(n) wait.for-MP-3PISbj, [rice Def] sprout(v).Pfv-3SgSbj, ìbè-Ø [[tágú r] gì], catch.Pfv-3SgSbj [[ground Def] Loc],
'They (=seeds) have waited for the rain. The rice has sprouted. It has caught (=taken root) on the ground.'
[There is variation in this passage between singular and plural agreement for 'rice', depending on whether it is conceptualized as a mass/abstraction, or as a plurality of seeds or plants]

\section*{17：23}

A：ìbì－yè mè－nè， catch．Pfv－3PlSbj if， ［mí：rì ní］nàkí kànà－nì－Ø mè－nè， ［water Def ？？］missing do－PfvNeg－3SgSbj if，
＇When it has seized（＝taken root），as long as the（rain－）water has not been lacking（＝deficient），＇
［obscure níafter definite noun §6．5．4］

17：25
A：［hàlí wé：wè］kòndè nà－gì tél－dà－Ø， ［even anything］later 3Sg－Acc block－IpfvNeg－3SgSbj， kóy nà－gí tòrí kán－dà－Øノ， grass 3 Sg－Acc pestering（n）do－IpfvNeg－3SgSbj， ［wè：\({ }^{\text {L }}\) tó：pós］nà－gí tòrí kán－dà－Øゝ， ［thing other all］3Sg－Acc pestering（n）do－IpfvNeg－3SgSbj， ＇Nothing further will prevent it（from growing）．Weeds won＇t prevent it（from growing）．＇
［wé：wè＇（not）anything＇，irregular iteration of wè：＇thing＇§4．1．2］

17：30
A：ùnjìgè－Ø mè－nè，álhámdùlìllá：hì， get．up．Pfv－3SgSbj if，praise．to．God， ［èrègé r gè］sòbì－yè bìlè－Ø mè－nè， ［rice Def Pl］sprout（v）．Pfv－3PlSbj become．Pfv－3SgSbj if，
＇When it（＝rice）stands up，praise to God，when the rice has already sprouted （＝grown），＇

\section*{17：35}

A：［［èktâ：r tò：mà］ò bìlè，
［［hectare one］ 2 SgSbj have］ \(3 \mathrm{SgSbj}-F u t\) become．Pfv， ［［èktá：rí－gé nì：ygà］ò \(\quad{ }^{\mathrm{LH}_{s} \text { sa：］}}\) nǎ：billè， ［［hectare－Pl two］ 2 SgSbj have］3SgSbj－Fut become．Pfv， ［［èktá：r \({ }^{\text {LH }}\) pècèrと́ \(]\) ò bilè， ［［hectare half］ 2 SgSbj have］ 3 SgSbj －Fut become．Pfv，
＇If it happens that one hectare［focus］that you－Sg have，（or）if it happens that two hectares［focus］is what you have，（or）if it happens that you have a half hectare，＇

\section*{17:42}

A: [[lò kànì yá] LH \(\left._{\text {wě: }}\right]\) hàybí ò bí:-nì, [[2SgPoss Poss] guarding(n) do.Pfv and.Nonpast.SS] 2SgSbj be-Dur, níyè-gè ò-lá hàybí kànì, bird-Pl 2 SgSbj-Fut guarding(n) do.Pfv,
'You keep checking your property. You will check for birds.' [granivorous birds such as queleas, weavers, and sparrows]

\section*{17:45}

A: [mí: yà bó mè-nè] né:nó-gè nó:-b-à: mè-n ] [water Exist.Dist be-3SgSbj if] fish-Pl enter-Ipfv-3Pl if] ò-lá tàykí kànì, 2 SgSbj -Fut inspection do.Pfv, 'If there is water (in the field), if fish get into it, you-Sg will inspect.'
[while fish can be beneficial in consuming insect pests, some fish spp. also damage the plants]

17:48
A: [[kóy rì] bání bǎ: rì] ò-lá tàykí kànì, [[grass Def] manner be.Rel Def] 2SgSbj-Fut inspection do.Pfv, [hàlí jè: ná] [èrègé rì] nǎ: nàlè, [until take.Pfv and.Nonpast.SS] [rice Def] 3SgSbj-Fut bear.Pfv,
'You-Sg will inspect the way weeds are (growing) there. Eventually the rice will bear grain.'

\section*{17:52}

A: [èrè
rì] nàlè-
[rice Def] bear.Pfv-3SgSbj if, ah! \(2 \operatorname{SgSbj}\) look.at.Pfv-when á:mi tègè-Ø [gómbóló-gé rì] mí: bǒ: rì, rain(n) rain.fall.Pfv-3SgSbj [wall-Pl Def] water be.Rel Def,
'When the rice has borne grain, ah, and then you-Sg have considered whether rain has fallen and (consider) the water that is inside the dikes.'
[i.e. the main outer "walls" (raised earth) that trap rainwater inside a a field; - \(\grave{y}^{n}\) after LH-toned verb (§15.2.2.5)]

