# A Grammar of Tommo So <br> Dogon Language Family Mali 

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Draft dated 10/23/11
Not finished or definitive, use caution in citing. Chapters 1-20 revised, later chapters await revision and in some cases writing.

Supported by National Science Foundation grant BCS-0537435, the
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## 1. Introduction

### 1.1 Dogon languages

The Dogon language family is made up of around 20 languages, and it is currently thought to constitute its own branch of the Niger-Congo phylum (Blench XXX). The languages are spoken on the plains and mountains in the eastern part of Mali's Région de Mopti, with small crossover into Burkina Faso. The internal classification of the language family is not yet clear, for there are not yet enough detailed grammars of the constituent languages; the Dogon Language Project, under whose auspices I have prepared this grammar, aims to fill this gap.

In the absence of genetic classification, the following table summarizes our current understanding of the Dogon language family based on geographic distribution:

## (xx)

Northern

| Northeast | Ben-Tey | (Heath, m.s.) |
| :--- | :--- | :--- |
|  | Jamsay | (Heath 2008) |
| Northwest | Najamba | (Heath, m.s., Hantgan xxx) |
|  | Kindige |  |

North central Nanga (Heath, m.s.)
Yanda-dom (Heath, m.s.)

## Central

North central Tommo So (McPherson, m.s.)
Donno So (xxx)
South central Togo-Kan (Heath, m.s.)

## Eastern

Sangha So ${ }^{1}$ (Calame-Griaule 1968, Moran, m.s.)
Yorno So (Heath, m.s.)

## Western

Mombo (Prokhorov, m.s.)
Ampari (Prokhorov, m.s.)

[^0]Dogulu-dom<br>Tomo-Kan

This should not be understood as representing genetic similarity. For example, despite the fact that Tommo So and Dogulu Dom fall into the same geographic location, Tommo So bears a closer relation to Nanga or Najamba, while Dogulu Dom bears a closer relation to Mombo and Ampari.

## MAP

### 1.2 Tommo So

Tommo So /tòmmò sı̀̀́/ is a Central Dogon language spoken on the plateau between Douentza and Bandiagara by an estimated 40,000-60,000 people (Hochstedtler et al. 2007). The name itself is made up of the name of the ethnic group Tommo /tòmmó/ and the word for language /sòó/.

The communes of Ningari /niyari/, Mory /mori/, Tédié /teeḑe/, Dè /d $\varepsilon /$, Ondogu /óndógú/, Kani Goguna /kànì gógúná/ and Kéndié /kènđéé/ constitute the heart of Tommo territory. Each of these communes have a market whose lingua franca is Tommo So. Other nearby languages include Bondu-So (made up of Najamba and Kindige) to the northwest, Nanga and Jamsay to the east, and Dulo-So to the west. Donno So, Dogulu Dom....

Tommo So's closest relative is Donno So, spoken in and around the major market town of Bandiagara. In fact, until recently, Tommo So has not been listed as a separate language in Ethnologue, simply due to the fact that Donno So was documented earlier by Catholic missionaries (CITE). While the two languages are mutually intelligible, particularly those dialects of Tommo So closest to Bandiagara (e.g. Kani Gogouna), the data I have seen suggest that Donno So is an intermediate step between two poles formed by Tommo So and Sangha So (Toro So). Furthermore, Tommo So is a culturally important language to the Dogon people, seen as one of the main or original varieties of spoken Dogon, and many Dogon songs are in Tommo So regardless of the language of the village where they are sung (Hochstedtler et al. 2007).

### 1.3 Environment

Tommo villages are all located on the plateau of a rocky inselberg mountain between Douentza and Bandiagara and generally cannot be reached by paved roads. The
most efficient way of reaching most villages is by motorcycle, though the area can be navigated by $4 \times 4$ vehicle via Dogani or Bandiagara.

The landscape consists of areas with large boulders interspersed with pebbly or clayey plains and punctuated by small densely wooded copses. The climate is arid, with a rainy season between June and September, when millet (Pennisetum glaucum) is cultivated along with other minor crops such as sorghum (Sorghum bicolor), cow-pea (Vigna unguiculata), sesame (Sesamum indicum), roselle (Hibiscus sabdariffa in red and green varieties), okra (Hibiscus esculentus), peanut (Arachis hypogaea), and groundnut (Vigna subterranea). Wild fruits such as the shea fruit (Vitellaria paradoxa), wild grapes (Lannea microcarpia), and zaba (Saba senegalensis) are also harvested throughout the year.

Aside from farming, Tommo people also do a small amount of herding of sheep, goats and cows. Most of the herding knowledge appears to have originated with the Fulani people, indicated by the near total lack of native Dogon words for practices of animal husbandry. Large game animals have mostly disappeared from the region, but small mammals, such as hedgehogs, mongooses, and dassies, as well as many species of birds and reptiles still thrive.

In the dry season, there are few ponds or other sources of water; wells and pumps provide water to most villages in the region. Thus, plant life is confined for most of the year to those trees and shrubs not requiring much water, such as the doum palm, indigo, baobab, and a few species of Acacia trees. When the rains arrive, the sandy soil bursts to life with many varieties of grasses, and Ipomoeia flowers line the banks of nascent streams.

### 1.4 Language use and vitality

### 1.5 Tommo So sources

### 1.5.1 Previous work

To my knowledge, the only scholarly work published on the grammar of Tommo So is Dogon (1995), written by Vladimir Plungian for the Languages of the World series. While providing a good introduction to the language, his work is based on the dialect spoken around XXX, which differs slightly from the dialect discussed here, and he does not mark tone, a key grammatical feature of all Dogon languages. Several articles have appeared over the last 50 years that mention Tommo So (often under the name Tombo-So) among other dialects of Dogon, including several by Plungian. For a detailed bibliography, see Hantgan (2007).

In terms of lexical work, the Direction Nationale de l'Alphabétisation Fonctionnelle et de la Linguistique Appliquée (D.N.A.F.L.A., now known as the Institut National des

Langues - Abdoulaye Barry) has published Elements de Terminologie Dogon (1984) based on Tommo So, and several other articles provide limited wordlists (CITE).

### 1.5.2 Current fieldwork

The data in this grammar are from work with speakers from the commune of Tédié (villages of Tongo-Tongo and Anji) from June 2008 to February 2012. Elicitation was done both in situ and in the nearby towns of Douentza and Sévaré with consultants from Tédié. Recordings were made using a Zoom H4 digital recorder and analyzed using Praat (CITE). In addition to notebooks, data were stored in Microsoft Word, Excel, and Filemaker Pro, and Excel was used to plot vowel formants.

### 1.5.3 Acknowledgements

Funding for this research is provided by National Science Foundation grant PA 50643-04, "Dogon languages of Mali" (DATES), the J. William Fulbright Institute for International Education (2008-2009), and the National Science Foundation Graduate Research Fellowship Program (2010-2013) with the support of the Institut National des Langues - Abdoulaye Barry in Bamako. I would also like to thank the UCLA Department of Linguistics, in particular Bruce Hayes and Russell Schuh, for their advice and encouragement for this project.

I would like to express my deep gratitude to Dr. Jeffrey Heath for getting me involved in this project. Without his support and unending knowledge, this work would not be what it is today. Also thanks to Seydou Moro, Minkailou Djiguiba and Oumar Koné for their assistance in establishing contacts and getting me to the village, to Kirill Prokhorov for collaboration and company, and to Abbie Hantgan, for unquestioning support and friendship over the years.

I am very grateful to the chief and people of Tongo-Tongo for taking this strange American into their village. Special thanks to Ramata Ouologuèm, my main consultant, for her patience, eagerness, and friendship, and to her father Sana 'M. le Maire' Ouologuèm for his guidance, wisdom, and prolific knowledge of the Tommo people's language and history. Thank you as well to my consultant in Sévaré Issa Toloba, without whom this grammar would not be here. Many thanks as well to Ajuma Guindo and Zakaria Ouologuèm for additional help and perspective.

Finally, thank you to my family and friends who continued to support me on all of my trips to Mali. I am deeply indebted.

## 2 Grammatical Sketch

This chapter will provide an introduction to the main grammatical features of Tommo So, all of which will be covered more in depth later in the grammar.

### 2.1 Phonology

### 2.1.1 Segmental inventory and phonotactics

The phonemic inventory of Tommo So consists of 18 consonants, including nasalized sonorant $/ \mathrm{y}^{\mathrm{n}} /$, and 7 vowels, for which length and nasalization are contrastive. ATR and backness harmony is present in stems and to a lesser extent between stems and derivational affixes; inflectional affixes are outside the domain of both kinds of harmony. Harmony is discussed in section XXX.

Unlike some Dogon languages, /l/ and /r/ are contrastive, but neither liquid occurs in word-initial position. Only sonorant consonants can serve as codas.

The transcription system used in this grammar is a modified form of IPA. The divergences are intended to make it closer to standard orthographies in use for other West African languages like Bambara. Thus, affricate / $\mathrm{d}_{\mathrm{p}} /$ will be written ' j ', tap $/ \mathrm{r} /$ as ' r ', and $/ \mathrm{j} /$ as ' $y$ ', while long vowels will be written as two consecutive vowels ('aa' rather than /a:/). Nasalization will be marked with a superscript $n\left\{\mathrm{v}^{\mathrm{n}}\right\}$ to distinguish it from nasal codas; this also ensures maximum visibility of tone marking, since the use of tilde would require stacking diacritics.

### 2.1.2 Tonal inventory and tonotactics

Like all Dogon languages, Tommo So is tonal, with tonal primitives $\mathrm{H}[\mathrm{igh}]$ and L [ow], marked $\{\dot{v}\}$ and $\{\grave{v}\}$, respectively. It also has two contour tones, $<\mathrm{LH}>$ rising ( $\{\check{v}\}$ or $\{\dot{v} v ́\}$ ) and $<\mathrm{HL}>$ falling ( $\{\hat{v}\}$ or $\{$ 的 $\}$ ), though instances of the latter are rare. Tommo So lacks the "bell-shaped tone" (following Heath 2008) <LHL> characteristic of other Dogon languages such as Jamsay or Nanga, but it does maintain a three-way contrast between $\mathrm{H}, \mathrm{L}$ and toneless, with the latter constrainted to clitics and certain suffixes (McPherson 2011).

Native Tommo So stems all have one of two melodies: $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$, but loanwords have introduced $\{\mathrm{HL}\}$ and $\{\mathrm{LHL}\}$ tone melodies into the lexicon. $\{\mathrm{HLH}\}$ is not a licit surface melody. Word-level tone melodies can be overwritten in certain grammatical
contexts; these changes are listed at the end of this sub-section and described in depth in Chapter 3.

Intonation plays an important role in some Dogon languages (e.g. the "dying quail" intonation in Jamsay, Heath 2008), but this does not seem to be true for Tommo So.
Nonetheless, certain words or constructions have intonational pitch-raising, such as [kém] 'all' and the 'you'd better not' type of threat.

### 2.1.3 Key phonological alternations

One salient feature of Tommo So phonology is the variable epenthesis of [u] after sonorants. While Plungian (1995) lists sun as nàmú, most of the speakers in Tédié will say simply năm. On other words, like 'white', they may vary, pronouncing either pílu or píl. The fact that the vowel is epenthetic is clear from the fact that it is toneless and does not harmonize with the stem. This will be discussed further in section XXX.

Another phonological process is rhotic dissimilation, where an $r$-initial suffix after a syllable in the stem containing /r/ will dissimilate to [1]. For example, the stem góró 'hat' with the transitive suffix -rV will, in the Sarédina dialect, become gòríló 'put a hat (on a child)' rather than the expected gòrí-ró. The Tédié dialect does not use this verb. For more on rhotic dissimilation, see section XXX.

Vowel harmony is also a key feature of the vowel system in Tommo So, but this too is variable. Specifically, the levels of harmony of derivational suffixes on verbs correlate with how close the suffix is to the stem in terms of affix order. On a given day, the speaker may pronounce the very same verb with or without harmony. For example:
(xx) pónní-yó ~ pónní-yé 'put on pants'

Section XXX treats this variation.
A final phonological effect to note is that like other Dogon languages like Jamsay (Heath 2008), Tommo So shows the effects of a single left-aligned trochee, in that the second syllable, particularly in longer words, tends to be metrically weak. This results in both vowel syncope and vowel reduction. For examples and discussion, see section XXX.

### 2.1.4 Key tonal changes

Grammatical tone permeates the system in Tommo So, with typically word level tone changes in both the nominal and verbal realms. The following summarizes some possible tonal overlays:

## Overlaid all L ("tone lowering")

- NP as head of a relative clause
- Relative participle before demonstrative
- NP before adjective or demonstrative
- Possessed NP following full NP (non-pronominal) possessor
- First noun in canonical and synthetic compounds
- Second noun in pseudogenitive compounds
- Verb stem before perfect negative suffix


## Overlaid all H

- Singular affirmative imperative of most verbs
- Inalienably possessed nouns (1-2 morae) with a pronominal possessor
- Verbal stem in gerundive compounds
- Certain infinitives


## Overlaid HL

- Perfective and negative relative participles
- Possessed kinship terms (3+ morae) with a pronominal possessor
- Verb stems in the imperfect affirmative


## Overlaid LH

- Verb stems in the imperfect negative
- Certain infinitives


### 2.2 Verbal Inflection

The basic word order is SOV; the inflected verb (be that auxiliary or otherwise) comes at the end of the sentence. Like nominal stems, verb stems in Tommo So belong to one of two tonal classes: either all $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$ with the L on the first syllable or mora (on monosyllabic verbs). In the rare monomoraic verbs, $\{\mathrm{LH}\}$ surfaces as simply $\{\mathrm{L}\}$ in the absence of a second mora. Depending on the inflection, the $\{\mathrm{H}\}$ may surface on the following suffix. Which tone pattern a verb stem will take is partially predictable by the first consonant, with voiced obstruent-initial stems taking $\{\mathrm{LH}\}$, voiceless obstruent- and vowel-initial stems taking $\{\mathrm{H}\}$, and sonorant-initial stems lexically listed.

As indicated in section 2.1.4, the lexical tone of the stem is often overridden by grammatical tone patterns when inflected. I will discuss this in conjunction with verbal inflectional paradigms below.

The basic form of the verb in main clauses is as follows:
(xx) [stem- (derivational suffix(es))] - aspect/negation - pronominal subject

The verb is obligatorily inflected for subject agreement, using the following suffixes:

(xx) | $1 \mathrm{sg}-\mathrm{m}$ | $1 \mathrm{pl}-\mathrm{y}$ |  |
| :--- | :--- | :--- |
| $2 \mathrm{sg}-\mathrm{w}$ | $2 \mathrm{pl} \mathrm{-y}$ |  |
|  | $3 \mathrm{sg}-\varnothing$ | $3 \mathrm{pl}(-\mathrm{N})$ |

I have placed the 3 pl suffix in parentheses because there is no one suffix that surfaces in each inflected form. Rather, the 3 pl seems to have at least some nasal element that morphs and fuses with the aspectual suffix.

Inflection of a verb generally changes it in one of three ways: by 1) changing its tonal pattern, 2) changing the final vowel of the stem and 3) adding a discrete suffix. Because these three are intertwined, it is hard to simply list the forms without comment. Thus, I will briefly discuss aspectual categories in the affirmative followed by a section on negation in each of these aspects. For the full treatment of aspect and verbal inflection, see Chapter 11.

### 2.2.1 Aspect

There are two perfective forms for each verb, one of which changes the final vowel of the stem to $/-\mathrm{aa} /$ and the other of which changes it to one of three classes: 1 ) + ATR /e/, 2) - ATR $/ \varepsilon /$, or 3 ) neutral $/ \mathrm{i} /$, which sometimes surfaces as [u] before a labial consonant. If the stem is two syllables or less and the final vowel is a mid vowel, then it will necessarily also become a front mid-vowel agreeing in ATR value with the stem. However, if the final vowel is not a mid-vowel, it is unpredictable whether it will become a mid-vowel or a high vowel, and if mid, its ATR value is also unpredictable. Stems with three or more syllables always take / $\mathrm{i} /$ as the perfect vowel.

The two perfective forms differ in their tonal contours as well. The /-aa/ form has no effect on the lexical tone of the stem, except perhaps in monosyllabic $\{\mathrm{LH}\}$ verbs, in which case it may become all low if the auxiliary can take the H . The second perfective form, however, does change the tone of the stem. If the verb is defocalized, it undergoes tone lowering (its tone is overwritten with $\{\mathrm{L}\}$ ). If it is focused and reduplicated, it takes $\{\mathrm{HL}\}$ with a L-toned initial reduplicant. If it is the relative participle, it also takes $\{\mathrm{HL}\}$.

The choice of which perfect form to use is largely dependent on focus and relativization. The E-perfect is used in relative clauses and usually when there is a focused element in the phrase, and the AA-perfect is used elsewhere.

The imperfect is used for the habitual and the future, and it takes the suffix /-dè/ (/din/ for 3pl.) with no changes to the vocalism of the stem. However, it imposes a \{HL\} pattern on the verb, with the $\{H\}$ on the first mora.

The progressive is made up of a participle and an auxiliary verb, either 'have' $/ \mathrm{s} \varepsilon /$ or 'be'/wo/. In my consultants' speech, there is no discernible difference between the two forms. According to Plungian (1995), however, the former is used for the simple progressive and while the latter is used for an iterative progressive (Plungian 1995). The participial suffix is /-gú/ (occasionally /-nú/), which causes no change to either the tone or vocalism of the stem. Since there are no changes in this form in either vocalism or tone, I use it to identify the underlying stem. Stems listed in the lexicon are based off of the progressive.

### 2.2.2 Negation

The basic form of the negative suffix is $/-\mathrm{lV} /$, with the vocalism of ' V ' depending on the aspect of the inflected verb. Aspect also determines the vocalism of the final vowel of the stem as well as the overall tone. Because of this, aspect and negation cannot be stated separately but must be taken as a whole.

The distinctions seen in the affirmative perfect are collapsed into one negative form. Here, the negative is /-lí/ (/-nní/ for 3pl.), suffixed onto the verb stem. The vocalism of the stem does not change, but its tone is overwritten with $\{\mathrm{L}\}$.

For the imperfective, the habitual/future negative takes the suffix /-lè/ (/-nnè/ for 3pl.), while the final vowel of the stem becomes /-é/ (or in the case of long vowels in monosyllabic stems, the /-é/ replaces the second mora of the vowel). The tones preceding this /-é-lè/ complex are $\{\mathrm{L}\}$. Taking the /-e/ to be part of the stem, this means that the stem receives a $\{\mathrm{LH}\}$ overlay, with $\{\mathrm{L}\}$ extending to the final syllable.

The negative progressive merely inflects the auxiliary, which we will come to in a more detailed discussion of auxiliary and modal verbs (see Chapter XXX).