\section*{17:57}

A: yá:sà bò:-gé bò:-gé bò:-gé tógó-gé tógó-gé ò \({ }^{\text {LH }}\) kàm-bá, until ridge- Pl ridge- Pl ridge- Pl section -Pl section -Pl 2 SgSbj do-IpfvRel, [[tógó-gé ò \({ }^{\text {LH} k a ̀ n-s a ̀-g e ́ ~ r i ̀] ~ g i ̀] ~ m i ́: ~}{ }^{\text {LH}}\) bǒ: rì, [[section-Pl 2SgSbj do-ResltRel-Pl Def] Loc] water be.Rel Def, 'Eventually you-Sg make ridges and (rectangular) sections. The water that is in the sections that you have made,'
[bǰ: 'ridge' (distinct from bj̀: 'agemate'), these ridges form smaller rectangular sections (tógó) inside a field]

18:02
A: [[mí: rì] nàkí \({ }^{\text {LH} k a ̀ n i ́ ~ d e ̀ b e ̀-Ø] ~ y a ́ r e ́-w ̀ ~ m e ̀ n e ̀, ~}\) [[water Def] deficit do.Nom begin.Pfv-3Sg] notice.Pfv-2SgSbj if, [[[mbé: \({ }^{\text {LHtàngilé] gì] mí: yá bò-Ø] }}\) [[[here side] Loc] water Exist.Dist be-3SgSbj] yáré-ẁ mènè, notice.Pfv-2SgSbj if,
'If you-Sg notice that the water is in deficit (in one section), if you notice that there is water on this side (=in another section),'
[ \({ }^{\text {LH }}\) kàní as complement to 'begin' §17.3.4]
18:07
A: [bǒ: rì ] ò-lá bànjàgè \(\nearrow\),
[ridge Def] 2SgSbj-Fut breach(ridge).Pfv,
[mí: rì] [ég gì] nǎ: gwè: \(\nearrow\), [water Def [Dem.Def Loc] 3SgSbj.Fut exit(v).Pfv, [[yá: rì] gì] nǎ: nwè: \\, [[there.Def Def] Loc 3SgSbj.Fut enter.Pfv, 'You-Sg will breach (the intervening ridge), (and) the water will flow out of that (section), (and) it will flow into there (=the other section).'
[yá: 'there (definite)' treated like a noun]
18:10
A: [hàlí
[until
\(\begin{array}{lcc}\text { [until take.Pfv } & \text { and.Nonpast.SS]] } \\ \text { [nà } & { }^{\text {LH}} \mathrm{kù:ndú]}\end{array} \quad\) dàgá-dàgá \(\quad\) nă: kànì, [3SgPoss entirety] Rdp-equal 3SgSbj.Fut do.Pfv,
'Eventually its entirety (=all sections) will be equal (in water).'

\section*{18:13}

A: \(\varepsilon w^{n}=\) yò kànì- \(\emptyset\) à àlhámdùlìllá:hì
wet=Foc do.Pfv-3SgSbj if, praise.to.God
[èrè káỳ] [gèl̀ \({ }^{\text {L }}\) sómbé-sá] nà \({ }^{\text {LH } k e ̀ y-y a ́, ~}\) [rice Top] [place wet] 3 SgSbj like.Rel, 'When it is wet [focus], praise God, as for rice, a wet place is what it likes.'

18:17
A: દ́-rò Ljà:là-wn ò sí:-nì, thus look.at.Ipfv-while 2 SgSbj have-Dur, Ljà:là-w \({ }^{n}\) ò sí:-nì,
look.at.Ipfv-while 2 SgSbj have-Dur, [hàlí jè: ná] nǎ: nàlè, [until take.Pfv and.Nonpast.SS] 3SgSbj.Fut bear.Pfv, 'You keep looking and looking (=inspecting) thus, until it will bear grain.' [sí:-nì §15.2.1.6]

18:22
A: nàlè-sà-w \({ }^{\text {n }}\), ìlì-yè mè-nè, [sćm-bà gì] ò-lá nwè:, bear-Reslt-while, ripen-MP.Pfv if, [cut-VblN Loc] 2SgSbj-Fut enter.Pfv, [[ò ndà:] gélé \({ }^{\text {LH} b a ̌: ~ p o ́ s] ~ o ̀-l a ́ ~ t i ̀ y e ̀, ~}\) [[2SgPoss \({ }^{\text {LH }}\) person] place be.Rel all] 2 SgSbj -Fut send.Pfv, 'When it has borne grain, when it ripens, you-Sg will enter into (=begin) cutting (=harvesting). You will send (a message) to wherever your kinsmen are.' [ \(<\) ò ndă:]

18:27
A: yògè màygà-lì-yè-sà-w \(\mathrm{w}^{\mathrm{n}}\) è sèmè gìrદ̀ mè-nદ̀, come.Pfv assemble-Mult-Recip-Reslt-while 2PISbj cut.Pfv get.Pfv if, ò-lá nùmbè, nùmbè gíré-ẁ mè-nè, 2 Sg Sbj-Fut beat.Pfv, beat.Pfv get.Pfv- 2 Sg Sbj if, 'Having come and gathered together, if you-Pl have done the cutting (=harvesting), you-Sg thresh (the rice). If you-Sg have done the threshing,' [rice is harvested by slashing the stem with a sickle; then the harvested parts are piled up and pounded (threshed) to dislodge the grains; gíró \$15.1.3]

\section*{18:32}

A: [ájá kày] wé: [[ò \(\left.{ }^{\text {LH }} \mathrm{jòlò}-b a ́\right] ~\) rì \(]\) á:rì \(=w^{n}\), [now Top] thing [[2SgSbj look.for-VblN] Def] which=it.is [érí kày] [[tùmbùlà-ıgé rì] gì] \({ }^{\text {LH}}\) kàm-bò-ẃ, [Dem.Def Top] [[begin-Nom Def] Loc] do-Ipfv-2SgSbj,
'Now, the thing that you-Sg are looking for is which (=what)? That [focus] is what you-Sg do in the beginnings.'