### 2.2.3 Imperative and Hortative

The imperative makes a distinction between second person singular and plural, with the singular having no overt marking and the plural the suffix $/-\mathrm{j} /$. The tonal pattern of the imperative stem is all $\{\mathrm{H}\}$. A falling tone is formed on the last syllable of the plural imperative due to the presence of the L-toned suffix. The negative imperative has the suffix
/-gú/, which becomes [-gîn] in the plural from the vowel fronting in the combination of /gú/ + /-ǹ/.

The hortative is interesting in that here a distinction is made between first person dual and plural. The dual (you and I) suffix is /-mó/, while the plural (you all and I) is /-mó-$-\mathrm{j} /$. Once again, this can be analyzed as the plural suffix from the imperatives, and so these hortatives are better seen as meaning "me and one single person" and "me and several people", respectively.

### 2.3 Verbal Derivation

There are five main derivational suffixes in Tommo So: factitive /-ndV/, transitive $/-\mathrm{rE} /$, reversive $/-\mathrm{IE} /$, mediopassive $/-\mathrm{yE} /$, and causative $/-\mathrm{mo} /$. When more than one suffix is present, they surface in roughly this order. The final causative does not participate in ATR harmony and prompts no change in vocalism or tone when added to the verb stem, while the vowel of the factitive harmonizes completely with the final vowel of the stem. The mediopassive and transitive suffixes variably partake in ATR harmony and carry the meaning of doing something to oneself or someone else, respectively. When they are added to the stem, the preceding vowel changes to [i], with no change in the tone. The same is true for the reversive.

### 2.4 Noun Phrase (NP)

The NP can be maximally made up of the following constituents, in order:
(xx) a. possessor NP and/or pronoun possessor
b. noun stem
c. adjective(s)
d. possessive pronoun
e. demonstrative, determiner
f. plural particle
g. numeral
h. 'all'

There is, however, some variation in the placement of the numeral, which can also precede the possessive pronoun. For a discussion of what licenses this variation, see section XXX. An example of a fairly complex NP is given below:
(xx) yàà-nà èsú $=\mathrm{g} \varepsilon$ gàndùlù gèm $=\mathrm{g}$ $=$ mbè tààndú-gó
woman-HumSg.L pretty $=$ Def donkey.L black $=\mathrm{Dft}=$ Pl.L 3-Adv 'the pretty woman's three black donkeys'

The NP is the site of many interesting tonal interactions, since both demonstratives and adjectives force tone lowering on the preceding noun, be it simple or compound, while numerals don't interact tonally at all. Nonpronominal NP possessors cause tone lowering on the following noun. There is a special inalienable possessive form for kinship and other human terms and nothing else, with a possessive pronoun identical to the subject pronoun preceding the possessed noun.

### 2.5 Case Marking and PPs

The object (either direct or indirect, but not both) can be optionally marked for case with the enclitic / $=\grave{\mathrm{n}} /$, which may assimilate in place to the following segment. Human objects are obligatorily case marked.

Tommo So also has postpositions, which are grammatically enclitics: oblique $/=\mathrm{n} \varepsilon /$ meaning 'in', 'on' and occasionally 'for'; associative / = le/ meaning 'with' or 'and'; locative / = baa/ meaning 'at'; possessive / = mo/ meaning 'for' or 'belonging to'. The distinction between 'in' and 'on' is made by both context and the choice of copula. More complex spatial relations are made by adding body part words such as /ònnú/ 'back' or /gìré/ 'face' to $/=n \varepsilon /$ or / = baa/ to give the meanings of 'behind' or 'in front of', respectively. See chapter XXX for postpositions.

### 2.6 Main Clauses and Constituent Order

As previously stated, the basic word order of main clauses in Tommo So, like many Dogon languages, is SOV. Adverbials as /yògó/ 'tomorrow' are generally clause-initial, followed by the full-NP subject (if there is one), indirect object, direct object, and the verb, loosely in that order. Pronominal subjects are expressed through verbal suffixes; independent subject pronouns, which come clause-initially, are generally only used if the subject is focalized, as illustrated in (xxd).

[^1]b. Mí áí =j̀ màngóró óbáá bè-m.
$1 \operatorname{sgPr}$ friend $=$ Obj mango give.Perf was- 1 sgS 'I gave my friend a mango.'
c. Yògó bògò èsú ú=wò ébè-dè-m.
tomorrow dress pretty $2 \mathrm{sgObl}=$ Poss buy-Impf- 1 sgS
'Tomorrow I will buy you a pretty dress.'
d. É émmé $=$ le Tòmmò sòó sóò-dè-y.

2plPro 1plPro = Assc Tommo So speak-Impf-2plS
' You speak with us in Tommo So.'

### 2.7 Relative clauses

In relative clauses, the relative participle is devoid of subject inflection. Instead, it is treated nominally, and can take determiners (definite and demonstrative). Relative clauses are typically head-internal, and the head takes the all $\{\mathrm{L}\}$ overlay typical of other modifiers. The subject of the relative participle, if pronominal, is expressed by pronominal proclitic on the verb. If the relative clause is modified by a demonstrative, then the tone of the participle is lowered as well, but not the tone of its subject or any other constituents. If the head of the relative clause is a possessor plus possessed noun combination, tone-lowering does not take effect (as in xxa); that is, possessives are impervious to tone lowering.

```
a. Aràmátá nàà gèm mí=sémè \(=\) gè yúú \(\mathrm{m}=\mathrm{m}\)
    Ramata cow.L black.L 1 sgPro \(=\) slaughter \(\cdot\) Perf.Rel \(=\) Def millet 1 sgObl \(=\) Poss
    témé-gú bê.
    eat-Ppl was
    'Ramata's black cow that I slaughtered used to eat my millet.'
```

b. Àn-nà sòó sòò-gù mí=sè nó mí báá
man-HumSg.L speech speak-Ppl.L 1 sgPro $=$ have.L this 1 sgPro father. H
íg'-gó wò.
know-Adv is
'The man I am speaking to knows my father.'

### 2.8 Interclausal syntax

There are a number of ways in which to combine clauses. I have schematically listed a few of the more common ways below to be discussed in greater depth in Chapter XXX.
a. Chaining
...verb with final vowel /-éé/
Same subject VPs, imperfect
...verb with final vowel /-áá/ Same subject VPs, perfect
b. Conditionals
[...inflected verb] yo If (when)...
c. Adverbials
[...participle]
[...inflected verb] di $\varepsilon$
[...bare verb stem] n $\varepsilon$
Temporal, by... (while...)
After...
Before...
d. Quotative
[...inflected verb] 'say’ Quotative (reported assertion)
e. Complement
[...bare verb stem] Complement (with 'want (past)', 'begin')
[...inflected verb]
Complement (with 'finish', 'can' etc.)
f. Purposive
[...participle] Purposive (with 'go', 'come', etc.)
[...bare verb stem] Purposive (with 'go', 'bring', etc.)

In each of the above, it is understood that a main clause follows what is found in the first column. For instance, an illustration of (xxa) would be:

$$
\begin{aligned}
& \text { (xx) Pédú }=\mathrm{g} \varepsilon \quad \text { píyáá } \quad \text { kúú }=\mathrm{g} \varepsilon \quad \text { jìjìbì. } \\
& \text { sheep }=\text { Def cry.Perf } \quad \text { head }=\text { Def shake.Perf.Foc } \\
& \text { 'The sheep cried and shook its head.' }
\end{aligned}
$$

## 3 Phonology

This chapter deals exclusively with segmental phonology, including topics like phoneme inventory, syllable structure, phonotactics, vowel harmony, and phonological rules. For a description of the tone system of Tommo So, see the next chapter.

### 3.1 Consonants

3.1.1 Consonant chart

Tommo So has 17 consonant phonemes, shown in (xx):
(xx) Tommo So consonant inventory

|  | Alveolo |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Bilabial | Alveolar | palatal | Palatal | Velar | Glottal |
| Plosive | p b | td |  |  | kg |  |
| Nasal | m | n |  | n | y |  |
| Fricative |  | s |  |  |  | h |
| Affricate |  |  | j |  |  |  |
| Approximant | w |  |  | y |  |  |
| Tap |  | r |  |  |  |  |
| Lateral <br> approximant |  | 1 |  |  |  |  |

### 3.1.2 Exceptional sounds

The postalveolar fricative $/ 3$ / has also appeared once, in /zìmààgú/ 'Sarcostema viminale (plant species)', but due to its marginal nature, I am not including it in the phoneme list.

Similarly, ideophones (see section XXX) often contain consonants that are not part of the regular phoneme inventory. Particularly common consonants of this type are glottal stop, used in ideophones like $/ \mathrm{ku}^{\prime} \mathrm{ku}^{\prime} \mathrm{ku}^{\prime} /$ (sound of two women pounding millet), and voiceless alveolopalatal affricate, in ideophones like /cákàm-cákàm/ (noisy chewing). Since these sounds never occur in regular vocabulary, I do not include them as phonemes.

### 3.1.3 Gemination

Consonant length is phonemic; in native words, it is only sonorants that are geminate. The following minimal or near-minimal pairs demonstrate the length distinction.
a. àná 'rain'
àn-ná 'man'
b. yèlદ̀ 'he came' yéllè 'he will come'
c. dàmá 'taboo' dámmá 'village'
d. ú=wo 'yours' túwwó 'nine'
e. mùyó 'tolerance'
mùyyó 'sprain'
f. gìné 'to beg'
gìnné 'to intersperse'

Geminate $/ \mathrm{rr} /$ and $/ \mathrm{yy} /$ are unattested. In (xxf), a minimal pair is given with singleton and geminate $/ \mathrm{n} /$, but in fact only the geminate surfaces as a nasal stop. Intervocalic singleton $/ \mathrm{n} /$ in Tommo So has weakened into a nasalized palatal sonorant [y"], with words like /gìné/ 'to beg' pronounced as [gìyńz]. This development has parallels in the diachrony of other Dogon languages, such as Jamsay, where singleton ${ }^{*} m$ became the phoneme $/ \mathrm{w}^{\mathrm{n}} /$ while historical geminate ${ }^{*} \mathrm{~mm}$ has become a singleton $/ \mathrm{m} /$. In Tommo So, the same shift is taking place, but the step where the geminate becomes a singleton has not yet occurred, and as such we have no evidence for treating $\left[\mathrm{y}^{\mathrm{n}}\right]$ as anything but an allophone of the palatal nasal.

In loanwords, particularly from Fulfulde, we find geminate obstruents as well. For example, /sóbbò/ ‘dry sowing' or /éddè/ 'widow’s four month period of mourning'. These geminates are relatively rare, though. See section 3.3 on phonotactics for token numbers in the lexicon.

### 3.1.4 Minimal pairs

The following subsections give comments on each consonant, if any are required, and give minimal or near minimal pairs with similar consonants to show the phonemic status.

### 3.1.4.1 /p/

Voiceless stops are slightly aspirated in Tommo So,/p/ included. Since the Dogon languages lack an /f/, it is characteristic of Dogon French to replace all sounds with /p/.

```
/p/ vs. /b/ píl 'white' bíl 'ladder'
    /t/ p\varepsiloń\varepsilońn 'harden' téén 'hobble'
    /d/ póón 'bridge' dóón 'fish trap'
    /k/ péd\varepsiloń 'to gin' kédé 'to cut'
    /m/ pàndé 'widowhood' màndé 'Mande'
3.1.4.2 /b/
/b/ vs./p/ bíl 'ladder' píl 'white'
    /m/ bòòndó 'to pamper' mòòndó 'to stock up'
3.1.4.3 /t/
```

Like /p/, /t/ is also aspirated, and its position is firmly alveolar.

| /t/ vs. | /d/ tèbé | 'cross pole' | dèbé 'to get stuck' |
| :--- | :--- | :--- | :--- | :--- |
| /n/ táá | 'to shoot' náá | 'mother' |  |

3.1.4.4 /d/

| /d/ vs. | t/ | dèbé | 'to get stuck' tèbé | 'cross pole' |
| :--- | :--- | :--- | :--- | :--- |
| /n/ | dàá | 'to kill' | nàá | 'to forget' |

3.1.4.5 /k/

Aspirated, the position of $/ \mathrm{k} /$ can front to being palatal in front of the vowel $/ \mathrm{i} /$.

| /k/ vs. $/ \mathrm{g} /$ | kìyé | 'bone' | gìyé | 'thorn' |
| :--- | :--- | :--- | :--- | :--- |
| /y/ | jákà | 'Islamic tithe' | jàná | 'put (on a stand)' |

### 3.1.4.6 $/ g /$

There is some variation in the realization of $/ \mathrm{g} /$. Like $/ \mathrm{k} /, / \mathrm{g} /$ will also become palatalized before /i/, which makes it hard to distinguish from /j/. Nonetheless, speakers will correct my pronunciation if I use one instead of the other, suggesting these are phonemically distinct in this position, even though I cannot find a minimal pair.

In front of a round vowel, the voiced velar stop will take on rounding as well, yielding pronunciations like [ $g^{\mathrm{w}} \mathrm{u}$ ], [ $\mathrm{g}^{\mathrm{w}} \mathrm{o}$ ], and [ $\mathrm{g}^{\mathrm{w}} \mathrm{v}$ ]. Why this rounding is not present or audible on the voiceless velar stop is not clear.

Finally, /g/ lenites to [ y ] in some contexts. For a discussion of this lenition, see section XXX.

```
/g/vs./k/ giyé 'thorn' kìyé 'bone'
    /n/ pégé 'to button' péy\varepsiloń 'knot'
3.1.4.7 /m/
/m/ vs. /b/ mòòndó 'to stock up' bò̀ndó 'to pamper'
    /n/ máá 'dry' náá 'mother'
    /n/ ímm\varepsiloń 'to inflate' ínn\varepsiloń 'to lift (a heavy rock)'
    /y/ ámá 'in-law' áyá 'mouth'
```

3.1.4.8 $/ n /$

| /n/ vs. $/ \mathrm{d} /$ | nàá | 'to forget' | dàá | 'to kill' |
| ---: | :--- | :--- | :--- | :--- |
| /m/ | náá | 'mother' | máá | 'dry' |
| $/ \mathrm{n} /$ | nǎm | 'sun' | nǎm | 'fire' |
| $/ \mathrm{y} /$ | káná | 'to do' | káyáa | 'to discuss' |

3.1.4.9 /n/

As already mentioned above, the palatal $/ \mathrm{n} /$ has an allophone $\left[\mathrm{y}^{\mathrm{n}}\right]$ when the nasal is an intervocalic singleton. This variant may also be used in word-final position, though it seems to be in free-variation.
/n/ vs. /y/ nám 'difficult' yám 'wasted, broken'
[kúy"̄] 'squirrel' [kúyó] 'first'
/n/ nǎm 'fire' nǎm 'sun'
/m/ ínné 'to lift' ímmé 'to inflate'
/n/ pénné 'to rebalance' péyé 'knot'

### 3.1.4.10 $/ 7 /$

The palatal and velar nasals are indistinguishable before /i/. For example, the verb /níníyé/ 'fear' could just as easily be written /níníyé/. Phonetically, the place of articulation falls somewhere in between.

| /n/ vs. | /g/ | péné | 'knot’ | pégé |
| ---: | :--- | :--- | :--- | :--- |
| /m/to button' | áná | 'mouth | ámá 'in-law' |  |
| /n/ | kánáá | 'to discuss' | káná 'to do' |  |
| /n/ | péné | 'knot' | pénné 'to rebalance' |  |

### 3.1.4.11 /s/

Before /i/, the alveolar /s/ palatalizes to alveolopalatal [c]. This contrast is not phonemic.

| /s/ vs. $/ \mathrm{t} /$ | sárá | 'to pay' | tárá |
| ---: | :--- | :--- | :--- |$\quad$ 'to stick on'

### 3.1.4.12 $/ h /$

The voiceless glottal fricative $/ \mathrm{h} /$ is not a native phoneme, but it has been well integrated due to a large number of loanwords from Fulfulde. It also occurs in exclamations like [òhóô'] 'yes; I see'.
/h/ vs. /s/ hárá 'to be forbidden' sárá 'to pay'

Ø hárá 'to be forbidden' árá 'to suck'

### 3.1.4.13 j/

The place of articulation of the affricate written $/ \mathrm{j} /$ is alveolopalatal (IPA / $\mathrm{d}_{\sim} /$ ), like the voiced affricate in Japanese jibun 'self', rather than English-like post-alveolar (IPA / $\mathrm{d} /$ ).

| /j/ vs. | /g/ | jàmbá | 'to chip off' | gàmbá 'to reduce' |
| :--- | :--- | :--- | :--- | :--- |
| /d/ | jàbá | 'to replaster' | dàbá | 'hoe' |
|  | /y/ | jàbá | 'to replaster' | yàbá | 'to agree'

3.1.4.14 $/ W /$

```
/w/ vs. /b/ dàwá 'to cover up' dàbá 'hoe'
    /m/ áwá 'to catch' ámá 'in-law'
    /y/ wì̀ré 'to set out to dry' yì̀ré 'snake'
```

3.1.4.15 $/ y /$
/y/ vs. /n/ yám 'wasted, broken’ nám 'difficult'
/w/ yì̀ré 'snake' wìré 'to set out to dry'
/j/ yám 'wasted, broken' jám 'peace’
3.1.4.16 $/ r /$
/r/ vs. /d/ jàrá 'to knock down’ jàdá 'to calculate'
/n/ gìré 'to watch over' gìn $\varepsilon$ 'house'
/l/ sárá 'to pay’ sálá 'bad'

The phonemic contrast between $/ 1 /$ and $/ \mathrm{r} /$ is not true of all Dogon languages. In XXX, for example, this contrast is neutralized.
3.1.4.17 ///

| /l/ vs. | /r/ | sálá | 'bad' | sárá |
| ---: | :---: | :---: | :---: | :---: |$\quad$ 'to pay'

### 3.2 Vowels

### 3.2.1 Vowel Inventory

Tommo So has 7 short vowel phonemes, with 7 long vowel equivalents. Nasalization is also contrastive, though all phonemically nasalized vowels are long and the 7 vowel system is collapsed to a 3 vowel one. Only the lowest vowels, /a/ and the -ATR mid vowels, have nasalized equivalents. This brings the total number of vowel phonemes up to 17 , the same number as the consonants.
(xx) Short oral Long oral Nasalized

| $u$ | uu |  |
| :--- | :--- | :--- |
| 0 | 00 |  |
| 0 | 00 | $\tilde{o} \tilde{0}$ |
| a | aa | $\tilde{a} \tilde{a}$ |
| $\varepsilon$ | $\varepsilon \varepsilon$ | $\tilde{\varepsilon} \tilde{\varepsilon}$ |
| e | ee |  |
| i | ii |  |

$\{\mathrm{e}, \mathrm{o}\}$ and $\{\varepsilon, \rho\}$ form harmonic sets, to be discussed further in the treatment of vowel harmony in §3.4.