18:37
A: nùmbè gíré-ẁ mè-nè, [sà:kù dé:] gíré-ẁ mè-nè, cut.Pfv get.Pfv-2SgSbj if, [sack 40] get.Pfv-2SgSbj if, ò-lá pècí kànì [[pé-náygá]-gé rì] ò-lá tùlè, 2SgSbj-Fut division do.Pfv [[20]-Pl Def] 2SgSbj-Fut sell.Pfv, [[pé-nángá]-gé rì] [ò LH 1 ì̀:-bà-gé] ò-lá bèjè, [[20]-Pl Def] [2SgPoss eat-IpfvRel-Pl] 2SgSbj-Fut store(v).Pfv, 'If you-Sg have been able to harvest, if you-Sg have gotten forty sacks (of rice grain), you will divide them (in half). You will sell the twenty. You will keep the twenty that you-Sg (will) eat.'

\section*{18:45}

A: pé-nángá-gé yá: ò \({ }^{\text {LHtùlù-gé rí-gè, }}\) 20-Pl there.Def 2 SgSbj sell.PfvRel-Pl Def-Pl, [kélć-ngé rí-gè] námá-gó-là, [money-Pl Def-Pl] ruin-Tr-Proh, '(As for) the twenty that you-Sg have sold there, don't waste the money!' [prohibitive §10.7.1.2; námá-gó 'ruin, damage, waste (sth)', transitive of nám(ư) 'be damaged']

18:48
A: [kélé-ggé rí] ò-lá bèjè, [money-Pl Def] 2SgSbj-Fut keep.Pfv, [ájá kày] kàtàràpálá ò \(\quad{ }^{\text {LH}}\) gìré nǎ: bìlè, [now Top] Caterpillar 2 SgSbj get.PfvRel 3 SgSbj .Fut become.Pfv, tràktê:r ò \({ }^{\text {LH }}\) gìré \(\quad\) nǎ: \(\quad\) bilè, tractor 2 SgSbj get.PfvRel \(3 \mathrm{SgSbj} . F u t\) become.Pfv,
'You-Sg will save up the money. Now, it may be that it's a Caterpillar [focus] that you-Sg have gotten (=bought). (Or) it may be that it's a tractor [focus] that you-Sg have gotten.'
[refers to Caterpillar earth-movers]

18:54

'It must happen that when you have all assembled together, if it happens that every village is of one voice (=is agreed), you-Pl will go and look for a machineowner.'
[ìjò póy 'every village', contrast ìjó rì pós 'the whole village' @ 19:28]

19:01
A: sàf
which.means [now Top] be.well.done.Pfv begin.Pfv-3SgSbj if [ndà-gè gíró-bò-w] [bálá-ẁ gó?], [person-Pl get-Ipfv-2SgSbj] [see.Stat-2SgSbj tag],
'So that now, if it begins to turn out well, you-Sg (will) get (lots of) people, you see?'
[ \({ }^{\text {LH }}\) tèndé as complement to 'begin' §17.3.4; góp '(not) yet’ but here functioning as a kind of tag question]

19:04
A: bí:má ò \({ }^{\text {LH }}\) gìré wô:, [ìjò \({ }^{\text {LH }}\) bòĺ́ \(]\) ò \({ }^{\text {LH }}\) gìré wô:, stranger 2 SgSbj get.Pfv or, [village resident] 2 SgSbj get.Pfv or, kà:nànké ò \({ }^{\text {LH gìré wô:, mìsìkì:ní ò }{ }^{\text {LH }} \text { gìré wô:, }}\) boss 2 SgSbj get.Pfv or, pauper 2 SgSbj get.Pfv or, '(As) an outsider [focus] you-Sg get, (as) a village resident [focus] you-Sg get, (as) a powerful person [focus] you-Sg get, or (as) a pauper [focus] you-Sg get.' [wô: §7.2.1.3; \({ }^{\text {LH }}\) bolé \(\left.§ 4.2 .6\right]\)

19:10
A: ndá: \({ }^{H}\) ò LH gìrè pós, person 2 SgSbj get.PfvRel all, [è pós] è-lá màngà-là-mì [2Pl all] 2PlSbj-Fut gather-Mult-Caus.Pfv [ndà: pós] [nà \({ }^{\text {LHìmá] nǎ: }}\) sògè, [person all] [3SgPoss ability] 3SgSbj.Fut bring.Pfv, 'Everyone whom you-Sg have gotten, all of you will gather (your resources), everyone will bring (=contribute) what he/she can.' [ndă: \({ }^{H}\) < ndà: here H-toned as relative head §14.2.7]

19:15
A: è-lá sìnì [[màsí rì] yà \(]\)
2PlSbj-Fut convey.Pfv [[machine Def] Inst] è-lá [bò: \({ }^{\text {L }}\) bíní-bíní] è-lá kàndì-yè, 2PISbj-Fut [dike Rdp-big] 2PISbj-Fut fix-MP.Pfv, 'You-Pl will take (the money) to the machine (owner). You will make a big dike (raised earth).'

19:18
A: [ájá kày] [[gèlé rì̀ gì] LHà:gé dèbè-Ø, [now Top] [[place Def] Loc] arrive.Pfv begin.Pfv-3SgSbj, gàyà-ndè-Ø mè-nè, è kùbè, wide-Inch.Pfv-3SgSbj if, 2PlSbj cultivate.Pfv, 'Now it (=machine) has begun to arrive. When it (=field) has become spacious, you-Pl have cultivated (it).'
[ \({ }^{L H}\) à:gé as complement of 'begin' \(\left.\$ 17.3 .4\right]\)

19:23
A: sògè-sà-w \({ }^{\mathrm{n}}\), [b̌̌: rì] è kàndì-yè mè-nè, bring-Reslt-while, [dike Def] 2PISbj fix-MP.Pfv if, [tógó-gé bè-gè] [tógó-gé bè-gè] [[è \({ }^{\text {LHtùmbùlć] tòrò }]}\) [section-Pl small-Pl] [section-Pl small-Pl] [[2PlSbj begin.PfvRel] like] [è tèlè LHbàrò-bó kòndè là], [2P1Sbj cut.Pfv add-Ipfv later also],
'When you-Pl have brought it (=machine), when you have repaired the dike, you-Pl cut (=divide) and add little sections again the (same) way you-Pl began.'

19:28
A: è 2PlSbj \(\begin{aligned} & \text { ť̀lıे } \\ & \text { cut.Pfy }\end{aligned}\) bàrè mè-nદ̀, 2PSbj add.Pfv if, [ájá kày] [ìjó rì pós], [[ìjó rì] gì] \({ }^{\text {LH }} \mathrm{b}\) bèŕ, [now Top] [village Def all], [[village Def] Loc] near,
'When you have cut and added (sections), now the whole village, the area near the village,'

19:32
A: ndà: \({ }^{\mathrm{L}}\) tó:, ò \(\quad{ }^{\text {LH}}\) gìdó, ò \(\quad{ }^{\text {LH}}\) tògú, ò \(\quad{ }^{\text {LH }}\) nàlí, person other, 2 SgPoss friend, 2 SgPoss kinsman, 2 SgPoss companion, ndá: \({ }^{H}\) ò LHyèy-yà pós, yògè-Ø mè-nè, person 2 SgSbj know.Rel all, come.Pfv-3SgSbj if, 'Any other person, your-Sg friend, your kinsman, your companion, anyone who you know, when he/she has come,'

19:39

'You-Pl will get organized, you-Pl will write down (your obligations), until it will be well done.'
[< French classer/classé]
19:41
A: mà:ní [èktâ:r tò:mà] nà \({ }^{\text {LH} k e ̀ y-y a ́ ~ w a ̀] ~ g u ̀ n e ̀-\varnothing, ~}\) so.and.so [hectare one] 3 SgSbj want Quot] say.Pfv-3SgSbj, [ ह̀ktâ:r \({ }^{\text {LH }}\) sànjá] nǎ: sòjè, [hectare price] 3 SgSbj.Fut pay.Pfv,
'So-and-so says he wants one hectare [focus], he will pay the price of a hectare.'

19:45
A: mà:ní [èktâ:r yâ:] [pèccèř̀ yâ:]
so.and.so [hectare and] [half and]
nà \({ }^{\text {LH} k e ̀ y-y a ́ ~ w a ̀] ~ g u ̀ n e ̀-Ø, ~}\)
3SgSbj want Quot] say.Pfv-3SgSbj,
[èktâ:r yâ:] [pèccèrè yâ:] nǎ:
[hectare and] [half and] 3SgSbj.Fut pay.Pfv,
'So-and-so says he wants one and a half hectares [focus], he will pay for one and a half hectares.'
[< pèccèré; yâ:. 'and' in lists (\$7.1.1.3)]
19:49
A: mà:ní [èktá:r-gè nì:ngà] nà \({ }^{\text {LH} k e ̀ y-y a ́ ~ w a ̀] ~ g u ̀ n c ̀-~} \varnothing\), so.and.so [hectare-Pl two] 3 SgSbj want Quot] say.Pfv-3SgSbj, [èktá:r-gè nì:ngà] nǎ: sj̀jè, [hectare-Pl two] 3 SgSbj.Fut pay.Pfv, 'So-and-so says he wants two hectares [focus], he will pay for two hectares.'

\section*{19:53}

A: [z̀ktâ:r gùnì-yè-Ø mè-nè] nì yè-nì
[hectare say-MP.Pfv-3SgSbj if] 1PISbj know-Neg
[èktá:r-gé kày] tùbà:g-gé= wò,
[hectare-Pl Top] white.person- \(\mathrm{Pl}=\) it.is,
'What is called "hectare," we (Africans) don't know (it). "Hectare" is (for) whites.'