In addition to these vowel phonemes, metrically conditioned vowel reduction can lead to the creation of [ $\partial$, but this is not phonemic. However, it has led to some interesting reanalyses in the speech of younger speakers. See section 3.5 for a discussion of metrical effects in Tommo So.

Monosyllabic stems seem to have a vowel of somewhat ambiguous length. If measured, they are long than short vowels of polysyllabic words, but shorter than long vowels in these words. There are monosyllabic nouns with contour tones, indicating an underlying long vowel, such as /nàá/ 'cow', but for H stems like /kúú/ 'head', it is less clear how the length of the vowel should be analyzed, and no minimal pairs based on vowel length have been found. However, as I will argue in the next subsection, Tommo So has a minimal word size requirement of being bimoraic; for coda-less monosyllabic stems, the only option would be to have a long vowel, and thus length would not be contrastive, so while pronounced with a vowel shorter than that in a polysyllabic word, it is still phonologically long. For a couple exceptions to this bimoraic stem minimum, see section 3.3.2.1.

### 3.2.2 Vowel formants

The graph in (xx) plots the 7 (oral) vowels with their formant values, averaged across the analysis of several words, each repeated three times. ${ }^{2}$

Tommo So vowel inventory with formant values

[^2]

### 3.2.3 Minimal pairs

Finding minimal pairs for individual vowels is difficult due to the strong demands of the vowel harmony system. For example, attempting to find a minimal pair with short $/ \mathrm{u} /$ and short /i/ will trigger changes in other vowels in the stem as well as a result of backness harmony. Taking this into account, the following subsections list some minimal and nearminimal pairs I was able to find.

### 3.2.3.1 /u/

| /u/ vs. /i/ | kúdu | 'handle' | kídu | 'seed residue' |
| :--- | :--- | :--- | :--- | :--- |
| /o/ | kúló | 'hair' | kóló | 'raw' |
| /o/ | dùmbú 'short' | dùmbó 'to punch' |  |  |
| /uu/ | dùrú | 'long pole' | dùrùúu 'Ceiba tree' |  |

### 3.2.3.2 /o/

| /o/ vs. /u/ | kóló | 'raw' | kúló | 'hair' |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| /0/ | púló | 'unweave' | púló | 'Fulani' |  |
| /e/ | sól | 'cream of millet' | sél | 'last bit | of liquid' |
| /oo/ |  | 'ag |  | tóóru | fetish' |

3.2.3.3 /o/

| /o/vs. $/ \varepsilon /$ | dògú | 'quiver' | dègú | 'poverty' |
| ---: | :--- | :--- | :--- | :--- |
| /o/ | dúgá | 'necklace' | dúgó | 'poison' |


| /a/ | dògú | 'quiver' | dàgú | 'small' |
| :--- | :--- | :--- | ---: | :--- |
| /oo/ | bóndu | 'marrow' | bóóndu 'pampered' |  |

3.2.3.4 /a/

| /a/ vs. $/ \varepsilon /$ | dàgú | 'small' | dègú | 'poverty' |
| ---: | :--- | :--- | :--- | :--- |
| /o/ | dàgú | 'small' | dògú | 'quiver' |
| /aa/ | dàgú | 'small' | dàà-gú 'don't kill!' |  |

3.2.3.5 /e/

| /e/ vs. $/ 0 /$ | dègú | 'poverty' | dògú | 'quiver |
| :---: | :---: | :---: | :---: | :---: |
| /e/ | píné | 'to pinch' | píné | 'tire' |
| /a/ | dègú | 'poverty' | dàgú | 'small' |
| /ع์/ | péndé | 'sores' | péén | 'to line |

3.2.3.6 /e/
/e/ vs. /o/ sél 'last bit of sól 'cream of millet' water'
/ع/ píné 'tire’ píné 'to pinch'
/i/ pédé 'to shell' pídé 'to spray'
/ee/ jèlé 'to hang up' jéélé 'waddle (of a goat)'
3.2.3.7 $\mathrm{i} /$

| /i/ vs. | /u/ | kídu | 'seed residue' kúdu |
| ---: | :---: | :---: | :--- |
| /e/ | pídé | 'to spray' pédé | 'to shell' |
| /ii/ | kílé | 'extra hard' | kílé 'to pull off' |

### 3.2.3.8 /uu/

/uu/ vs. /ii/ dúú 'below' díí 'water'
/oo/ búúrù 'bread' bóóru 'errand'
/u/ dùrùú 'Ceiba tree' dùrú 'long pole'
3.2.3.9 /oo/

```
/oo/ vs. /ee/ dòó 'millet type' dèé 'to know'
    /uu/ bóóru 'errand' búúrù 'bread'
    /oo/ dòó 'millet type' dòó 'to arrive'
    /o/ toóru 'fetish' tòrú 'agemate'
```

3.2.3.10 /oo/

| /oo/ vs. $/ \mathrm{L} \mathrm{\varepsilon} /$ $/ \mathrm{oo} /$ | $\begin{aligned} & \text { sóó } \\ & \text { sò } \end{aligned}$ | 'to speak' <br> 'speech' | $\begin{aligned} & \text { séé } \\ & \text { sòó } \end{aligned}$ | 'beer residue' 'sweat' |
| :---: | :---: | :---: | :---: | :---: |
| $100^{\text {n/ }}$ | sóó | to speak' | sós ${ }^{\text {n }}$ | 'to extinguish' |
| /0/ | bóóndu | pampered' | bóndu | 'marrow' |

### 3.2.3.11 /aa/

/aa/ vs. /oo/ sáá 'wild grape' sós 'to speak'
$/ \varepsilon \varepsilon /$ sáá 'wild grape' s $\varepsilon$ ع́ $\quad$ 'beer residue'
$/ \mathrm{aa}^{\mathrm{n}} /$ báá 'father' páán 'to dry up' /a/ sàdá 'garden’ sàdáá ‘bird’

### 3.2.3.12 $/ \varepsilon \varepsilon /$


/ee/ néé 'now' néé 'two'
/aa/ séé 'beer residue' sáá 'wild grape'

/モ/ pééndé 'to line up' péndé 'sores'

### 3.2.3.13 /ee/

/ee/ vs. /oo/ dèé 'to know' dòó 'millet type'
$/ \varepsilon \varepsilon /$ néé 'two' néé 'now'
/ii/ déé 'Papa!' díí 'water'
/e/ jéélé 'waddle (on jèlé 'to hang up' a goat)'

### 3.2.3.14 /ii/

/ii/ vs. /uu/ díí 'water' dúú 'below'

```
    /ee/ dií 'water' déé 'Papa!'
    /i/ kílé 'to pull off' kílé 'extra hard'
3.2.3.15 /00"/
/00n/vs./00/ sóón 'to extinguish'sóó 'to speak'
    /aa n/ póśn 'bridge' páán 'to dry up'
    /\varepsilon\varepsilon n// póśn 'bridge' p\varepsilon\varepsilon畐 'to get old'
3.2.3.16 /a\mp@subsup{a}{}{n}/
/aan/ vs./aa / páán 'to dry up' báá 'father'
    /\varepsilon\varepsilon n/ páán 'to dry up' pé\varepsilon五 'to get old'
    /os n/ páán 'to dry up' póón `bridge'
3.2.3.17 /\varepsilon\mp@subsup{\varepsilon}{}{n}
/\varepsilon\varepsilon\mp@code{n}/vs./\varepsilon\varepsilon/ p\varepsiloń\varepsilońn 'to get old' pé\varepsiloń 'to squash'
    /aa n/ pé\varepsilońn 'to get old' páán 'to dry up'
    /von/ pé\varepsilońn 'to get old' póón 'bridge
```


### 3.3 Syllable and stem structure.

### 3.3.1 Syllable shape

Tommo So syllables can be one of the following shapes: (C)V, (C)V:, (C)VR (where R stands for a sonorant), (C)VC (where the coda is the first half of a geminate), $\mathrm{NCV}, \mathrm{N}$, or CVV (with vowel hiatus). The last type arises almost exclusively in verbal inflection, but is present in some loanwords as well.

The following provides examples of each type of syllable:

| (xx) | V | è.né | 'goat' |
| :--- | :--- | :--- | :--- |
|  | CV | pé.du | 'sheep' |
|  | V: | áá | 'who' |
|  | CV: | nàá | 'cow' |
|  | VR | ém | 'milk' |
|  | CVR | nǎm | 'sun' |


| CVC | sób.bò | 'dry sowing' |
| :--- | :--- | :--- |
| NCV | jà.ygá | 'to study' |
| N | j..yદ́ | 'to eat' |
| CVV | dò̀̀ | 'he arrived' |

Of these, CVC, N, and CVV are the rarest, since non-sonorant geminates are rare and syllabic nasals are not common either. As mentioned above, CVV syllables are not typically present in stems.

There is some question as to treatment of NC clusters as in /jàngá/. In word-initial position, there appear only to be syllabic nasals followed by a consonant, rather than prenasalized stops. This is evidenced by the fact that the word-initial nasal (when followed by a consonant, not when by itself as an onset) is always a tone-bearing unit, indicating that it is moraic, unlike the nasal of a prenasalized stop. For instance:
(12) গ́. $y \grave{c}-\mathrm{d}$ è-m
eat-Impf-1sgS
'I eat'

In the imperfect aspect, the verb stem has a $\{\mathrm{HL}\}$ tone melody, with the H on the first mora only, in this case, $/ \mathfrak{n} /$. Word internally, however, the nasal does not appear to act as a syllable nucleus and does receive any extra articulatory attention. It is possible that the nasal syllabifies as the coda of the preceding syllable, but in that case, we would expect it to add a mora, making disyllabic words with a medial NC cluster trimoraic. This would be evidenced by such words receiving a $\{\mathrm{HL}\}$ rather than a $\{\mathrm{H}\}$ tone melody if possessed inalienably by a pronominal possessor (see section XXX). This is not the case. A word like /nínju/ is treated as bimoraic. Therefore, it seems that NC clusters stem-internally should be analyzed as prenasalized stops.

### 3.3.2 Word minimality requirement

The minimum word size in Tommo So is bimoraic. Thus, we find words like /díí/ 'water' and /kúú/ 'head', but no monomoraic equivalent. Almost all stems meet the minimality requirement, except for three exceptional verb stems: /gè/ 'say', /yè/ 'see', and $/ \mathrm{j} \varepsilon /$ 'take'. In most inflections, suffixes can be added to bring the stem up to word size, but in forms like the defocalized perfect, we may see subminimal words like /gì/'(s)he said'.

Note that we can use this measure of minimality to distinguish independent words from clitics. Clitics in Tommo So are almost uniformly monomoraic. The exceptions to this are the locative clitic / = baa/ and the topic clitic / = kay/, which are bimoraic.

### 3.3.3 Stem lengths

All known stems are between one and three syllables in length, with the vast majority of monosyllabic stems being bimoraic (either a long vowel or a sonorant coda). Trisyllabic stems are rarer than their mono- and disyllabic counterparts. Below are examples of stems of different lengths:

| (xx)a. Monosyllabic (1 mora) | gè | 'say' |
| :--- | :--- | :--- |
|  | yè | 'see' |


| b. Monosyllabic (2 morae) | nǎm | 'sun' |
| :--- | :--- | :--- |
|  | sóó | 'speak' |


| c. | Disyllabic | (2 morae) |
| :--- | :--- | :--- |
|  |  | ìsé |
| ébé | 'dog' |  |
|  |  | 'buy' |

d. Disyllabic (3 morae) dámmá 'village'

| e. Disyllabic (4 morae) | gààlúú <br> tànnàá | 'last year' |
| :--- | :--- | :--- |

$\begin{array}{lll}\text { f. Trisyllabic (3 morae) } & \begin{array}{l}\text { kágádá } \\ \text { bùgùdó }\end{array} & \begin{array}{l}\text { 'sear' } \\ \text { 'chubby, }\end{array}\end{array}$
$\begin{array}{lll}\text { g. Trisyllabic (4 morae) } & \text { dénnélé } & \text { 'circle' } \\ & \text { mòòmíyó } & \text { 'scorpion' } \\ & \text { gùrùmbáá } & \text { 'pigeon' }\end{array}$
h. Quadrisyllabic? (6 morae) gúnnıómmóló 'hump (on a person’s back)'

The only known instance of a potential quadrisyllabic stem is given in (xxh). I am also unable to find any trisyllabic stems with 5 morae, meaning with two heavy syllables. Whether this is an accidental gap or a principled absence is not clear.

### 3.3.4 "Crypto-compounds"

Most if not all long words (four syllables or more) and even some shorter ones behave phonologically as though they were compounds rather than a single stem, even if they contain no recognizable smaller stems. Following Heath (2008), I call such words crypto-compounds, a compound made up of lexically unidentifiable parts.

These crypto-compounds often have a prosodically-marked juncture, generally but not always split into two trochees [б́व̆-б́व̆], which typically exhibits one of the two tonal patterns characteristic of compounds: either the first "stem" is tone lowered or the second is. Nonetheless, this is not always true; the crypto-compound /bándáy-kálá/ 'courtyard' shows that they can be all $\{\mathrm{H}\}$ as well.

Apart from prosodic cues and length, there are segmental cues that these words should be treated as compounds, opaque though they may be. Continuing with 'courtyard', phonotactics prohibit voiceless plosives stem-internally (see section XXX), so the $/ \mathrm{k} /$ wordmedially requires some kind of juncture preceding it.

Below is a list of features that may distinguish crypto-compounds from single stems:
(xx) a. Tone pattern of either [ $\sigma \sigma-\sigma \grave{\partial}$ ] or [òò- $\sigma \sigma$ ], the unmarked tones being generally HH or LH.

Ex. XXX
b. Adjacent vowels articulated separately, with or without phonetic glottal stop. Ex. XXX
c. Separate harmonic domains, where vowels in the first half of the word do not agree in backness or ATR with the vowels in the second half. Ex. èndè-kúmó 'centipede'
d. Word-internal voiceless plosive, or other phonotactic violations. Ex. bándáy-kálá 'courtyard'

### 3.4. Phonotactics

Sections 3.1 and 3.2 introduced you to the consonants and vowels of Tommo So. In this section, I discuss phonotactic restrictions on where in the stem phonemes can occur and how they can combine with one another.

### 3.4.1 Constraints on individual consonants

### 3.4.1.1 Word-initially

In word-initial position, the liquid /r/ is not allowed. Where this occurs in loanwords, a copy of the following vowel is epenthesized to the front. For example:
(xx)a. Ramata (female name) $\rightarrow$ àràmátá
b. réunion 'meeting' $\rightarrow$ èrénúyón

For more on vowel epenthesis, see section 3.5. The liquid /l/ also seems to be dispreferred word-initially for native words, though loanwords with initial /l/ are not repaired, as in /léc̀tèrè/ 'letter' (from French lettre).

Also blocked word-initially is the velar nasal $/ \mathrm{y} /$. There is evidence from Plungian (1995) that this may be dialectal. In his grammar sketch, he gives the word/yygulo/ 'get up'. In the Tédié dialect of Tommo So, this is pronounced /úngúló/, once again with a vowel at the beginning. This [u] may be either synchronically or diachronically epenthetic, but the fact that it is specified for tone suggests it is part of the underlying representation. See chapter 4 for more on tonal underspecification.

### 3.4.1.2 Stem-internally

In native words, voiceless obstruents are not allowed stem-internally. Here I mean stem-internally, not word-internally, since the crypto-compounds discussed above demonstrate that there is no ban on voiceless obstruents in a compound, treated as a single word. Again, loanwords have introduced exceptions to this rule, such as /jákà/ 'zakat, Islamic tithe'. Nonetheless, such loanwords will often show variable pronunciation, with French loanwords like fête 'party' pronounced as [pźdù], even though an 'educated' Dogon may correct this to [pétù] or even [fétù]. Fulfulde loanwords will sometimes retain their intervocalic voiceless stop, as in /hákílé/ 'idea', though at other times, speakers will vacillate between two pronunciations, as in [wákádú] versus [wágádú] 'time, when'.

### 3.4.1.3 Word-finally

Once again, I return to the domain of words. Stems may end with an obstruent (voiced, for native stems), but words cannot. To repair this violation, the vowel [u] is epenthesized.
( xx )a. kěd 'large awl' $\rightarrow$ kèdú
b. óg 'hot, fast' $\rightarrow$ ógu

As before, the epenthetic vowels are tonally underspecified, unless their addition results in the resyllabification of a contour tone (xxa). Sonorant codas are only optionally repaired by epenthesis. See section 3.5.
$\mathrm{h} / \mathrm{is}$ also not allowed word-finally.
Other than the constraints given here, all consonants may occur in any position.

### 3.4.2 Constraints on individual vowels

Generally, all vowels may occur in any position in the word, so long as on the whole the word obeys Tommo So's rules of vowel harmony (see section 3.5). However, there are a few phonotactic restrictions independent of vowel harmony.

First, polysyllabic verb stems must end in a non-high vowel. Even if the initial vowel of the stem is high, the final vowel must be mid. The same is not true of noun stems, but the generalization holds that for native stems, if the final stem vowel is high, all earlier vowels must also be high. That is, there can be no change across the stem from lower to higher vowels. Of course, if a vowel is epenthesized to the end, the word may end in [u], but it appears that underlyingly, such sequences are unattested.

In native Tommo So words, nasal vowels typically only occur in monosyllabic words where they are the only vowel. Of course, a monosyllabic verb stem may be inflected, spreading its nasalization, or a singleton $/ \mathfrak{y} /$, realized $\left[y^{n}\right]$, may nasalize vowels around it, but at an underlying level, nasal vowels only occur in monosyllabic stems. Loanwords from French have introduced nasal vowels later in the stem, as in /lì̀lós̀n'/ 'nylon', but due to major differences in vowel harmony, tone patterns, and other phonotactics, it seems likely that loanwords are clearly identifiable to native speakers and that they are subject to a loanword co-phonology, not as restrictive as the native phonology.

### 3.4.3 Constraints on vowel length

In the initial syllable of a polysyllabic word, both long and short vowels are allowed. A minimal pair of this type is /kólí-yó/ 'to pour water on the body' and /kóślí-yó/ 'to skim off by hand (i.e. seeds from a papaya)'. Stem-medially, however, long vowels are unattested in native words, though they may appear in Fulfulde loanwords such as /àtínééré/ 'Monday’ (Arabic via Fulfulde). Long vowels word-medially are not uncommon, arising either from verbal inflection or from compound words.