19:56

"."Plot" [focus] is what we know. The limit (=total amount) of plots that he wants.'
[i.e. parcels of land designated for farming]

19:59
A: sòjè-sòj
(iteration)-pay.Pfv
pâ:"
understanding
[mí: rì]
kànì-Ø mè-nè,
do.Pfv-3SgSbj if,
kánú-ẁ dé?,
do.Pfv-2SgSbj Emph,
[water Def] come.Pfv-3SgSbj if,
'When he has paid it up, you-Sg have agreed. When the water comes,'
[verb-stem iteration §9.8; emphatic dé? §19.4.2]
20:03
A: [mí: rì] yá: gélé nà gò:-bá té \({ }^{\text {n }}\)
[water Def] there.Def place 3 SgSbj exit(v).IpfvRel area gwè:-Ø mè-nદ̀, [òjí rì] díy-y \(=\) ẁ , exit.Pfv-3SgSbj if, [path Def] leave-Pass=it.is,
'There around where the water comes out, when it has come out, the path (=channel) is left alone (unblocked).'
[< díyó 'leave (alone); abandon']
20:06
A: pâ:
understanding do.Pfv-2SgSbj Emph,
hàyà, [túmbúlá-ŋgé rì] bèléw \({ }^{\mathrm{n}}\) là \(\nearrow\),
well, [beginning Def] as.soon.as also,
káná: nì yògè mè-nè, do.Purp 1Pl come.Pfv if,
'You-Sg have agreed. Well, from the beginning, if we have come to do (it).'

20:13
 [village [1PlPoss Poss] Def] [animal-Pl village]=it.is, [gùrtól là] wá:jíbì nì-lá gò-mì [gùrtòl \({ }^{\text {L }}\) báy-báy], [passage also] obligation 1PlSbj-Fut exit-Caus.Pfv [passage Rdp-big],
'Our village is a village of livestock animals. A passage too, we must take out (=reserve) a big (=wide) passage (for cattle).'

20:18
A: [gùrtò \({ }^{\mathrm{L}}\) báy-báy rì] è gò-m mè-nè, [passage Rdp-big Def] 2PISbj exit-Caus.Pfv if, [bèlì-gé rì] yògì-yè mè-nè jéná:gú, [animal-Pl Def] come.Pfv-3P1Sbj if rainy.season,
'When you-Pl have taken out (reserved) the big passage (for cattle), when the animals come in the rainy season,'

20:22
A: [ké là \(\nearrow]\) [tòrrà póy] órâ- \(\varnothing\),
[3Pl too] [interference all] not.be- 3 SgSbj ,
\(\left[\begin{array}{ll}\mathrm{ké} & \text { là }] \text { [ég gì] }{ }^{\text {LH}} \text { tàngò--bá-à:, }\end{array}\right.\)
[3Pl too] [Dem.Def Loc] cross-Ipfv-3PISbj,
'They too (=herders and their cattle), there is no interference. They too, there [focus] is where they pass through.'
[t̀̀rrá 'interference', verbalized as t̀̀rríplus 'do' in the following segment]
20:25
A: [bè̀ì-gé rì] [[yálá rì \(]\) gì] nó:-r-à: ノ, [animal-Pl Def] [[field Def] Loc] enter-IpfvNeg-3PlSbj, [yálá-tìngá 1 là] [field-owner Def too] [[bèlì̀-gé rì] gì] tòrrì kán-dà- Ø, [[animal-Pl Def] Acc] interference do-IpfvNeg-3SgSbj,
'The animals don't go into the (cultivated) field, and likewise the field owner (=farmer) doesn't interfere with the animals.'

20:29
A: [ndà: póy] [[nà \({ }^{\text {LH}}\) hà:jé \(]\) gì] \({ }^{\text {LH }}\) tègá-Ø, [person all] [[3SgPoss need] Acc] head.for.Stat-3SgSbj, hàyà [nì káỳ], ànìyá nì \({ }^{\text {LH }}\) kàn-sá rì, well [1Pl Top], intention 1 PlSbj do-ResltRel Def,
'Everyone takes care of his own business. Well, as for us, the plan we have made,'
[tègá, stative < tégí-yó 'head for, be focused on']

20:33
A: \(\varepsilon\)-rò \(\rightarrow\) ह́-rò \(\rightarrow\) kànà: \({ }^{\text {n }}\) nì \({ }^{\text {LH bǎ:, }}\) thus, thus do.Dur 1PlSbj Prog, ájá [érí = yò là] ànìyá kàn-sà-w \({ }^{n}\) now [Dem.Def=Foc too] intention do-Reslt-while [[gíró gì] nà \({ }^{\text {LHèm-bá }] ~ n i ̀ ~}{ }^{\text {LH }} \mathrm{j}\) j̀̀è-sá, [[forward Loc] 3SgSbj go-IpfvRel] 1Pl look.for-Reslt,
'That [focus] is what we do. Now having decided on that [focus], what we are looking for is for it to go forward.'
[bă:for nonsubject relative of bǒ: 'be' §14.4.2, here as progressive auxiliary]
20:39
A: [érí LHànìyá rì], wá:jíbí [Dem.Def intention Def], obligation [él là] [[è \({ }^{\text {LH }}\) sùgùnú] gì] nì-lá tùnì, [Dem.Def too] [[2PlPoss ear] Loc] 1PlSbj-Fut put.in.Pfv, 'That plan, we will also have to put that into your-Pl ear(s) (=inform you).' [< érí là]

20:43
A.
[[2PlPoss ear] Loc] 1Pl put.in.Pfv if è nù:ndè mè-nè, 2PISbj hear.Pfv if,
[ndà: káỳ] [ndà: tò:mà] [hàkkìlé tò:mà], [person Top] [person one] [mind one],
'When we have put (that) into your-Pl ears, (and) when you-Pl have heard (=understood), as for a person, one person (has) one (=his own) mind.'