Vowel length is contrastive stem-finally for polysyllabic words, though often the length is hard to hear without a clitic or suffix, especially in citation form. A minimal pair is /sàdá/ 'garden’ versus /sàdáá/ 'bird'.

Initial long vowels with no onset are very rare in polysyllabic stems; the only example in my data is a plant name, /ààgúlú/ (Diospyros mespiliformis), which is very likely a crypto-compound, judging by the harmonic break between the L-tone /àà/ and the H-toned /gúlú/.

### 3.4.4 Consonant clusters

### 3.4.4.1 Initial CC

Stem-initially, the only CC sequence is NC, though as discussed in section 3.3, the nasal may be treated as its own syllable nucleus, hence breaking up the cluster into two syllables. Examples of this include:
(xx) a. ǹ.dé 'person'
b. m̀.bé 'like'
c. j̀̀.jó 'mat'

I have found no instances of a velar nasal + stop cluster stem-initially. Plungian (1995) gives nŋgulo 'get up', but in my data, this is V-initial /úngúló/; the lack of initial /y/ is exceptionless in my data.

### 3.4.4.2 Medial geminated CC

Section 3.1 discussed licit geminates in native Tommo So stems, which are all sonorants. Other geminates appear in the language in loanwords (often cultural vocabulary), reduplication in native words, or due to vowel syncope. Examples are given below along with their frequency in the lexicon.

| (xx) | pp (2) | /pìp-píyè/ | 'it (the door) is closed' |
| :---: | :---: | :---: | :---: |
|  | bb (2) | /sóbbò/ | 'sowing seeds in a pit with manure' |
|  | tt (1) | /páttì/ | 'absolutely not' |
|  | dd (3) | /Éddè/ | 'widow's quarantine after husband's death' |
|  | kk (7) | /tákkà/ | 'pulmonary disease in livestock where lungs collapse' |
|  | gg (3) | /úggúnnó/ | 'dust' (derived from /úgú gùnnò/ 'slave of the air') |
|  | jj (1) | [híjju] ~ [híju] | 'pilgrimage to Mecca' < Ar. hajj |
|  | yy (7) | [yéyyé] | 'sleep' (from /yéyí-yé/) |
|  | hh (0) | --- |  |
|  | ss (0) | --- |  |

Between these and the geminate sonorants of 3.1, there are no other attested geminates in the language.

### 3.4.4.3 Medial non-geminate CC

Once again, consonant clusters in native Tommo So words are restricted to homorganic nasal plus voiced stop sequences. Such clusters are common at all places of articulation:

| (23) | $m b$ | [jòmbó] | 'to peck' |
| :---: | :---: | :---: | :---: |
|  | $n d$ | [kíndé] | 'heart' |
|  | nj | [dèjjú] | 'individual field' |
|  | ng | [sìngilǐy] | 'woven basket used to strain juice' |

Other consonant clusters are given below with the number of attested examples in parentheses.
(24) a. Nasal plus homorganic voiceless stop

| $\mathrm{mp} \mathrm{(4)}$ | /kómplè/ | 'outfit' (French) |
| :--- | :--- | :--- |
| $\mathrm{nt} \mathrm{(8)}$ | /àn-tólú/ | 'hunt' |
| $\mathrm{yk}(10)$ | /ày-kòmmó/ | 'handful (of food)' |

b. Nasal plus nonhomorganic stop
mt (2) /nìmtí/ 'couscous pot' (Bambara)
c. Nasal plus fricative
ms (2) /kámsìlù/ 'woman’s sleeveless dress-like boubou’ (< camisole?)
ns (1) /àn-sáárá/ 'white person'
d. Liquid plus fricative
ls (1) /àlsì̀ààmú/ 'Muslim community' (Arabic) (also pronounced
/sìlààmé/)
rs (4) /sàrsám/ 'sergeant' (French)
lf (1) /màlfá/ 'gun' (often pronounced [màlbá])
e. Liquid ( $1, r$ ) plus stop or affricate
lb (3) /kélbè/ 'eggplant'

m. Fricative plus stop

```
sp (1) /pàspór/ 'passport' (French)
st (1) /pístòlè/ 'pistol' (French)
sk (1) /ह̀skàlìy\varepsiloń/ 'external stairway` (French)
```

No other consonant clusters are attested in the data. The nasal plus voiceless stop sequences in examples like 'hunt' and 'handful of food' in (xxa) derive from a historical /aN-/ prefix, no longer active in the language, but still attested in the lexicon. It is not clear from the examples what the semantics of this prefix would have been.

### 3.4.4.4 Medial CCC

Medial CCC are extremely rare, as most loanwords containing this sort of consonant cluster are broken up by epenthesis. However, at least in one consultant's pronunciation, the French loanword /kómplદ̀/ 'outfit' retains its consonant cluster. Another example is /sèmpléks/, a kind of modern rifle imported from Italy. Note that both words contain the cluster $/ \mathrm{mpl} /$, a relatively easy CCC cluster to pronounce.

### 3.4.4.5 Final CC

Final consonant clusters are extremely rare except in occasional loanwords from French or Fulfulde such as /pómp/ 'water pump' (<French pompe). Most of the time, speakers will epenthesize a vowel at the end, as they would for even a single final C.

### 3.4.5 Vowel epenthesis

A lot of allusion has been made in the preceding sections to vowel epenthesis. This is the preferred strategy of phonotactic violation repair involving consonants. As we have seen, the epenthetic vowel is generally [u]. A factor indicating that epenthesis of the [u] rather than its deletion after sonorants is the correct analysis is the fact that the epenthetic vowel is often underspecified for tone, something not seen on the underlying vowels of a stem. When the epenthesis is initial, as when a stem begins with $/ \mathrm{r} /$, a phoneme which is not allowed word-initially, the epenthetic vowel is a copy of the vowel in the following syllable. See section 3.4.1.1.

If we take final $[\mathrm{u}]$ to be epenthetic, then this raises a problem for determining the underlying form of verb stems. The reason is that in what seems to be the underlying form of a verb stem, the final vowel is obligatorily mid or low. However, the deverbal noun is formed by deleting this final vowel, and seemingly epenthesizing the [u]. For example, consider the following opposition:

```
(xx)a. Yìmé-gú s\hat{\varepsilon}.
    die-Ppl have
    '[He] is dying.'
    b. yìmú ~ yǐm
        'death'
```

Here we must make a choice. Either the stem for 'death' is /yǐm/, and the [ $\varepsilon$ ] of the verb is epenthetic, added to fit some sort of template for verbs, or the deverbal noun form is a case of subtractive morphology.

The fact that we are dealing with the former analysis rather than the later comes from the existence of some verbs whose deverbal nouns are in fact identical to the verb stem. These include verb /núyá/ 'sing', with an identical stem for 'song', and /bìré/ 'work', with the deverbal noun /bíré/. If we went with the subtractive morphology analysis, there is no reason why these verbs would not yield deverbal nouns /břr/ and /nǔy/, respectively.

What forces the epenthesis of a harmonizing vowel on the verb stem? We can assume that there is a constraint that verb stems must end in a vowel. In many inflections, this is supplied by the aspect or mood, but where it is not, a default vowel is inserted that harmonizes. This default vowel can be seen much like the final vowel in Bantu. It may have special realizations in certain tenses or aspects, but otherwise it surfaces as $/-a /$.

Nonetheless, this analysis is not without problems of its own. First, it raises the need for either different levels for nominal and verbal epenthesis or different co-phonologies for verbs and nouns, since otherwise there is nothing driving verbal epenthetic vowels to harmonize while nominal epenthetic vowels remain [u]. Second, there is the mystery of how verb stems with only a high vowel "know" whether they are + ATR or -ATR, since both verbal varieties exist. It seems the stem must simply be marked for this feature, even if it is not audible on the high vowel itself.

A final possibility is that verbal and nominal stems simply exist side-by-side. This would explain some idiosyncrasies, such as the fact that for some verb stems, the quality of the vowel changes in the noun. An example of this is [wàlá] 'cultivate' vs. [wòlú] 'cultivation'. While this is not the only example of an $/ \mathrm{a} /$ to / $/$ / change in nominalization, it is not a general pattern either. Listing each stem separately would allow for greater accuracy at the expense of generalization.

I leave the question of analysis for future research and will simply focus on the descriptive facts here, assuming, as a measure of convenience, that verbs and nouns may have separate stems.

Before moving on, it seems that epenthesis has often taken place on a lexical level in the assimilation of loanwords to break up consonant clusters. This epenthesized vowel is often a copy of an adjacent vowel. For instance, /tààbálú/ < French table 'table', /síkı̀r̀̀/ < French sucre 'sugar'. These vowels are now part of the Tommo So lexical representation, though historically they were epenthesized to assimilate the words to native pronunciations.

### 3.5 Vowel harmony

Tommo So has two different harmony processes: ATR harmony and backness harmony. The domains of each harmony differ somewhat, but we can generalize over both, stating that harmony is sensitive to morphological distance from the stem. The stem is a domain of strict harmony, and with increasing morphological distance, in terms of affix order and the transition from derivational to inflectional morphology, this strictness steadily decreases.

I will give an overview of stem harmony first, before turning to different levels of suffixal harmony in subsequent subsections.

### 3.5.1 Stems

ATR defines the harmonic sets $\{\varepsilon, \supset\}$ (-ATR) and $\{\mathrm{e}, \mathrm{o}\}(+$ ATR), while backness determines the sets $\{\mathrm{u}, \mathrm{o}, \rho\}$ (+back) vs. $\{\mathrm{i}, \mathrm{e}, \varepsilon\}$ (-back). High vowels are neutral to ATR, and /a/ typically forms a domain of its own for stems. Many noun stems end in a consonant that requires epenthesis, so superficially $[\mathrm{u}]$ seems to be neutral to harmony. Nonetheless, I argue that this is simply due to the fact that harmony is no longer operative at the level where epenthesis takes place.

Stems must agree in both ATR and backness. Furthermore, stems may not have high vowels following non-high vowels. These constraints together lead to a very restrictive set of possible vowel patterns. These are listed below, with examples from the nominal and verbal domains.

|  | Nominal |  | Verbal |  |
| :---: | :---: | :---: | :---: | :---: |
|  | díí | 'water' | N/A |  |
| \{u\} | kúú | 'head' | N/A |  |
| $\{\mathrm{e}$ \} | ém | 'milk' | séé | 'trim hair' |
| \{0\} | sòó | 'sweat' | gòó | 'go out' |
| $\{\varepsilon\}$ | bèź | 'beard' | yè | 'see' |
| \{0\} | sóó | 'speech' | nò | 'drink' |

\{a\} náá 'mother' dàá 'kill'


We can see that verbs have stricter templates for stem vowels, with high vowels not allowed in non-final position. Additionally, where a verb stem contains high vowels followed by mid vowels, the high vowels extend up to the last syllable, where it changes to a mid vowel. The same is not necessarily true for nominal stems.

Note that for the most part, /a/ does not combine with any other vowels. However, $/ \mathrm{a} /$ and the back mid vowels do sometimes show /u/ in V2 position. As I will discuss further
in the next subsection, this is due to the fact that the second syllable is a metrically weak position, and reduced vowels have been reinterpreted by younger speakers as being $/ \mathrm{u} /$. In this way, younger speakers are innovating a new, weaker system of vowel harmony than previous generations.

Disharmonic stems do exist, however, though it is not clear what their origins are. For instance, we see an adjective /wàgé/ 'far' that is otherwise phonotactically native in appearance. Another word that appears to be a single stem, despite disharmony, is /bònnàá/ 'whip'. These words are far outweighed by harmonic stems.

Loanwords are outside the bounds of vowel harmony. This leads to harmonically atrocious words like /bùyàgí/ 'guava' (from Bambara buyaki) or /(̀̀)ròmìné/ 'water faucet' (from French robinet). Again, it appears that loanwords are not subject to the same phonology as native stems.

### 3.5.2 Derivational suffixes-verbs

### 3.5.2.1 Introduction

Section 2 noted that Tommo-So has five derivational suffixes on verbs, in the following order:
(xx) Stem -ndV -lE -rE -yE -mo

> Factitive Reversive Transitive Mediopassive Causative

In the factitive, V stands for a copy of the preceding stem vowel. In the next three suffixes, the reversive, the transitive, and mediopassive, E stands for a mid-vowel underspecified for ATR. Finally, the causative has a fully specified vowel, / $/ /$.

This order does more than align the affixes with regards to one another. It also correlates with the probability of harmony for a given suffix. The following chart summarizes the behavior of harmony with respect to the derivational suffixes given above:
(xx) $0 \quad I \quad$ II $\quad$ III $\quad$ IV

Stem - Factitive - Reversive -Transitive - Medio-Passive - Causative - Inflection


We see here the verb split into five morphological levels. Level 0 represents the stem, then I-IV indicate different blocks of suffixation, as determined by levels of harmony. What we can notice first off is that as we move farther away from the stem morphologically,
harmony levels decrease, but the two different harmony processes do not shut off at the same rate.

What does it mean for harmony levels to decrease? Shouldn't harmony be all or nothing? In Tommo So, harmony levels decreasing means variation is introduced into the system, and when a suffix is more likely to harmonize, it means that a higher percentage of instances will be harmonic. Take as an example the verb with a medio-passive suffix /gòró$\mathrm{yE} /$ 'put a hat (on oneself)'. The harmonizing pronunciation of this verb is [gòríyó] (the stem-final vowel becoming [i] before the suffix), and on certain days, this is the pronunciation speakers insist upon. Ask the same speaker another day, however, and you might get the response [gòríyé] with ATR harmony but no backness harmony. On days where speakers use this variety, they prime themselves, and [gòríyó] is out of the question.

If we look at the chart, we see that backness harmony is "more optional" in level II (medio-passive suffixes) than in level I (factitive, transitive, and reversive suffixes). When I say this is in terms of morphological distance, I mean that it does not matter whether there are any suffixes before the medio-passive. Whether next to the root or removed by more than one suffix, its propensity to harmonize is still lower than that of morphologically "closer" suffixes.

Before turning to the actual levels of harmony of each suffix, I will briefly introduce what the idealized behavior of each looks like.

### 3.5.2.2 Idealized suffix behavior

Beginning with the factitive, a prescriptive grammar of Tommo So might state that the factitive is simply a full copy of the preceding stem vowel. Unlike the transitive, reversive, and mediopassive, which change the stem-final vowel to [i], the factitive causes no such change. In addition to being added to verbs to form a sort of causative, this suffix can also derive verbs from noun stems. Examples of stems and the factitive are as follows:

```
(xx)a. jáá jàà-ndá
    meal meal-Fact
    'meal' 'cook'
```

b. gòó gòò-ndó
go.out go.out-Fact
'go out' 'take out'
c. dùmó dùmó-ndó
be.done be.done-Fact
'be done' 'finish'

In each case, the vowel of the factitive is a copy of the stem-final vowel.
The transitive, reversive, and medio-passive all behave in the same way. They attach the verb stem (or to a stem already modified by the factitive) and change the preceding vowel (of the stem or factitive) to [i]. The underlying vowel of these suffixes appears to be a front mid vowel underspecified for ATR value, but added to a verb, the suffix agrees in both backness and ATR with the stem. For example:

```
(xx)a. góró gòrí-yó
    hat hat-MP
    'hat' 'put a hat (on oneself)'
b. kónnó kónní-ró
    curved curved-Tr
    'sharply 'make sharply curved'
    curved'
    c. mènn\varepsiloń mènnílľ
    fold fold-Rev
    'fold' 'unfold'
```

Many stems to which these suffixes are added are bound stems. Note that when these suffixes are added to high vowel stems, the change in the final vowel to [i] results in opacity.

```
(xx) kígílé
    make.go.back
    make.go.back-MP
    `make (sb) go back' 'go back'
```

The suffix is + ATR, agreeing with the stem, though the stem itself no longer contains any mid vowels that would show this specification. Note also that /a/ stems behave as though they were front, -ATR:

```
(xx) tàgá tágí-yé
    shoe shoe-MP
    'shoe' 'put shoes on (oneself)'
```

The causative is prescriptively outside the bounds of harmony. It takes the form /mo , and when added to a verb stem, there is no change in the stem's final vowel nor in the vowel of the suffix:
(xx)a. káná
do

'do' $\quad$| káná-mó |
| :--- |
| do-Caus |
| 'make do' |

This is also the most productive of the suffixes, able to be added to any verb stem.

### 3.5.2.3 Actual suffix behavior

Though the idealized behavior does contain a kernel of truth, it is not an accurate description of how vowel harmony operates in each suffix. Rather than having one realization (full vowel copy, harmony, or no interaction), the pronunciation of each suffix is variable, within speaker, within stem. To gauge harmony levels, I counted the type frequencies for stem + suffix combinations. A type was defined such that a stem with a harmonic suffix and the same stem with a disharmonic suffix counted as two types. Data were drawn from my lexicon.

Let us start with the factitive. This suffix is supposedly characterized by full vowel copy from the stem. While this is often true, it is not the full story. ATR harmony is indeed exceptionless, but backness harmony is not. We find disharmonic stems like the following:

```
(xx)a. jòbó-nd\varepsiloń
run-Fact
'make run'
```

b. mòò-ndé
pile-Fact
'stock up'

The fact that the only disharmonies are with back stems taking a front suffix suggests that rather than having no vocalic specification in the suffix (-ndV), the factitive might have an ATR underspecified front vowel, like many other suffixes (-ndE). The following table
summarizes the number of harmonic and disharmonic factitive types, where harmony refers here only to backness harmony (since ATR harmony is $100 \%$ ):

## (xx) Percentage of harmonic factitive suffixes

|  | Harmonic | Disharmonic | \%Harmonic |
| :--- | :--- | :--- | :--- |
| All stems | 43 | 2 | 95.6 |
| Back stems | 15 | 2 | 88.2 |

Back stems are separated from all stems, since if the suffix is underlyingly a front vowel, disharmony will only be evident with back stems. We see that harmony is the norm, but it is not exceptionless. The two exceptions, shown in (xx), each have a harmonic version as well. Additionally, there were two stems, [dàà-nd $\varepsilon$ ] 'put down' and [jàà-nd́́] 'cook', where the suffix is not strictly disharmonic, since /a/ tends to take $[\varepsilon]$ in harmony processes, but where the vowel of the suffix is not a copy of the stem-final vowel either.

Next, we turn to the reversive /-lE/. Like the factitive, ATR harmony is exceptionless, but we see variation in backness harmony. The following table summarizes the variation:
(xx) Percentage of harmonic reversive suffixes

|  | Harmonic | Disharmonic | \%Harmonic |
| :--- | :--- | :--- | :--- |
| All stems | 84 | 2 | 97.7 |
| Back stems | 29 | 2 | 93.5 |

While these numbers may look as though the reversive is more harmonic than the factitive, the difference is not significant ( $\mathrm{p}>.5$ ).

The transitive $/-\mathrm{rE} /$ also has similar harmony rates to the factitive and the reversive, shown in the following table:

## (xx) Percentage of harmonic transitive suffixes

|  | Harmonic | Disharmonic | \%Harmonic |
| :--- | :--- | :--- | :--- |
| All stems | 55 | 7 | 88.7 |
| Back stems | 20 | 5 | 80.0 |

In all of the other suffixes, the disharmonic forms have all been back stems. The presence of two disharmonic front stems here is strange. If the underlying form of the suffix is already front, why should it change disharmonically to a back vowel without a back stem triggering it? One possibility is that the disharmonic forms are imperatives. In the medio-
passive as well, some front stems took back suffixes in the imperative, perhaps a reflex of the imperative historically carrying the $2 \mathrm{sg} /-\mathrm{w} /$ suffix. This area needs further investigation.

Again, the numbers are not significantly different from the factitive or the reversive, showing that these three suffixes form a unit in terms of morphological distance from the stem. The medio-passive, however, breaks rank and shows different behavior. It is the most prevalent of the derivational suffixes, and it also harmonizes much less than the preceding suffixes. Consider the following numbers:

## (xx) Percentage of harmonic medio-passive suffixes

|  | Harmonic | Disharmonic | \%Harmonic |
| :--- | :--- | :--- | :--- |
| All stems | 223 | 71 | 75.9 |
| Back stems | 36 | 69 | 34.3 |

We can see that once again, as expected, most of the disharmony is on back stems, but like the transitive, two disharmonic front suffixes have been found. As mentioned above, these come from imperatives, where a diachronic explanation could apply. Both of these rates of harmony are significantly different than the earlier suffixes ( $\mathrm{p}<.005$ ).

Let us consider reasons for this discrepancy in harmony. Does morphological distance alone account for these low harmonizing rates? In fact, phonetics appears to play at least some role as well. The form of the suffix is $/-\mathrm{yE} /$, and elsewhere in the language, $/ \mathrm{y} /$ has known fronting effects, particularly on preceding vowels. For example, the dimunitive suffix /-ý/ fronts the vowel preceding it, yielding forms like [kòrèý] 'little calabash' from the stem /kòró/. But what about preceding vowels? If we look at harmony rates in stems alone, we find a handful of disharmonic stems, most with $/ \mathrm{y}$ / in them. Comparing harmonic $u y O$ stems to disharmonic $u y E$ stems in terms of token numbers in the lexicon, we find 67 harmonic stems and 23 disharmonic, or a harmony rate of about $74 \%$. If harmony in the medio-passive suffix were entirely dependent on the phonetics of $/ \mathrm{y} /$, we would expect the same harmony rate as stems, $74 \%$. Instead, the rate is $34 \%$, leaving the morphology, or morphological distance, to account for the $40 \%$ gap between the two.

Turning finally to the causative, we find even less harmony than before. Here, since the underlying form of the suffix has a back vowel, we look at front stems to find the disharmony.

## (xx) Percentage of harmonic causative suffixes

|  | Harmonic | Disharmonic | \%Harmonic |
| :--- | :--- | :--- | :--- |
| All stems | 5 | 99 | 4.8 |
| Front stems | 5 | 68 | 6.8 |

We see very low rates of harmony here, but we also find a few unusual cases. For example, [’́nní-yó-mé] 'make tired', where the causative would be in perfect harmony with the stem if it surfaced with its underlying form, but instead it changes to [mé]. Even if this were an imperative, which it is not, it would not explain it, since the imperative has a backing effect, not a fronting one. This seems to just be noise in the data.

The few harmonic front stems are interesting as well. We find examples like [yè-m $\varepsilon$ ] 'be seen' and [bèlé-mé] 'be found', both of which include the idiosyncratic passive usage of the causative. As I will argue below, it is not surprising that different harmony behavior exists in these forms.

The difference in harmony level between the causative and medio-passive is highly significant ( $\mathrm{p}<.001$ ).

### 3.5.2.4 Harmony as morphological cohesion

Now that I have described the harmonizing behavior of the derivational suffixes, I will offer a potential explanation. Let us start with a few key generalizations:

1. Stems are almost always fully harmonic. When they are not, there is generally a phonetic explanation, such as the presence of /y/fronting a following vowel.
2. We never find a harmonizing suffix outside of a non-harmonizing one.
3. The outer suffixes, especially the causative, are much more productive than the inner ones.
4. The idiosyncratic harmonizing causatives are those with equally idiosyncratic meanings.

These facts point to an analysis where harmony is a property of the stem, and the likelihood of a given suffix to harmonize is linked to the likelihood of that suffix to be lexically accessed as a single unit with the stem. That is, the more likely it is that the suffix is not parsed as a suffix, that it is taken as part of the stem, the more likely it is to harmonize. Research by Hay and Baayen (CITE), among others, has found that productivity tends to correlate with parsability. The more productive an affix is, the more likely it is to be parsed as an affix, separate from the root. To take an example form English, the suffix -th is not nearly as productive as the suffix -ness, and we are less likely to say the word warmth is suffixed than the word warmness. Furthermore, it has long been observed that productive affixes tend to fall outside of unproductive ones, and the more inner affixes tend to be more phonologically cohesive with the root than outer ones (e.g. Level 1 and Level 2 suffixes in English, Kiparsky CITE). Other factors that have been found to correlate with the
parsability of suffixes is the relative frequency of the base and the derived word. We do not have enough data on Tommo So to determine these frequencies, but it seems intuitive that for causative forms, the underived stem is more common.

What also falls out from this explanation is the behavior of different stems with the same suffix. Unlike an approach like level ordering (CITE), individual stems may have different likelihoods of being parsed together with or separately from the suffix. Again taking an example from English, the -ment suffix in government is much less parsable than it is in a word like abolishment. If [yè-mé] 'be seen' has a meaning that is not particularly decomposable, speakers are more likely to access the word as a whole than to build it productively, thus accessing the causative suffix separately and not including it in the stem, the domain of harmony.

A large corpus of data would reveal more fine-grained distinctions between the suffixes and between individual stems, which may shed light on this issue, but for the time being, we can only speculate as to what drives the correlation between morphological distance and vowel harmony.

### 3.5.3 Inflectional suffixes-verbs

While derivational suffixes on the whole harmonized, inflectional suffixes do not. This is to be expected in a model where productively used affixes are seen as separate from the stem, for what can be more productive than verbal inflection?

There is, however, one exception to this rule, and that is the final vowel of the - E perfect (introduced in chapter 2), used in clauses with focus. The chart below summarizes the harmonizing behavior of verbal inflectional suffixes.

|  | Harmony | No harmony | N/A |
| :--- | :--- | :--- | :--- |
|  | Focused perfect -E | Habitual -dèm | Perfective -aa |
|  | Neg. imperfective -élè | Participial -gú |  |
|  | Subjunctive -e | Neg. imperative -gú |  |
|  | Impf. chain form -éé | Neg. perfective -lí |  |

The suffixes in the N/A column are either high or low vowels, outside the realm of ATR harmony and not subject to backness harmony. Of all these suffixes, only the focused perfect harmonizes. Consider the following examples:
(xx) a. dŋ̀̀̀-m
arrive.FocPerf-1sgS
'I arrived'
b. bòè-m
call.FocPerf-1sgS
'I called'

Here, whether the final vowel (or in this case, final half of the syllable) becomes + or ATR depends on the stem. Since this vowel fuses with the stem, we might find it understandable that it would participate in stem ATR harmony. However, the subjunctive /e/ occupies the same position, but does not harmonize, so harmony is not inherent to the position. It is not clear why the behavior of these two suffixes (or replacive vowels) should differ.

### 3.5.4 Derivational suffixes-nouns

Nouns in general has much more isolating morphology than verbs. Here I will discuss suffixes on deverbal nouns, including the agentive suffix, two infinitive suffixes, and one generic nominalizer. These suffixes are as follows:

| (xx) | -né | Agentive | dáí-né | 'killer' (from dàá 'kill') |
| :--- | :--- | :--- | :--- | :--- |
|  | -lé | Infinitive | dánní-yí-lé | 'to sit' (from dànní-yé 'sit') |
|  | -dìm | Infinitive | káná-dìm | 'to do' (from káná 'do') |
|  | -yé | Nominalizer | èmmí-yé | 'strength' (from émmé 'be powerful') |

I will address the semantics of the different infintives and nominalizers in chapter XXX. Here, I simply intend to point out that none of these suffixes harmonize.

### 3.5.5 Inflectional suffixes-nouns

As indicated in the previous subsection, nouns do not take much morphology. There is, however, one series of nominal suffixes in Tommo So that could be seen as inflectional. These are the human singular and human plural suffixes $/-\mathrm{n} \varepsilon /$ and $/-\mathrm{m} /$. Underspecified for tone (see chapter 4), these suffixes participate in limited backness harmony with the stem.

Notice that as agentive nominalizers, they do not harmonize at all. On other stems, though, the harmony is sporadic. The following forms contrast harmonizing forms with nonharmonizing forms:

```
(xx)a. àn-ná 'man'
    ságárá-n\varepsiloń 'able-bodied man'
```

b. kúm-no 'unmarried person'
sólógò-ne 'Bozo person'

Sometimes harmony is variable, with /ògǒ-nદ/ 'chief’ varying in pronunciation between [ $\grave{g} \grave{̀}-\mathrm{n}$ '] and [̀̀gò-nદ́]. Like the derivational suffixes, the amount of harmony may depend on the extent to which the suffixes are lexicalized with the stem.

### 3.5.6 Other suffixes

There are few other suffixes in the language, particularly on adjectives. These are /gó/, which seems to be an adverbializer, and /-gú/, which derives an adjective from a noun with the meaning 'having X characteristic'. Neither harmonize with the stem, though both may be fronted by a following $/ \mathrm{n}$ /, yielding adverbial complex [-gé-ní] and the deadjectival complex [-gí-nź], meaning ‘one who has X characteristic’. For example:
( xx )a. wò- y -gé-ní
that-N-Adv-Adv
'like that'
b. kùlò-gí-né
hair-Adj-HumSg
'one who is hairy'

Notice that neither harmonizes with the stem.

### 3.6 Metrical structure

Unlike the metrical system in a language like English, where there is a clear rhythmic pattern of stressed and unstressed syllables, Tommo So's meter is rather vaporous That being said, certain phonological rules suggest an underlying metrical structure, with a stem-initial strong-weak trochee [б́व̆]. This trochaic pattern does not continue throughout longer words-there is no sense of undulating rhythm as in a typical stress language. There is but one initial trochee. The evidence for this comes from the following:

1. Vowel reduction to a high vowel or schwa in $\sigma_{2}$ position [(C)VCV]
2. Post-sonorant syncope [(C)VSㅡ]

## 3. $/ \mathrm{g} /$ spirantization $[(\mathrm{C}) \mathrm{VgV}]$

I will discuss each in turn below.

### 3.6.1 Vowel reduction

In section 3.5.1, we came across trisyllabic stems where the vowel in the second syllable was a high vowel, not a prototypical harmonic pattern. I argue that this arises from the metrical system of Tommo So, where the second syllable is a metrically weak position. It receives less emphasis than the syllables around it, and hence this position is prone to vowel reduction.

In rapid speech, the vowels in this position sound like [ə]; ex. [sógóró] 'creak'. However, when you ask particularly younger speakers to slow their speech down, this schwa is replaced by a high vowel, generally [u]. It seems that the metrical system has caused a reanalysis of vowels in the second syllable position of some verbs, though this is not true for all verbs. For example, /bògól'/ 'make a fuss' does not show this reanalysis, though its second syllable is also weak. I hypothesize that this is a change in progress, since speakers who are still alive today say words like 'creak' as fully harmonic [sógóró].

### 3.6.2 Vowel syncope

Vowel reduction taken one step further is vowel syncope, and this also occurs in the second syllable position. The rule is post-sonorant syncope, a process that applies only in verbs and their verbal nouns. This process targets any vowel in the position $\left(\mathrm{C}_{1}\right) \mathrm{VC}_{2-}-\mathrm{C}_{3}$, wherein $\mathrm{C}_{2}$ is a coronal sonorant $/ \mathrm{l}, \mathrm{r}, \mathrm{n} /$ and $\mathrm{C}_{3}$ is a suffix-initial coronal stop $/ \mathrm{t}, \mathrm{d}, \mathrm{n} /$ or $/ \mathrm{y} /$. (xx) summarizes the necessary conditions for verbal post-sonorant syncope (cf. Heath 2008 for the same process in Jamsay):

## (39) Verbal post-sonorant syncope

A short vowel is deleted (syncopated) when...
a. It is in the metrically weak second syllable of a CVCV stem.
b. It is preceded by coronal sonorants $/ 1, \mathrm{r}, \mathrm{n} /$.
c. It is followed by a suffix-initial coronal stop $/ \mathrm{t}, \mathrm{d}, \mathrm{n} /$ or by $/ \mathrm{y} /$.

Suffixes triggering this syncope are the habitual /-d $\grave{/}$, the experiential perfect suffix /-tíyé/, infinitival suffix /-dìm/ and the deverbal agentive suffix /-né/. For instance:
a. kánà-dè $\rightarrow$ [kándè]
do.Impf-Impf
's/he will do'
b. wòlù wálí-n $\boldsymbol{\rightarrow}$ [wòlù wáln $\varepsilon$ ]
farming farm.Nom-Agnt
'farmer'
c. káná-dìm $\rightarrow$ [kándìm]
do-Inf
'to do'
d. kúú èrè-tíyáá= wò-m $\rightarrow$ [kúú èrtíààòm]
head braid-Exp $=$ be- 1 sgS
'I have braided (a head) [before]'

It is possible that the irregular imperfect form /yéllı̀/ of the verb /y ̀ľ́/ 'come' arose from this post-sonorant syncope, followed by regressive assimilation of the / $\mathrm{d} / \mathrm{to} / \mathrm{l} /$, as in:

$$
\begin{equation*}
\text { yélè-dè } \rightarrow \text { yદ́ldè } \rightarrow \text { [yćllı̀] } \tag{41}
\end{equation*}
$$

Note that both /yélè-d $\varepsilon$ / and /yéllı̀/ are acceptable forms today.

### 3.6.3 /g/ spirantization

A final effect of the metrical structure is $/ \mathrm{g} /$ spirantization. Velar $/ \mathrm{g} /$ often weakens to $[\gamma]$ between low back vowels when it is the onset of the second syllable in a stem. This lenition is only in the context of [a_a] or [0_0]. The context [o_o] does not trigger lenition. For example, /àgá/ $\rightarrow$ [àyá] 'morning', /òǧ̌/ $\rightarrow$ [ว̀yó] 'chief, king', but /yògó/ $\rightarrow$ [yògó] 'tomorrow' and /bògó/ $\rightarrow$ [bògó] '(dog) bark'.

This lenition is sensitive to the internal structure of a word. In morphologically complex words such as compounds or reduplicated forms, the $/ \mathrm{g}$ / will only lenite when acting as the onset of the second syllable within a stem. Thus, we see forms [tà-táfá] 'joking', but [sádágá] 'alms'. This indicates that the alignment of the trochee is also sensitive to stem structure and not to word structure.

### 3.7 Other phonological rules

The following sub-sections will discuss all other segmental phonological processes not discussed in the previous sections.

### 3.7.1 Nasalization

Nasal stops / $\mathrm{m}, \mathrm{n}, \mathrm{n}, \mathrm{y} /$ cause the preceding vowel to nasalize. Since this is such a natural process, I do not mark this nasalization except in narrow transcription when such nasalization is important.

The allomorph of the palatal nasal $\left[y^{\mathrm{n}}\right]$, however, nasalizes both the preceding and following vowels. I do not mark this in broad transcription to differentiate between contrastive nasalized vowels and those phonetically nasalized due to [ $\mathrm{y}^{\mathrm{n}}$ ]. In narrow transcription, we would see [kún $\left.y^{n} \tilde{y}^{n}\right]$ 'squirrel' or [jón $\left.y^{n}\right]$ 'drawing, design'.

If a monosyllabic nasalized stem has the derivational suffix $/-y E /$ added to it, the nasalization will spread through the glide and onto the vowel that follows it, stopping only when hitting a consonant that is not a semivowel. For instance, the nasalized stem /péén/ meaning 'old' has the slightly idiosyncratic medio-passive verb form [ $\left.p i^{n}-y^{n} \varepsilon^{n}\right]$ 'to age', and derived forms such as [pín $-y^{n} \mathrm{ya}^{\mathrm{n}}-\mathrm{d}$ d́ $]$ 'aged', with nasalization spreading all the way until the $/ \mathrm{d} / .^{3}$

### 3.7.2 Nasal place assimilation

Regressive nasal place assimilation is widespread in the language. A nasal stop will assimilate to the place of articulation of the following consonant. If the following segment is a vowel, the nasal seems to become almost a nasal sonorant $\left[y^{\mathrm{n}}\right]$ or a very far back velar nasal; there is more closure than if the vowel were simply nasalized, but the closure seems slight or very far back. This area would reward phonetic analysis.

This process is common across any stem boundary-either within compounds or between words. For instance:
a. /èm kòló/ $\rightarrow$ [èn kòló] 'fresh milk'
b. /gíyé mí = ̀̀ áwáá = wò/ $\rightarrow$ [gíyé míỳ" áwááò] 'I'm hungry' (Lit. 'hunger has caught me')
3.7.3 Presuffixal vowel raising

[^3]Before most derivational suffixes (the causative and factitive being the exceptions), the final vowel of the stem raises to [i]. The suffixes triggering this process are mediopassive $/-\mathrm{yE} /$, transitive $/-\mathrm{rE} /$ and reversive $/-\mathrm{lE} /$. Again, the stem can be a verb, an adjective, or a noun. For instance, [tóbí-yó] 'wrap a turban’ (cf. /tóbó/ 'turban'), [mùnní-ló] 'unroll pant leg' (cf. /mùnnó/ 'roll up pant leg') [úmmúgí-yé] 'sip' (cf. /ùmmùgó/ 'mouthful').

If such a derivational suffix is stacked on another one, it will change the final vowel of the preceding suffix to /i/, leaving the stem untouched. For instance, [póó-ndí-yó] 'become fat' (cf. /póó/ 'fat', or bound stem /póó-ndó/).

The same vowel raising is seen before the deverbal agentive suffix /-n $\varepsilon$ /: [sóí-n $\varepsilon$ ] ‘speaker’ (from/sóó/), [jóní-nદ́] 'healer’ (from /jònó/). Note that the tonal pattern of derived agentives is all $\{\mathrm{H}\}$.