20:49
A: sàfé [ndà-gè nì:ngà là \(\nearrow]\) [hàkkìlé-gé nì:ngà],
which.means [person-Pl two also] [mind-Pl two],
[ò \({ }^{\text {LHbàlì-yà-ní] bálí-yé-ỳ }{ }^{\text {n }} \text {, }}\)
[2SgSbj see-MP-PfvNegRel] see-MP.Pfv-1 Sg Sbj,
[mì LHbàlì-yà-ní] bálí-yé-ẁ,
[1SgSbj see-MP-PfvNegRel see-MP.Pfv-2SgSbj,
'So that two people likewise (have) two minds. I have seen what you-Sg have not seen. You-Sg have seen what I have not seen.'

20:53
A: [ò \({ }^{\text {LH }}\) nù:ndò-ní] nú:ndé-y \({ }^{\text {n }}\), [2SgSbj hear-PfvNegRel] hear.Pfv-1SgSbj [mì \({ }^{\text {LH}}\) nù:ndò-ní] nú:ndé-ẁ, [1SgSbj hear-PfvNegRel] hear.Pfv-2SgSbj
'I have heard what you-Sg have not heard. You-Sg have heard what I have not heard.'

20:56
A: bon, mè:-náy, [ndà-gè nì:ngà] è màngè mè-nદ̀, well, however, [person-Pl two] 2PlSbj unite.Pfv if, [ndà: póy] [[nà \({ }^{\text {LH }}\) nìmbó] \({ }^{\text {LH }}\) yè̀-ná \(]\) [person all] [[3SgPoss colleague] know-NegRel] [nà \({ }^{\text {LHyèy-yá] bò-Ø mè-nè, }}\) [3SgSbj know-StatRel] be-3SgSbj if,
'Okay, however, when you-Pl two unite, each person, if there is something he knows that his counterpart doesn't know,'
[mè:náy contains French mais]
21:01
A: dàmì-yè-sà-w \(w^{n}\) pâ: \({ }^{\text {n }}\) kànì-yè mè-nè speak-Recip-Reslt-while understanding 2PISbj do-Recip.Pfv if,
\begin{tabular}{lllll}
{\([\) è } & LH \(\left._{\text {gìrí }}\right]\) & [gíró & gì \(]\) & úm-bò-Ø, \\
{\([2\) PlPoss } & gain(n) \(]\) & [forward & Loc] & go-Ipfv-3SgSbj \\
{\([\) è } & LHgìrí \(^{2}\) & [gíró & gì \(]\) & úm-bò-Ø, \\
{\([2\) PlPoss } & gain(n) \(]\) & {\([\) forward } & Loc] & go-Ipfv-3SgSbj
\end{tabular}
'Having spoken together, if you-Pl make (=come to) an agreement, what youPl gain will progress, what you-Pl gain will progress.'

21:06
A: [è
[2PlSbj [è \({ }^{\text {LHgìrà-ní] è gíró-bò, }}\) [2PlSbj get-PfvNegRel] 2PISbj get-Ipfv, [è \({ }^{\text {LH}}\) yè-ná] è yéyyé-bò, [2PISbj know-NegRel] 2PISbj know-Ipfv,
'You-Pl will see what you-Pl have not seen (before). You-Pl will gain what you-Pl have not gained (before). You-Pl will know (=learn) what you-Pl don't know (now).'
[yéyyé-bò imperfective of an otherwise usually stative verb §11.2.5.1]

\section*{21:11}

A: hàyà, [én này], [gírí này]
well, [Dem.Def too], [gain(n) too]
[gíró gì] ùnì-Ø mè-l là \(\nearrow\),
[forward Loc] go.Pfv-3SgSbj if too, hàlì wé:wè [[gàndá rì] gì] [gíró gì] sín-dà-Ø, even nothing [[country Def] Acc] [forward Loc] convey-IpfvNeg-3SgSbj,
'Well, that too, if the gains go forward, nothing will take the country forward,'

\section*{21:15}

A: sèwánà [gíró [ò \(\quad{ }^{\text {LH }}\) wě:] kày] wá:jíbì nǎ: yògè, other.than [front [2SgPoss Poss] Top] obligation 3SgSbj.Fut come.Pfv, [gírí gì] gíré-ẁ mè-nè, [gain(n) Def] get.Pfv-2SgSbj if, [tínó póy] [ér bì] bǒ:, [profit all] [Dem.Def Loc] be-3SgSbj,
'.. except that what is in front of you (=your potential) will come. If you-Sg have gotten some gains (=benefit), all the profit is in that.'
[sèwánà 'except, other than', cf. Arabic siwa:]

21:20
A: hàyà
well, [Dem.Def
\({ }^{\text {LH }}\) sàbà:bú \(=\) yò \(]\)
reason=Foc]
[[ndǎ: rì] gì] mbé: sògè- \(\varnothing\),
[[person Def] Acc] here bring.Pfv-3SgSbj,
nì-gí ùjàrà:m bǒ: ájá,
1Pl-Acc ask.Dur Prog-3SgSbj now,
'Well, that cause [focus] is what has brought a person here. Now he (=the person) asks us.'