### 3.7.4 Vowel hiatus

Unlike many languages that avoid sequences of dissimilar vowels, Tommo So has fairly unrestricted vowel hiatus. This is seen in inflected forms, adjective plus noun combinations and compounds. Examples include [sò̀̀] 's/he spoke', [ìnù èsú] 'pretty teeth (teeth sticking out slightly)', [òdò ònnú] 'throat'.

### 3.7.5 Pre-palatal vowel fronting

Before palatals $/ \mathrm{y}, \mathrm{n} /$, $/ \mathrm{u} /$ is often fronted to [i] or [ü] (IPA [y]). If the sequence in question is /uy/ within a stem, as in /núyó/ 'sing' or /kúyó/ 'first', then the /uy/ often merges simply to front-rounded [ü]; The glide element is lost and the words are pronounced [núó] and [kúź $]$, respectively, with the final $/ 0 /$ also fronting disharmonically in 'first'.

An epenthetic [u] at the end of a word before a palatal in the next word will be pronounced as [i]. For instance, /tín nàm/ $\rightarrow$ [tíni nàm] 'firewood'.

Before the diminutive suffix /-ý/ (related to the word for child /íi/, but phonologically reduced; see §4.1.8), back vowels also have a tendency to front, such that /àý/ and /ò-ý/ are pronounced closer (though not identically) to [と̌y], and /ǒy/ closer to [ěy]. For instance, /dùmbò-ý/ 'small stone' $\rightarrow$ [dùmběy], /tòndòò-ý/ $\rightarrow$ [tònděy]. ${ }^{4}$ Note that in careful speech, this fronting is not obligatory. If the back vowel is $/ \mathrm{u} /$, or epenthetic $[\mathrm{u}]$, however, it will front to /i/, creating a final rising [ǐy] or [î́], in both careful and rapid

[^4]speech, as in: /kùnn-ý/ $\rightarrow$ [kùnnǐy] 'small piece (of something)', /bòn-ý/ $\rightarrow$ [bòň̌y] 'little branch, twig'.

### 3.7.6 Derhoticization

Tommo So forbids the sequence of two rhotic $/ \mathrm{r} /$ surrounding a vowel $(/ \mathrm{rVr} /$ ), and such sequences arising from derivation are dealt with by lateralizing one or both of the offending segments in a process of derhoticization, or rhotic dissimilation. The most common occurrence of $/ \mathrm{rVr} /$ sequences arises with the addition of the transitive suffix $/-\mathrm{rE} /$ on a verb stem. The data in ( xx ) demonstrate the two ways of coping:

```
(xx)a./gòró-rE/ -> [gòrílló] Change the final /r/ to [1]
    put.hat-Trans
    'put a hat (on someone else)'
\begin{tabular}{ll} 
b. & párá-rE/ \(\rightarrow\) [pállá] \\
snap-Trans & Change /rr/ cluster to [11] \\
'snap [a string]' &
\end{tabular}
```

What determines the way in which the sequence is mended is not yet clear, nor is why the vowel of the suffix mirrors that of the stem rather than retaining the /E/ in (xxb). Perhaps in this case, the vowel syncopates between the two /r/ before the second lateralizes, yielding a forbidden [rr] cluster; this then lateralizes and the resulting bisyllabic form is reanalyzed as a root and abides by the harmonic patterns seen in verb stems, namely the second vowel harmonizes with the $/ \mathrm{a} /$ in the first syllable rather than remaining an $/ \varepsilon /$. This, however, merely pushes the problem of determining the difference between the two stems up a level, as now we would have to decide why the vowel syncopates in (xxb) and not (a). It is possible that these forms are simply lexicalized, and there is no principled reason for choosing one strategy over another.

### 3.8 Clitic phonology

Where to draw the line between a clitic and a word is often a difficult decision, and one that does not always have a large impact on the analysis of the data. However, in my grammar, I will abide by the following criteria for differentiating a clitic from a word:
(xx)

Clitic
a. No underlying tone
b. Often monomoraic
c. Cannot be focused
d. Cannot be said isolation Can be said in isolation

According to this definition, the determiner, the plural particle, many auxiliaries, and all postpositions are clitics. Tommo So has no second position clitics.

Criterion (xxb) is speculative. I have found no monosyllabic stems contrasting in length, so I posit them all to be underlyingly bimoraic (with the few exceptions already indicated above). This surfaces when the stem carries a contour tone, since both morae are needed to carry the tonal primitives, but if the stem is all H , the word may not be pronounced with maximal vowel length (since there is no room for confusion, length not being contrastive). The postpositions, however, with the exception of the demonstratives, never carry a contour tone and, in fact, seldom have underlying tone at all, the exception being the copula/object/focus marker / $\mathrm{j} /$. Furthermore, almost all of them always have a short vowel. ( xx ) shows examples of the postpositions and particles in Tommo So:

| Postposition | Uses | Example |
| :---: | :---: | :---: |
| /ne/ | Locative | /tòndòó $=\mathrm{n} \varepsilon$ / 'in the water jar' |
| /baa/ | Locative | /dúmásá = baa/ 'in Douentza' |
| /le/ | Instrumental, associative | /tàgá $=$ le/ 'with a shoe' /ú = le mí= le/ 'you and me' |
| / $1 \varepsilon /$ | Also | $/ \mathrm{mí}=1 \varepsilon$ / 'me as well' |
| /ge/ | Determiner | /èné $=\mathrm{g}$ // 'the goat' |
| /mbe/ | Plural | /tòndòó = mbe/ 'water jars' |
| /mo/ | Genitive | /péd $(\mathrm{u})=\mathrm{mo} /$ 'for the sheep' |
| /kay/ | Topic | /émmé = kay/ 'as for us' |
| / $\mathrm{j} /$ | Copula, object marker, focus marker |  |

It is clear that these particles are not suffixes, as they can be separated quite a bit from the noun they affect. For instance, all of the postpositions above can be separated from their noun by a relative clause, as in:
(46) Nùyò mí $\quad$ í $=\mathbf{g} \varepsilon=$ mbe kém tòmmò sóó $=$ j̀.
song 1sgPro know $=\mathrm{Det}=\mathrm{Pl}$ all $\mathrm{Tommo}-\mathrm{So}=\mathrm{Cop}$
'All of the songs that I know are [in] Tommo-So.'

Suffixes would not exhibit such flexibility in where they attach.
The copula clitic $/ \mathrm{j} /$ also has an allomorph [ỳ], which attaches to perfect participles in the $3^{\text {rd }}$ person singular, as in:
a. Àn-ná $=g \varepsilon$ é yìmáá =ỳ.
man-HumSg $=$ Def die. $\operatorname{Perf}=$ Cop
'The man is dead.'
b. bòndáá $=$ ỳ
become.holed.Perf=Cop
'[it] has a hole in it'

This allomorph is not seen elsewhere, though there is always some variation between a true palatal nasal $/ \mathrm{n} /$ and its allophone $\left[\mathrm{y}^{\mathrm{n}}\right]$.

## Chapter 4 Tone

### 4.1 Introduction

Tommo So has two of what I call tonal primitives, the tonal building blocks of the language: $\mathrm{H}[\mathrm{igh}]$ and $\mathrm{L}[\mathrm{ow}]$. These can combine to make two contour tones: $<\mathrm{HL}>$ (falling) and $<\mathrm{LH}>$ (rising). Unlike some Dogon languages, Tommo So lacks the tritonal "bell-shaped tone" (Heath 2008) < LHL>. The one exception may be an ideophone, /bèzèm/ 'newborn', but this word is also unusual in its excessive vowel length. It is unsurprising that the exception should be an ideophone, since as noted earlier, this class of words often has exceptional phonological features (Heath, ms.).

Each tonal component must be mapped to a mora; thus, no light (monomoraic) syllable may be pronounced with a contour tone. Nonetheless, there is no restriction on the number of tones underlyingly associated with a stem, so in certain occasions, evidence arises for underlying contours on light syllables. See section 4.3.4.

In addition to these sequences of H and L tones, Tommo So also allows the absence or underspecification of tone to persist to the surface. Tonal underspecification is constrained to clitics, suffixes, and epenthetic vowels. See section 4.3.

A word about transcription conventons: I use curly brackets (\{\}) to represent a word- or stem-level tonal melody. Thus, $\{\mathrm{LH}\}$ refers to monosyllabic words with a rising tone, disyllabic LH words, trisyllabic LLH words, etc. Angled brackets ( $<\gg$ ) represent a contour tone, two tones on a single syllable. Thus $\mathrm{L}<\mathrm{LH}>$ would refer to a disyllabic word with L on the first syllable and a rising tone on the second syllable. Unless otherwise stated, sequences of tones like LH or HLL are meant to indicate one tone per syllable.

### 4.2 Lexical tone patterns

This section deals with the tone patterns of underived, uninflected stems, both nominal and verbal. The tone patterns reported here are surface tone patterns of bare stems (in the case of nouns) or stems in inflections that do not alter underlying tone (in the case of verbs). In some cases, we have evidence of a mismatch between surface and underlying tone. I will make a mention of such stems in what follows.

Since their tonal patterns often differ, we may separate native Tommo So stems from loanword stems. Nonetheless, even given these differences, the generalization holds that all nominal stems (nouns and adjectives) must have at least one H -toned syllable, and may not have two non-contiguous H tones. That is, the sequence $\{\mathrm{HLH}\}$ is banned within a stem, as is a stem with an all $\{\mathrm{L}\}$ melody.

### 4.2.1.1 Native stems

All native stems must belong to one of two over-arching stem melodies: $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$. Examples of $\{\mathrm{H}\}$ stems are as follows:

|  | Noun | Adjective |  |  |
| :--- | :--- | :--- | :--- | :--- |
| H | díí | 'water' | póó | 'fat' |
| HH | góró | 'hat' | súnnó | 'moderately plump' |
| HHH | dégélé | 'measles' | ságárá | 'young' |

$\{\mathrm{LH}\}$ stems are interesting in that there is no automatic tone mapping mechanism. That is, we cannot say that $\{\mathrm{LH}\}$ is mapped onto a stem from left to right, yielding tone patterns $<\mathrm{LH}>, \mathrm{LH}, \mathrm{LHH}$, etc., or from right to left, yielding $<\mathrm{LH}>$, LH, LLH, etc. Instead, both patterns are attested. The following gives examples of possible realizations of $\{\mathrm{LH}\}$ on nouns and adjectives:

| (xx) | Noun |  | Adjective |  |
| :--- | :--- | :--- | :--- | :--- |
| $<\mathrm{LH}>$ | nàá | 'cow' | šl | 'lightweight' |
| LH | sàdáá | 'bird' | pàlá | 'long' |
| $\mathrm{L}<\mathrm{LH}>$ | tòndòó | 'water jar' | gàmbàá | 'some' |
| LHH | kògódó | 'shell' | pàdíyé | 'bad' |
| LLH | tègèlé | 'wide bowl' | sògòló | 'multi-colored' |

I have found no cases of a trisyllabic stem with a rising tone on the final syllable, but this probably has more to do with the general rarity of trisyllabic stems with final heavy syllables than with a tonotactic constraint against this melody. Derived nouns often carry this tone melody when suffixed by the diminutive /-ý/; see section 4.4.6. Of the two realizations on trisyllabic stems, LLH and LHH, LLH is more than twice as common.

Unlike verbs, there is no correlation between the initial segment of the stem and the tone pattern. Stem tone melody is entirely unpredictable.

### 4.2.1.2 Loanwords

The incorporation of loanwords, mainly from Fulfulde and French, into the Tommo So lexicon has expanded the number of possible tone melodies. Whereas all native stems had one of two melodies $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$, loanwords expand this inventory to four: $\{\mathrm{H}\},\{\mathrm{LH}\}$, $\{\mathrm{HL}\}$ and $\{\mathrm{LHL}\}$.

The realization of $\{\mathrm{HL}\}$ sequences in a word is interesting in that it appears to recruit tonal underspecification to achieve its goal. Native stems do not allow a fall from H to L , but grammatical tone does, as do sequences of enclitics between a H tone and a L tone or stem boundary. Thus, these falling melodies do exist on the surface in Tommo So, but not in a stepwise HL form, with a clean break between syllables that are H and syllables that are L. It seems that when these words were borrowed, particularly from Fulfulde, Tommo speakers heard the initial stress pattern in the language as H at the beginning and L at the end, without much regard to how the tone got from H to L -that was left up to interpolation.

## Write more later, make recordings

The $\{\mathrm{LHL}\}$ words in the language seem to come exclusively from French. Examples include:

| (xx) | kàrdándè | 'ID card' | < French carte d'identité |
| :--- | :--- | :--- | :--- |
|  | kòmàndâw | 'commander' | < French commandant |
|  | pàspôr | 'passport' | < French passport |

This tone melody seems to be the Tommo So interpretation of French final stress. Nonetheless, plenty of French loanwords take other melodies as well, such as $\{\mathrm{HL}\}$, or simply $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$.

| (xx) léčtèrè | 'letter' | $<$ French letter |  |
| :--- | :--- | :--- | :--- |
|  | sínwá | 'Chinese' | $<$ French chinois |
|  | màrtó | 'hammer' | $<$ French marteau |

4.2.2 Verb stems

Verb stems are much more restrictive in their tone melodies than nominal stems. They have only the two native melodies, $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$. Often this underlying melody is
overwritten by tonal processes involved in inflection (discussed in section 4.5), but before the participial suffixes /-gú/ and /-nú/ and the verbal noun suffix /-dìm/, the distinction becomes clear, as well as in chain forms (-AA perfect and -éé chain form, though these forms overwrite the final vowel of the stem).

Which melody a stem will take is almost entirely predictable based on the initial segment of the stem. Stems beginning in a vowel or a voiceless obstruent take the melody $\{\mathrm{H}\}$ while those beginning with voiced stops or affricate /j/ (traditionally depressor consonants) take $\{\mathrm{LH}\}$. Stems beginning with a sonorant can be of either tonal melody, making the system almost predictable rather than entirely predictable. Nonetheless, even within sonorants, there are tendencies: $/ \mathrm{n} /$ tends towards $\{\mathrm{H}\}$ melodies and $/ \mathrm{w} /$ towards $\{\mathrm{LH}\}$.
$\{\mathrm{H}\}$ stems, mono-, di-, and tri-syllabic are as follows:

## (xx)

V-initial
غ́ćn 'marry'
áwá 'catch'
ádúbá 'think'

## Voiceless-initial

| sáá | 'empty' |
| :--- | :--- |
| píyé | 'cry' |
| túgúdó | 'crumple' |

## Sonorant-initial

| yóó | 'enter' |
| :--- | :--- |
| núyó | 'sing' |
| yúrúmó | 'pity' |

$\{\mathrm{LH}\}$ stems all take L on the first syllables (regardless of weight) and H on subsequent syllables. Monosyllabic stems have a rising tone:

| (xx) | Voiced-initial | Sonorant-initial |  |
| :--- | :--- | :--- | :--- |
|  | gòó $\quad$ 'go out' | yàá | 'go' |
|  | jòbó $\quad$ 'run' | wàlá | 'cultivate' |
|  | bògóló 'bellow' | yàwálá | 'grope along' |

Often trisyllabic verbs are made up of a bound stem plus derivational suffix. An example of this is /kééní-yé/ 'listen', with transitive counterpart /kééní-ré/. The stem itself, /kééné/, cannot stand alone. Verb stems of this type can also fall into either the $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$ tonal classes.

Exceptional verb stems have been discussed before for their weight, violating as they do the bimoraic minimum. These same stems, /yè/ 'see', /gè/ 'say', and /jè/ 'take', also do not abide by the stem tone rules, since they do not have a H tone, at least in those contexts where other stems show their underlying tone. It may be the case that underlyingly, these stems are $\{\mathrm{LH}\}$ and that they simply cannot host the H due to their weight. This would predict that a light monosyllabic verb stem could be all $\{\mathrm{H}\}$ if it began with a voiceless obstruent or vowel, but no such stem exists. The closest we get is the quasi-verb/se/ 'have', which like other quasi-verbs is underspecified for tone.

Note that nouns can have tonal patterns differing from their cognate verbs. For instance, if a verb stem is $\{\mathrm{LH}\}$, its nominal cognate can be all $\{\mathrm{H}\}$, or vice versa. Examples of this include: /góó/ ‘dance’ (cf. gòó ‘dance’), /sòó/ ‘speech’ (cf. sóó ‘speak’), /àdùbú/ 'thought' (cf. ádúbá 'think'). However, they can also be the same, as in: /bòndó/ 'hole' (cf. bòndó 'be punctured') or /wàlú/ 'plow' (cf. wàlá 'farm').

### 4.3 Underspecification

As I mentioned in the introduction to this chapter, Tommo So allows certain elements to carry no tone at all. Unlike some languages, where this is true of the underlying representation but rules of spreading or insertion eliminate the underspecification before the surface, Tommo So actually demonstrates surface underspecification. What does this mean? What pitch do these syllables carry, since they must carry a pitch? Underspecification means that rather than giving the phonetics a direction (H means the F0 should be high and level, L means F0 should be low and level), these syllables simply are transition periods between surrounding specified tones; that is, the F0 interpolates from the last specified point before the underspecified syllable(s) to the first specified point after. I will give pitch tracks demonstrating this interpolation below, after describing the distribution of underspecification in the language.

### 4.3.1 Distribution of underspecification

Tommo So underspecification is for the most part restricted to grammatical elements, such as clitics, certain suffixes, and epenthetic vowels. Of these, clitics are both the most prevalent and the most audible. For a list of enclitics, see section 3.8.

The suffixes that are noticeably underspecified are the nominal ones, namely, the human singular and plural suffixes. These were introduced in section XXX for their behavior in vowel harmony and are discussed in depth in Chapter XXX.

The ubiquitous final [ $u$ ] in the language is also underspecified, though it often receives tone if the stem it is added to carries a contour tone; this contour tone is resyllabified, pushing the second tone onto the underspecified syllable. In fact, the same is true for all categories, but this is most common for epenthetic vowels. Note that the initial epenthetic vowels that harmonize with the stem do not seem to be underspecified. This could be due to the fact that though they were at one time epenthetic, they have now been learned as part of the stem, and are thus forced to carry tone. This would also explain why they participate in vowel harmony, while epenthetic [u] does not.

It is possible that many verbal suffixes are equally underspecified, but since verbal tone is most often controlled grammatically, we have no way of knowing. However, the enclitic auxiliaries /be/, /wo/, and /se/ are good candidates for underspecification, as I will show.

Other possible areas that need more study include internal syllables in \{HL\} loanwords and certain grammatical $\{\mathrm{HL}\}$ overlays. These melodies may specify H as a starting point and L as an ending point, allowing underspecification and interpolation to hold between these two points.

START AGAIN HERE; in the meantime, readers, see McPherson (2011).