\section*{21:25}

A: yògè
wèlè-sà-w \({ }^{n}\)
bí: \({ }^{\mathrm{n}}\)-yè,
come.Pfv be.accustomed-Reslt-while be.Dur-Past, yògè wèlè-sà-w \({ }^{n} \quad\) kè \({ }^{\text {LH}}\) bě: rì, come.Pfv be.accustomed-Reslt-while 3PISbj be.PastRel Def,
'(When) he was accustomed to keep coming, when they used to be accustomed to come,'
[bí: \({ }^{n}-y \grave{\varepsilon}\), past-time form of bí:-nì §15.2.1.7]

21:29
A: [ndá: \({ }^{H}\) [bó: gì] nà yògè \(\quad{ }^{\text {LH }}\) Wèl̀̀-sá rì] [person [midst Loc] 3 SgSbj come.Pfv be.accustomed-ResltRel Def] yógó-nì-Ø, come-PfvNeg-3SgSbj,
'The person who used to come together (with another person) hasn't come (with the others).

21:30
A: [yò: káỳ] ná-w \({ }^{\mathrm{n}}\) yógé-sà, hàyà [nà yògè-sá rì], [today Top] 3Sg-Indep come-Reslt, well [3SgSbj come-ResltRel Def], [[ájá kày] nì dàm-bá rì] nìllá dàmì, [[now Top] 1PlSbj speak-IpfvRel Def] 1PISbj speak.Pfv, 'Today it's (just) he [focus] who has come. As he has come, now we will say what we (will) say.'
[the recording was made by the Mali project manager (Djiguiba) in the absence of the linguist]

\section*{21:33}

A: nǎ: nù:ndè, yá: ùnì-Ø mè-nè,
3 SgSbj .Fut hear.Pfv, there.Def go.Pfv-3SgSbj if,
[bán nà \({ }^{\text {LH }}\) kàm-bá] [yá: là]
[manner 3SgSbj do-IpfvRel] [there.Def too]
[ná là] nǎ: jà:lè,
[3Sg too] 3SgSbj.Fut look.at.Pfv,
'He (=the linguist) will hear it. When he goes there, he too will consider what he (will) do there.'

\section*{21:39}

A: [[nì̀ yà \(]\) [nà yà \(]\) póy] [òji \({ }^{L}\) tómá-ngá \(\left.r\right]\) nà \(=\) w \(^{n}\), [[1Pl and] [3Sg and] all] [road identical Def] 3Sg-it.is, sàbù ndà: [bání ò \({ }^{\text {LH} k a ̀ m-b a ́] ~ n i ̀-g i ́ ~ t u ̀: r a ̀-t i ̀ n g a ́, ~}\) because person [manner 2 SgSbj do-IpfvRel] 1Pl-Acc inform-owner,
'We and him both, it's (=we have) the same road. Because someone informs us what you-Sg (may) do,'

\section*{21:43}

A: [tú:ré-ẁ mè-n \(̀\) ] nà \(=\) w \(^{n}\) ò-gí báró-mâ- , [inform.Pfv-2SgSbj if] \(3 \mathrm{Sg}=\mathrm{Foc} 2 \mathrm{Sg}-\mathrm{Acc}\) help-Capac-3SgSbj, ò-gí bàrò-mà gí, 2Sg-Acc help-CapacRel ??,
'If you-Sg inform (him), it's he [focus] who will help you-Sg. He is (the) one who can help you-Sg.'
[final gíobscure §14.6.4]
21:46
A: [[túnú gì] díyó-bà] hà:ní kànà-nì-Ø,
[[behind Loc] leave-VblN] being.right do-PfvNeg-3SgSbj, [érí \({ }^{\text {LH }}\) sàbà:bú rì = yò] [ájá kày] \({ }^{\text {LH }}\) yògè-sá \(=W^{\text {n }}\), [Dem.Def reason Def=Foc] [now Top] come-ResltRel=it.is, 'Leaving (him) behind wouldn't be right. That issue is what has come now,'

\section*{21:50}

A: bání nì kànì \({ }^{\text {LH }}\) wèlè-sá rì pós, manner 1PlSbj do.Pfv be.accustomed-ResltRel Def all [érí yà] nà-gì dá:-ndá: nì \({ }^{\text {LH }}\) yògè-sá, [Dem.Def Comit] 3Sg-Acc speak-Benef.Purp 1Pl come-Reslt, '.. the (same) way that we have become accustomed to. That [focus] is what we have come to tell him.'
[dá:n-dó 'speak to (sb), tell (sb)', benefactive of dám(ú) 'speak']

\section*{21:56 (in Bambara language)}

A: ó nà-nà ní dúmíníyè, ó nà-nà ní tǒ: yèré dè
2Pl come-Pfv beside food, 3Pl come-Pfv beside tô exactly
'They have brought the food. They have brought the tô.'
[remainder of recording is small talk in Bambara, not transcribed here]