### 4.3.2 Phonetic realization: Interpolation

4.3.3 Boundary tones and phrasing

### 4.3.4 Decontouring

### 4.4 Grammatical tone in the NP

The Tommo So tonal system does not contain many of the features of African tone language: spreading, shifting, floating tones, etc. Its system of grammatical tone overlays, however, is resplendent in its complexity and in its close connection with syntactic structure/grammatical role. The most complicated "tonosyntax" (Heath and McPherson, ms .) is to be found in the nominal domain, in multi-word phrases containing modifiers and possessors. This section addresses these tonal changes.

### 4.4.1 Unpossessed NPs

Before adding the complication of possessors, I will first show the tonal changes that occur when different elements in the unpossessed NP combine.

### 4.4.1.1 Adjectives

When a noun is modified by a following adjective, its lexical tone will be overwritten with an all $\{\mathrm{L}\}$ overlay in a process I call "tone lowering". Note that this cannot be the deletion of lexical tone alone, since this would result in underspecification and the interpolation of F0 over the modified noun towards the tone of the modifier. Examples of this tone lowering include the following:
( xx )a. jàndúlu 'donkey’
jàndùlù gém 'black donkey’
$\begin{array}{ll}\text { b. dámmá } & \text { 'village' } \\ \text { dàmmà díyé } & \text { 'big village' }\end{array}$

In both cases, the lexical tone ( $\{\mathrm{LH}\}$ in xxa and $\{\mathrm{H}\}$ in xxb ) is overwritten by $\{\mathrm{L}\}$ when an adjective follows. Even the underspecified epenthetic vowel [u] in (xxa) receives the grammatical L overlay. Here is where we see the motivation for all stems containing a H tone lexically. If there were any $\{\mathrm{L}\}$ lexical stems, tone lowering would not be audible in this case.

An adjective following another adjective will cause tone lowering on both the adjective and the noun:

| (xx) | jàndùlùl | gèm | díý́ | (cf xx$)$ |
| :--- | :--- | :--- | :--- | :--- |
|  | donkey.L black.L | big |  |  |
|  | 'big black donkey' |  |  |  |

Here, /díyél 'big' causes tone lowering on both 'black' and 'donkey', indicated in the interlinear gloss by ".L".

### 4.4.1.2 Demonstratives

Demonstrative determiners /nǒ/ 'this' and /ň̌/ 'that' along with the discourse-definite /kó/ or /wó/ will also cause tone lowering on the preceding words. In addition to operating on the modified noun, they will also tone lower any modifying adjectives.
( xx ) a. jàndùlù no ${ }^{5}$
donkey.L this
'this donkey'
b. jàndùlù gèm dìyè nó
donkey.L black.L black.L this
'this big black donkey'

[^5]The definite determine $/ \mathrm{g} \varepsilon /$ is not a tone controller; that is, like the numeral, it has no effect on the tone of what precedes it. Thus, we see [jàndúlu=g $\varepsilon$ ], with no tone lowering on ‘donkey’.

### 4.4.1.3 Numerals and quantifiers

Note that while a numeral does not have any effect on the preceding noun, a demonstrative following a numeral will tone lower both the preceding noun and the numeral itself:

```
(xx)a. jàndúlu tààndú-gó
    donkey three-Adv
    'three donkeys'
```

b. jàndùlù tààndù-gò nò=mbé
donkey.L three-Adv.L this $=\mathrm{Pl}$
'these three donkeys'

Numerals may also follow demonstratives. In this position, they are outside the domain of the demonstrative's tone lowering and they preserve their lexical tone:

```
(xx) jàndùlù nò=mbé tààndú-gó
    donkey.L this = Pl three-Adv
    'these three donkeys'
```

Non-numeric quantifiers such as /kém/ 'all' also do not interact tonally with the preceding elements in the NP; they are tonally independent.

```
(xx) jàndùlù gém = g\varepsilon kém
    donkey.L black=Def all
    'all of the black donkeys'
```

Here, the adjective /gém/ 'black' forces tone lowering on the noun, but the outermost modifier, the quantifier /kém/ 'all', has no effect on what precedes it.

Morphological or grammatical quantifiers go in a position after the determiner. The word /gàmbáá/ 'some', while semantically a quantifier, behaves grammatically like an adjective-it falls in the adjective slot directly after a noun and it causes tone lowering.

### 4.4.1.4 Relative clauses

Relative clauses in Tommo So are typically head internal, with the noun, adjective, and sometimes numeral in Tommo So in situ in the relative clause and other later NP elements like determiners and quantifiers after the participle. The internal head undergoes tone lowering.

| (xx) | mí báá | jàndùlù | gèm | wó | béndè $=\mathbf{g} \varepsilon$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1sgPro father.H | donkey.L black.L | 3sgPro | hit.Perf.Rel = Def |  |
|  | 'the black donkey that my father hit' |  |  |  |  |

I have bolded the pieces of the NP that would exist without the relative clause, namely, those pieces comprising 'the black donkey'. The relative clause tone lowering gives us the best indication that tone lowering is dependent on grammatical role or syntactic structure rather than on surface linear order.

If the relative clause is followed by a demonstrative rather than a definite, which is not a tone controller, then both the relative participle and the head of the relative clause are tone lowered, leaving all other elements in the clause (subject of the relative, adjuncts within the relative, even the object if it is a subject relative) with their lexical tone. For example:

| (xx) mí báá | jàndùlù gèm | wó | bèndè nó | nén. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | 1sgPro father.H | donkey.L black.L | 3sgPro | hit.Perf.Rel.L this |
|  | 'the black donkey that my father hit' |  |  |  |

The subject /mí báá/ 'my father' along with the resumptive pronoun /wó/ retain their lexical tone, while 'black donkey' and the participle 'hit' receive a $\{\mathrm{L}\}$ overlay. It is an open question whether it is the demonstrative that simultaneously controls the tone of the head and the participle, or whether the participle (or some other relative operator) controls the tone of the head and the demonstrative controls the tone of the participle.

### 4.4.2 Alienably possessed NPs

Tommo So has two classes of possession: inalienable possession, which refers only to kinship and certain other human nouns (not body parts, as in some languages), and alienable possession, which refers to everything else. While the two semantic types of possession have largely similar grammatical structures, there are subtle differences in the
tonology and differences in pronominal possession. Thus, I treat them separately here. For a more in-depth look at possession, see Chapter XXX.

### 4.4.2.1 Non-pronominal possession

In a non-pronominal genitive or possessive construction, the possessor and possessed are directly juxtaposed, with the possessor before the possessed noun. The possessor causes tone lowering on the possessed noun:

```
(xx)a. yàa-ná jàndùlù (cf. jàndúlu 'donkey')
    woman-HumSg donkey.L
    'woman's donkey'
```

b. nàá kènnè
(cf. kènné 'mouth')
cow mouth.L
'cow's mouth'

Occasionally in texts, the genitive particle $/ \mathrm{mo} /$ is used between the possessor and the possessed noun, and the tone is variable; either tone lowering may take place, or the construction can be Jamsay-like (Heath 2008), and both members retain their lexical tone:

```
(xx)a. Tò-Tónó= m> tìgé
    Tongo-Tongo = Gen last.name
    'the name of Tongo-Tongo'
    b. Móólu=m` jàw [Text 1]
    Mory=Gen fight.L
    'Mory War'
```

It may be that place names are particularly prone to forming possessive constructions with the genitive clitic. For more on the genitive clitic, see Chapter 9.
4.4.2.2 Non-pronominal possession with other modifiers

What happens if the left-to-right tone lowering of the possessor comes into contact with the right-to-left lowering of other modifiers?

With an adjective, the possessor wins, and the adjective is also tone lowered:

```
(xx) yàa-ná jàndùlù gèm
    woman-HumSg donkey.L black.L
    'woman's black donkey'
```

A numeral also is also tone-lowered if it is in the position preceding the determiner. If outside the determiner, it is outside the tone lowering domain:

```
(xx)a. yàa-ná jàndùlù tààndù-gò
    woman-HumSg donkey.L three-Adv.L
    'woman's three donkeys'
```

    b. yàa-ná jàndùlù \(=\mathrm{g} \varepsilon=\) mbe tààndú-gó
    woman-HumSg donkey.L \(=\) Def \(=\mathrm{Pl}\) three-Adv
    'woman's three donkeys'
    With a demonstrative, it is impossible to tell what is causing the tone lowering of the possessed noun, as both the possessor and the demonstrative retain their lexical tone:

| (xx) yàa-ná | jàndùlù nó |  |
| :--- | :--- | :--- |
|  | woman-HumSg | donkey.L this |

'this donkey of the woman's'

When a possessed noun is head of a relative clause, again, both the possessor and the relative participle retain their lexical tone, while the head noun is tone lowered.

```
(xx) yàa-ná jàndùlù mí béndè = g\varepsilon
    woman-HumSg donkey.L 1sgPro hit.Perf.Rel = Def
```

    '(a) woman's donkey that I hit'
    However, if it is the possessor that is the head of the relative clause, the possessor is tone lowered and in such a state, it is not able to control the tone of the possessed noun. Thus, the tone is reversed-possessor with the $\{\mathrm{L}\}$ overlay, possessed noun with lexical tone:
(xx) yàà-nà jàndúlu mí béndè = ge
woman-HumSg.L donkey 1 sgPro hit.Perf.Rel = Def
'the woman whose donkey I hit'

The possessive relationship is clear from the linear order of the possessor and possessed noun.

### 4.4.2.3 Pronominal possession

In alienable possessive constructions, the pronominal possessor was historically comprised of a pronoun followed by the genitive particle. Synchronically, this origin is still visible, though these pronominal possessive bundles have undergone some changes. The form will be discussed more in depth in Chapter XXX. Here, it is only important to note that the possessive pronouns, which follow the possessed noun, have no tonal effect on the noun:

| (xx) | jàndúlu | mm |
| :--- | :--- | :--- |
|  | donkey | 1 sgGen |
|  | 'my donkey' |  |

They typically follow the adjective, and still have no effect tonally:

```
(xx) jàndùlù gém mmo
    donkey.L black 1sgGen
    'my black donkey'
```

There is some indication that in rare cases, the adjective may follow the possessive pronoun, in which case the tone lowering of the adjective is blocked. MORE DATA

### 4.4.3 Inalienable possession

### 4.4.3.1 Non-pronominal possession

At first glance, non-pronominal inalienable possession seems identical to its alienable counterpart. In the absence of any modifiers, this is true. The possessor precedes the possessed noun, which receives a $\{\mathrm{L}\}$ overlay:

```
(xx)a. yàa-ná bàbè
    woman-HumSg uncle.L
    'woman's uncle'
```

b. Sáná bàà

Sana father.L
'Sana's father'

Note that I have seen no cases of inalienable possession using the genitive clitic. This falls in line with the possessive system of Jamsay (Heath 2008), where alienable possessive constructions always include the possessive particle with no tonal interaction between the possessor and possessed noun, but inalienable possessive constructions never do.

### 4.4.3.2 Non-pronominal possession with other modifiers

It is with modifiers that the tonal behavior of inalienable and alienable nonpronominal possessives diverge. While the alienable possessor has the ability to control the tone of an adjective or numeral that modifies its possessed noun, the inalienable possessor has no such control:

| (xx)a. | yàa-ná <br> woman-HumSg <br> 'woman's skinny | bàbè uncle.L uncle' | kómmó skinny |
| :---: | :---: | :---: | :---: |
| b. | yàa-ná <br> woman-HumSg <br> 'woman's three | bàbè <br> uncle.L <br> ncles' | tààndú-gó <br> three-Adv |

As we can see, both the possessor 'woman' and the adjective 'skinny' or the numeral 'three' have their lexical tone; only the possessed noun is tone lowered. In examples (xxa), it is impossible to tell whether it is the possessor or the adjective causing the tone lowering. However, examples with pronominal possessors below will suggest that it is the adjective.

The behavior of non-pronominal inalienable possessors with other modifiers is identical to that seen for alienable possessors above.

### 4.4.3.3 Pronominal possession

Pronominal inalienable possession is the most tonally complex and interesting of all possessive constructions, because here, we diverge from the tone lowering ( $\{\mathrm{L}\}$ overlay) controlled by all previous modifiers.

Unlike pronominal possession in alienable constructions, in inalienable constructions, the possessor is just a bare independent pronoun, and it precedes rather than follows the possessed noun. This pronoun imposes one of two tonal overlays on the possessed noun:
$\{\mathrm{H}\}$ or $\{\mathrm{HL}\}$. Which overlay is used depends on the phonological weight of the possessed noun. A noun with only two morae (either mono- or disyllabic) gets the overlay $\{\mathrm{H}\}$, while a "heavier" noun with three or more morae will get $\{\mathrm{HL}\}$. The break between H and L occurs after the first mora. For example:


The fact that the shift from H to L happens after a single mora makes it difficult to argue that the underlying overlay for all words is $\{\mathrm{HL}\}$ and that 1-2 mora words simply do not have enough room for both tones.

This moraic division is a good testing ground for whether nasal plus stop clusters constitute a coda nasal (moraic) plus an onset stop or whether the whole cluster acts a prenasalized stop onset. The answer is the latter. A form like [nínju] 'uncle (mother's brother)' will take the all $\{\mathrm{H}\}$ overlay rather than $\{\mathrm{HL}\}$, suggesting that $/ \mathrm{n} /$ does not contribute a mora. Nonetheless, since the last vowel is epenthetic, there is the possibility that it is not visible to the mora count and that /nínj/ is still bimoraic. A better test would be a word like /ámbá/ 'god', but unfortunately this is possessed alienably and no such inalienable word exists.

Interestingly, tone can differentiate between a $\mathrm{N}+$ Adj combination that has been lexicalized versus one that is productively put together. For example, /nàà díyé/, literally 'big mother', means 'aunt (older sister of mother)'. It its unpossessed form, it has the tone pattern of any noun plus modifier, with tone lowering on /náá/ 'mother'. However, when possessed by a pronoun, it takes the $\{\mathrm{HL}\}$ melody of a heavy word. A true $\mathrm{N}+$ Adj combination would show the adjective overpowering the tonal melody of the possessor; that is, the possessed noun would receive $\{\mathrm{L}\}$ tone from the adjective rather than $\{\mathrm{H}(\mathrm{L})\}$ from the possessor. Compare the following:
(xx)a. mí náà-dìyè

1sgPro mother-big.HL
'my aunt'
b. mí nàà kómmó

1sgPro mother.L skinny
'my skinny mother'

In (xxa), the supposed $N+$ Adj combination takes a $\{H L\}$ overlay, the same as any underived word, whereas in (xxb), the adjective imposes $\{L\}$ on the possessed noun 'mother' while retaining its own lexical tone.

So it is that the inalienable pronominal possessors cannot extend their domain of tone control past the possessed noun, and that other tone controllers like relative clauses and adjectives can easily override them. More data.

### 4.4.4 Compounds

Most noun-noun compounds in Tommo So also show tone lowering on the first stem. If The compound has more than two elements, only the last retains its lexical tone, all nonfinal stems being tone lowered:

```
(xx)a. èm kỳró (cf. ém)
    milk.L calabash
    'milk calabash'
    b. màlbà dùmmò pógúru (cf. màlbá, dúmmó)
    gun.L butt.L belt
    'leather strap around the butt-end of a rifle'
```

Some other compounds, which I call pseudo-genitive compounds, look as though they are possessive constructions, with non-initial stems tone lowered:

```
(xx) ín\varepsiloń sòm (cf. sóm)
    iron horse.L
    'bicycle'
```

Tommo So also has a fairly productive system for deriving bahuvrihi compounds with $\mathrm{N}+$ Adj combinations. Unlike traditional bahuvrihi compounds, which have a null head (i.e. 'blackbeard'), Tommo So bahuvrihi compounds are used like adjectives in and of
themselves. In these compounds, the first element, typically a noun, has lexical tone, and the second has a $\{\mathrm{HL}\}$ overlay with H extending to the last mora:

```
(xx)a. ánu ógù (cf. ógu)
    foot fast.HL
    'fast-footed'
b. kènné pálà (cf. pàlá)
mouth long.HL
'pointy-snouted'
```

Note that this is the only $\{\mathrm{HL}\}$ overlay that does not make the change from H to L after the first mora.

For more on compounds, see section XXX.

### 4.4.5 Suffixed forms

There are two nominal suffixes (not counting deverbal suffixes) that cause tone changes on the stem it is added to. These are /-gú/, a suffix added to a noun X to derive an adjective meaning 'characterized by X ', and the diminutive $/-\hat{y} /$. Both cause the noun stem to be tone lowered:

```
(xx)a. kùlò-gú (cf. kúló)
    hair.L-Adj
    'hairy'
    b. k\grave{rò-ý (cf. kòró)}
    calabash.L-Dim
    'little calabash (dipper)'
```

Both suffixes are productive.

### 4.4.6 Tonology of decimal numbers

Though not strictly nominal, the multiples of ten in Tommo So show what is arguably the only case of tonal polarity I am aware of in the language. The decimal numbers are made by combining a derivative of the word for ten /pél/ and the number it is multiplied by. Here, however, the tone of the ten derivative is based on the first tone of the
multiplying number. If it is H , 'ten' is tone lowered (20, $60,70,80,90$ ). If, however, the first tone of the multiplying number is L , then 'ten' retains its H tone and the multiplying number is tone lowered $(30,40,50)$ :
(xx) pélú 'ten'

| pè $\varepsilon$-néé 'twenty' | 2 | néé |
| :--- | :--- | :--- |
| pé-rààndù 'thirty' | 3 | tààndú |
| pé-này 'forty' | 4 | năy |
| p $\varepsilon$-ǹnò 'fifty' | 5 | ǹnó |
| pèlù kúlóy 'sixty' | 6 | kúlóy |
| pè-sóy 'seventy' | 7 | sóy |
| pè-gágìrà 'eighty' | 8 | gágìrà |
| pè-túww' 'ninety' | 9 | túwwó |

For further discussion, see section XXX.

### 4.5 Grammatical tone in the verbal domain

While verb stems have the lexical tone patterns described earlier in this chapter, often these are obscured by tonal overlays associated with different inflections and derivations. By and large, derivational morphology that is not category changing will not involve tone changes, while category-changing derivation or inflectional morphology will. The fact that lexical tone is obliterated does not hinder understanding, since the predictability of lexical tone means that there are little to no tonal minimal pairs in the language.

### 4.5.1 Derivational morphology

Derivational processes can also be divided into those that change the tone of the verb stem and those that cause no tonal effects. Generally, this division coincides nicely with those derivations that change the category of the verb (agentive, gerundive, and other deverbal derivations) and those that simply change the argument structure (causative, mediopassive, etc.), with the former changing the tone and the latter leaving the tone of the stem intact.