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\section*{Abbreviations}
\begin{tabular}{|c|c|}
\hline 3Hort & third-person hortative (i.e. subjunctive), §10.7.3.3 \\
\hline Acc & accusative \\
\hline Adj & adjective \\
\hline Adv & adverb \\
\hline ATR & advanced tongue root (vowel feature) \\
\hline Ben & benefactive \\
\hline C & consonant (in formulae like CvCv ) \\
\hline Capac & capacitative ('can VP', §10.5) \\
\hline Caus & causative \\
\hline Char & characteristic nominal derivational suffix, §4.2.1 \\
\hline Def & definite \\
\hline Dem & demonstrative \\
\hline Det & determiner (demonstrative or definite) \\
\hline Dim & diminutive \\
\hline Dist & distant (demonstrative or existential) \\
\hline Dur & durative \\
\hline EA & expressive adverbial (§8.4.5) \\
\hline Emph & emphatic (clause-final particle) \\
\hline Exist & existential (proclitic, §11.2.2.1) \\
\hline ExpPf & experiential perfect \\
\hline Foc & focus \\
\hline Fr & French \\
\hline Fut & future \\
\hline H & high (tone) \\
\hline Hort & hortative \\
\hline Imprt & imperative \\
\hline Inch & inchoative ('become' with adjective) \\
\hline Inst & instrumental \\
\hline Ipfv & imperfective \\
\hline L & a) low (tone) \\
\hline & b) any sonorant (in e.g. CvL) \\
\hline Loc & locative \\
\hline MP & mediopassive (suffix -yo/-ye) \\
\hline Mult & multiplicity (§9.7) \\
\hline N & a) noun (in e.g. "N-Adj") \\
\hline & b) any nasal consonant (in e.g. CvN ) \\
\hline (n) & noun, in interlinear glosses like 'work (n)' \\
\hline
\end{tabular}
\begin{tabular}{|c|c|}
\hline Neg & negative \\
\hline Nom & nominalization \\
\hline NP & noun phrase \\
\hline Num & numeral \\
\hline O & object (in e.g. 'SOV') \\
\hline Pass & passive \\
\hline Pfv & perfective \\
\hline Pl & plural \\
\hline Poss & possessor or possessum \\
\hline PP & postpositional phrase \\
\hline Prod & product-of-action (§5.1.11) \\
\hline Prog & progressive \\
\hline Proh & prohibitive (negative imperative) \\
\hline Pron & pronoun \\
\hline Purp & purposive \\
\hline Q & question \\
\hline Quot & quotative particle \\
\hline QuotSbj & quotative subject \\
\hline Recip & reciprocal \\
\hline Rel & relative clause; relative-clause form of verb \\
\hline Repet & repetition (§9.3.1) \\
\hline Reslt & resultative \\
\hline Rev & reversive \\
\hline S & subject (in e.g. 'SOV') \\
\hline Sbj & subject \\
\hline Sg & singular \\
\hline SS & same-subject (subordinator) \\
\hline Stat & stative \\
\hline TAMP & tense-aspect-mood-polarity \\
\hline Top & topic \\
\hline Tr & transitive derivational suffix \\
\hline V & verb (in e.g. "SOV') \\
\hline v & \begin{tabular}{l}
a) vowel (in e.g. CvCv ) \\
b) verb, in glosses like 'work(v)'
\end{tabular} \\
\hline Vb & verb \\
\hline VblN & verbal noun \\
\hline VP & verb phrase \\
\hline
\end{tabular}

\section*{Symbols}
\begin{tabular}{|c|c|}
\hline * & reconstructed \\
\hline \# & ungrammatical, unacceptable, unattested \\
\hline á, à, â, ǎ, â & tones on vowels (or syllables), §3.7 \\
\hline \(\overline{\mathrm{x}}\), \(\mathrm{x}, \mathrm{x}, \hat{\mathrm{x}}\) & tone changes on stem in compounds, chapter 5 \\
\hline /.../ & \begin{tabular}{l}
a) lexical tone melody, e.g. /LH/, /H/ \\
b) underlying or lexical representation
\end{tabular} \\
\hline \(\{\ldots\}\) & \begin{tabular}{l}
a) tone overlay, e.g. \(\{\mathrm{HL}\},\{\mathrm{H}\},\{\mathrm{L}\}\) \\
b) enclosing any set, e.g. \{u a i \(\}\)
\end{tabular} \\
\hline [...] & \begin{tabular}{l}
a) phonetic (IPA) representation, e.g. [bǔ:] \\
b) syntactic or tonosyntactic phrase
\end{tabular} \\
\hline [...] \({ }^{\text {L }}\) & \(\{\mathrm{L}\}\) tone overlay controlled by an element to the right \\
\hline \({ }^{\text {L }}\) [...] & \(\{\mathrm{L}\}\) tone overlay controlled by an element (possessor) to the left \\
\hline \(\rightarrow\) & (prolongation of final vowel/sonorant), §3.7.1, (449) in §15.2.2.4 \\
\hline 7 & terminal pitch rise or sustained high terminal pitch, §3.7.2 \\
\hline \(\downarrow\) & terminal pitch drop (intonation), §3.7.2 \\
\hline \(=\) & clitic boundary \\
\hline
\end{tabular}```


[^0]:    
    Seydou [house big-Pl]
    'Seydou's big houses'

[^1]:    a. à:màdú ${ }^{\text {LH}}[i ̀: n j \grave{~} \varepsilon$ jèmè-gé $]$

    Amadou [dog black-Pl]
    'Amadou's black dogs'