Without exception, valence-changing derivational suffixes, whose resulting forms are also verbs, do not induce any tonal changes on the stem. The suffixes in question are causative /-mó/, factitive /-ndV/, mediopassive /-yE/, transitive /-rE/ and reversive /-lE/.

Additionally, the suffix /-dìm/, which forms the infinitive, changes neither the tone nor the vocalism of the verb stem. The only changes which may take place with the addition of these derivational suffixes is the decontouring of monosyllabic \{LH\} stems (i.e. /gòó/ 'go out' $\rightarrow$ [gòò-ndó] 'take out'), but this is phonological rather than grammatical tone.

Deverbal derivation, on the other hand, often overrides the lexical tone of the verb stem. The table in ( xx ) shows three different deverbal derivations with their respective tone patterns.
(50)

| Derivation | Tone pattern | Suffix | Change in final <br> vowel | Example <br> /jòbó/ 'run' |
| :--- | :--- | :--- | :--- | :--- |
| Agentive | $\{\mathrm{H}\}$ | - né | -i | jóbí-né 'runner' |
| Gerundive | $\{\mathrm{H}\}$ | -lé | -i | jóbí-lé 'running' |
| Infinitive | $\{\mathrm{LH}\}$ | -yé | -i | jòbí-yé 'to run' |

Note that the cognate noun forms of verbs (i.e. 'sale' from 'to sell,' 'aid' from 'to aid') have unpredictable, lexically determined tone patterns; they may be the same as the lexical tone of the verb or they may differ. There is rule that assigns them tone based on the tone of the verb.

### 4.5.2 Inflectional morphology

While most inflections do change the tone of the verb stem, the following forms, mainly participles, do not, even if they do change the vocalism. The table in (xx) shows the inflections with an example of both a $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$ verb stem.

| Inflection | Suffix | Change in final vowel | 1? Example |
| :---: | :---: | :---: | :---: |
| a. Present participle | /-gú/ or /-nú/ | -- j | káná-gú ‘doing/making’ jòbó-gú 'running' |
| b. Perfect chain form | -- | -áá | kánáá 'done/made’ <br> jòbáá 'ran' |
| c. Imperfect chain form | -- | -éé | kánéé 'do/make [and] jòbéé 'run [and]' |
| d. Hortative | /-mó/ | -- n | núyó-mó 'let's sing' |


| e.Imperfect $/-\mathrm{d} \varepsilon ̀ / ~$ ébé-d $\varepsilon ̀ ~ ' t h a t ~[I] ~ w i l l ~ b u y ' ~$ |  |
| :--- | :--- | :--- |
| relative participle | bògó-d $\varepsilon$ 'that barks' |

Those moods and aspects shown in (xx), however, do come with a tonal overlay that overrides the lexical tone of the stem.

| Inflection | Stem tone pattern | Suffix | Change in final vowel | Example |
| :---: | :---: | :---: | :---: | :---: |
| Aff. imperfect | \{HL \} | /-dè/ | -- | kánà-dè 'he does' jóbò-dè 'he runs' |
| Neg. imperfect | \{LH\} | /-lè/ | -é | kàné-lè 'he does not' jàbé-lè 'he does not run' |
| Aff. perfect (focused) | \{L\} | -- | -E/i | Kànì 'he did' jòbè 'he did' |
| Neg. perfect | \{L\} | /-lí/ | -- | kànà-lí 'he did not do' jòbò-lí 'he did not run' |
| Aff. Imperative | \{H\} | -- | -- | káná ‘do!’ <br> jóbó 'run!' |
| Neg. imperative | \{L\} | /-gú/ | -- | kànà-gú 'don't do!' <br> jòbò-gú ‘don’t run!' |

### 4.6 Phonetic realization of tone

Tommo So tone is subject to typological usual phonetic effects, including consonant and vowel effects, downdrift, and declination.

### 4.6.1 Consonant and vowel effects

Consonants and vowels can have minor effects on the F0, and the trends displayed by Tommo So are what we see in many languages. Voiceless consonants and high vowels tend to raise the pitch slightly, while voiced consonants and low vowels tend to lower the pitch. Note that the consonant effects have been phonologized in the verbs into the two tone
classes $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$. While the phonetic effect is still there in nouns, it has not been phonologized.

### 4.6.2 Declination

Like most (if not all) languages, tonal or otherwise, Tommo So pitch across an utterance will tend to fall; both H tones and L tones get lower as the utterance draws to a close. This is effectively a modification of the "phonetic backdrop" (CITE) onto which the tones are placed. These declination lines form a sort of guideline for the realization of tone. We will see this illustrated in the pitch tracks below.

[Àà, ìdémbé yàmmé mómbú $=\mathrm{g} \varepsilon$ gàà bí- $\varepsilon^{n}$ wa mè, ] [jòmó wa nòn-gó-núc gì wà dè.] $]_{\mathrm{I}}$ '[They said], ah, they had met the other day, but Hare had said like that (that it wasn't good).'

Figure 1
The domain of declination is the intonational phrase. An utterance usually consists of a single intonational phrase in Tommo So, but it may consist of more than one, and in this case, we find a reset of the phonetic backdrop between the two. This is shown in the pitch track above. We can see that the first H tone in the second intonational phrase is higher than the last H tone in the first.

### 4.6.3 Downdrift

Downdrift, also known as automatic downstep, is the phenomenon wherein the second H in a HLH sequence is pronounced at a lower pitch than the first. This is a less general phonetic effect than either consonant effects or declination. It acts to reset the H
ceiling; any subsequent Hs will not be any higher. Note that this is not the same thing as non-automatic or phonemic downstep, which can occur with a sequence of two Hs. Nor does this effect occur if there is only a LH in the phrase-the initial H is crucial.

The domain of downdrift is a smaller phrase than that of declination, perhaps equivalent to the phonological phrase or minor phrase of certain theories (CITE). Crucially, this phrase is smaller than the utterance or the intonational phrase, as downdrift can be reset several times within a sentence. This is demonstrated by the pitch track below. The dashed lines indicate what I will call phonological phrase boundaries, marked by L- boundary tones, as discussed in section XXX. Looking at the second phonological phrase, we see that the second H in the sequence [jángu jàngá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon$ ] 'who studies' is significantly lower than the first H , almost at the same pitch level as the preceding L. This is characteristic of Tommo So downdrift, exhibiting what is referred to as "total" or "near-total" downdrift. This means that the H ceiling that is set after a HL is barely higher than the L before it.

What is important to notice is that the H on /isé/ 'dog' in the next phonological phrase is higher than the ceiling set by downdrift. That is because this F0 effect is bounded by the phonological phrase, and each forms its own domain. The ceiling is reset to base level at each boundary.

[àràmàtà Dúmásá $=$ baa][jáygú jà ggá-d $\varepsilon=\mathrm{g} \varepsilon$ ][ìsé wó $=\mathrm{mo}][$ díe-gò bógò-d $\varepsilon$ ]
'Ramata who studies in Douentza, her dog barks a lot.'
Figure 2

To better illustrate how both downdrift and declination work, consider the following schematization. In (a), we see the sentence from Figure 2 with its distribution of H, L and underspecified tones. In (b), H and L are mapped as targets onto the guidelines set up by declination. These are connected by interpolation in (c), where downdrift is added, then consonant and vowel effects in (d) connect the idealization to the actual data from Figure 2.

The end result of these phonetic processes is that the tone contours shown by a pitch tracker look very little like our ideal phonological understanding of the tone system. Many low level rules, regular though they might be, contribute to the seemingly random jumps in pitch in actual spoken language.
a. aramata dumasa $=$ baa $]_{\Phi}$ jangu janga- $\left.\mathrm{d} \varepsilon=\mathrm{g} \varepsilon\right]_{\Phi}$ ise wo $\left.=\mathrm{m} \supset\right]_{\Phi}$ di $\varepsilon$-go bogo-d $\left.\left.\varepsilon\right]_{\Phi}\right]_{\perp}$

LLLLHHH $\varnothing$ L HH LH $\varnothing \varnothing$ L L H H $\varnothing$ L HLLHLL L
b.


c.

d.
 i se wo modic gobogod $\varepsilon$

Figure 3

## 5 Nominal, pronominal, and adjectival morphology

This chapter deals with the morphology of nouns, pronouns, adjectives and numerals. It treats such topics as reduplication and nominalization, along with various affixes associated with each category. For treatment of how nouns combine with modifiers such as adjectives and numerals, see Chapter 6.

### 5.1 Nominal morphology

This section will discuss the morphology of noun stems; I will defer the treatment of nominal compounds to chapter 5 and of the morphosyntax of possessive constructions to chapter 6. Like most Dogon languages, Tommo So has minimal nominal morphology as compared with its verbal morphology. There is, however, a distinction between human and non-human nouns, which is marked suffixally, as well reduplication, a diminutive suffix, and a frozen prefix $/ \mathrm{aN}-/$, whose original meaning is hard to identify.

### 5.1.1 Human suffixes

Most simple nouns have very little morphology; plurality and definiteness are marked with clitics, briefly introduced in section 3.XX. However, there is a class of nouns denoting humans that make a singular/plural distinction with affixes. These suffixes were first introducd in section 3.XX, but I review them here:

| (64) | Human singular |
| :--- | :--- |
| Human plural | $-\mathrm{n} \varepsilon$ |
|  | $-m$ |

While Tthe singular suffix is most often pronounced [-nを], leading me to posit it as the underlying form, in certain cases it surfaces as [-nっ] or [-na], in harmony with the backness of the stem vowels; in one instance it even surfaces as /-nu/ in /nàà-nú/ 'master/owner'.

Note that there is no ATR harmony. The most productive use of the singular and plural suffixes is in nominal derivation, which I will discuss in section 5.2.

Often the plural suffix $/-\mathrm{m} /$ is inaudible, since it is often coupled with the plural clitic / = mbe/ regardless of whether the noun is human or non-human, as in /dj̀ǧ̌($\mathrm{m})=\mathrm{mbe} /$ 'Dogon people'. The presence of the /-m/ suffix can sometimes be deduced by tonal pattern, as in the following tonal minimal pair:

```
(xx)a. mí tíŕ́= mbe
    1sgPro grand.person = Pl
    'my grandparents'
    b. mí tírè-m=mbe
    1sgPro grand.person-HumPl=Pl
    'my grandchildren'
```

In (xxa), the bare stem /tír $\varepsilon /$ refers to grandparents, and since it is only two morae, it takes the $\{H\}$ overlay in inalienable pronominal possession (see section XXX). In (xxb), the same stem is suffixed, in which case it takes the meaning 'grandchild'. In the presence of the plural clitic $/=\mathrm{mbe} /$, the plural suffix $/-\mathrm{m} /$ is inaudible, but its presence adds a mora, which results in 'grandchildren' taking a $\{\mathrm{HL}\}$ tonal overlay.

Sometimes the plural /-m/ will even be omitted in the presence of the plural clitic if something intervenes between the head noun and the clitic. For example, with a pronominal possessor between the noun and the clitic, the suffix is omitted: /àná úwo=mbe/ 'your men' (*àná-m, see below for more information on 'man').

In the case of 'Dogon' and 'chief', the final light syllable has a rising tone that can only be realized when suffixed; these are examples of tone crowding, discussed in section XXX. Since the suffixes are underspecified for tone, they allow the docking of this unlinked tone. Note that in the plural, the H is on the final $/-\mathrm{m} /$ rather than rising on the nucleus $/ \mathrm{o} /$, as in [dı̀gə̀ḿ]. The rise simplifies to a H on the final syllable of suffix-less adjective [dògó] 'Dogon'. Other nouns that follow this pattern include:

| (xx) | Gloss <br> 'slave' | Related stem gùnnó | Singular gùnnò-nó | Plural gùnnò-ḿ |
| :---: | :---: | :---: | :---: | :---: |
|  | 'visitor' | yòùnjú | yòùnjù-nદ́ | yòùnjù-ḿ |
|  | 'orphan' | àbìyé | àbìyè-né | àbìyè-ḿ |
|  | 'leper' | dùmbú | dùmbù-né | dùmbù-ń |

5.1.2 Irregular nouns (woman, man, child, girl, boy, person)

As in many languages, some of the most common human words in Tommo So are the most irregular. Compared with other Dogon languages, woman and man are fairly regular. They take the singular suffix [-na] rather than [-ne], and the final vowel of 'man' syncopates between the two $/ \mathrm{n} /$. Thus we see [yàa-ná] 'woman' (from /yàá/) and [àn-ná] 'man' (from /àná/). Recall from section XXX that tonal underspecification is derived on the second half of the stem in 'woman' due to the reassignment of the tones involved in the rising contour.

When modified by a suffixed adjective, these nouns can either retain their suffixes or be suffixless, as is seen in (xx). Note that the unsuffixed form is only considered acceptable in the singular.

| (xx) | Gloss | Singular | Plural |
| :--- | :--- | :--- | :--- |
|  | 'single woman' | yàà(-nà) kúm-nっ | yàà-m kúm=mbe |
|  | 'old woman' | yàà(-nà) p pè-n $\varepsilon$ | yàà-m p -m |

For those compounds in which 'man' or 'woman' may be unsuffixed, see section XXX.
The word for child is the most irregular noun in the language. In the singular, it is unsuffixed /í1/, but the plural has the suppletive form /úlùm/. If 'children' is definite, the noun will retain its final nasal, presumably historically a plural suffix, even though the definite clitic $/ \mathrm{g} \varepsilon /$ intervenes between it and the plural clitic, yielding /úlùm $=\mathrm{g} \varepsilon=\mathrm{mbe} /$.

The related words for 'girl' and 'boy' show further irregularity.

| Gloss | Singular | Plural |
| :--- | :--- | :--- |
| 'boy' | àn-nà-ý | [ànnǎy] | ànà úlùm

'Boy' is simply the diminutive form of 'man', locking the lexicalized singular suffix into the middle of the word. For a discussion of the diminutive, see §4.1.8. The plural form 'boys', however, behaves exactly as a compound of unsuffixed /àná/ 'man' and the irregular plural /úlùm/ 'children'. 'Girl' is more irregular. It does not pattern like 'boy' (*/yàà-nà-ý/), nor is it simply a diminutive of unsuffixed /yàá/ (*/yàà-ý/). Rather, it appears to be made of a merger of /iì yàá/ 'female child' with the vowel of /yàá/ shortening before the diminutive /-ý/ to avoid a super-heavy syllable. /íi/ is also reduced. The plural patterns like 'boy'.

Finally, /ǹd $\varepsilon /$ 'person' does not take the singular human suffix, but it does take the plural, as in /ǹdé-m tààndú-gó/ 'three people'. Unlike some Dogon languages, /kídé/ 'thing' (though not human) is regular.

These human nouns are not just irregular in their morphology. They are also irregular in that all are treated as alienable nouns for the purposes of possession, despite other human nouns being possessed inalienably. For example, we see /íi ńmo/ 'my child' rather than /mí íl/. We already saw such an example for 'men' above in 'your men', which took the alienable pronominal possessor /úwo/ for 'your' rather than preposed inalienable possessor /ú/.

### 5.1.3 Human suffixes on kinship terms

The number of kinship terms that always take singular and plural suffixes is small. (xx) lists all known forms:


In (xxc-d), the addition of the suffix creates the reciprocal child member of grandparentgrandchild pairs. However, the suffixed /tíré-nદ/ form is not always used. In the example sentence 'I have a grandchild,' my consultant gives me [tìrè íí yé = sè-m], saying that /tírén $\varepsilon$ / in this case is possible, but not optimal. Also, grandparents may refer to their grandchildren as simply /tíré/, though the opposite is not true; grandchildren will not refer to their grandparents as /tíré-nع/.

We also see in the examples above that the terms for cousins and 'sister's child' are derived much in the same way as 'girl' and 'boy', but with a human suffix at the end in the singular.

In one instance, only the possessed form is suffixed. See below:

| (xx) | Gloss | Unpossessed | Possessed |
| :--- | :--- | :--- | :--- |
|  | 'cross-cousin' | tìy ${ }^{\text {n }}$ | tî̀-n |

It should be noted that while the term for paternal aunt /nìné/ contains the string /né/, this is not segmentable as the singular suffix; the plural is not /nì-m/, but simply /nìné/ with the plural clitic.

### 5.1.4 So-and-so

A final issue for human nouns is how speakers refer to someone when they either do not know or do not wish to use the person's name. When a speaker refers to someone or something whose name they have forgotten, they use the word /kíd $\varepsilon$ / 'thing'. On the other hand, if the speaker knows the name of the person he or she is referring to but does not choose to use it, he or she will use /máàn/ rather than /kídé/. For instance:

```
(xx) Máànu gìn \(=n \varepsilon \quad\) yàà \(=\) bé-m.
    so-and-so house. \(\mathrm{L}=\mathrm{Obl}\) go. \(\mathrm{Perf}=\) was- 1 sgS
    'I went to so-and-so's house.'
    Mòtò nó máànu \(=\mathrm{mo}=\) ỳ.
    moto. L this so-and-so \(=\) Poss \(=\) Cop
    'This moto is so-and-so's.'
```


### 5.1.5 Nominal reduplication

Reduplication in Tommo So nouns most often involves an initial reduplicant. Both initial CV- and full stem reduplication are possible; the two forms are in free variation for most reduplicated nouns.

The tone of the initial reduplicant is usually L. Examples include [kà-kàlú] ~ [kàlùkàlú] 'lie'; [tò-tòló] ~ [tòlò-tòló] 'hole'; [tò-tóりó] ~ [tòyò-tóyó] (village name). Examples of H -toned reduplicants include [kí-kíndé] 'soul' or XXX. It is often the case that H-toned reduplicants are CV and that there is no full stem reduplicant equivalent. It could be that these are no longer segmented as reduplicants and so they do not need to take the usual reduplicant L tone. However, segmental cues still exist, such as the word-internal $/ \mathrm{k} /$ in 'soul' that indicates that the word must be (or have been) morphologically complex.

In some cases, there is no equivalent unreduplicated form (*/kàlú/) and in others, the noun stem is acceptable unreduplicated with no change in meaning (/RED-tòló/ ~ /tòló/ 'hole').

Another less common reduplication pattern takes the form STEM-mà-STEM. This is most often seen in plant and animal names, though a few instances are seen in other domains. (xx) lists all such words present in the data:
(xx)
a. bégu-mà-bégu 'hiccup'
b. bธิ̀oั̀-mà-bốว์
c. áy yógu-mà-yógu
d. jígu-mà-jígu 'wind scorpion'
e. óru-mà-óru 'blister beetle'
f. séy-mà-séy 'Oedaleus senegalensis (grasshopper species)'
g. péru-mà-péru 'Pseudosphingonotus canariensis (grasshopper species)'
h. dóru-mà-dóru '(unidentified grasshopper species)'
i. tógu-mà-tógú 'praying mantis'

Notice that in every case but (xxb), the stems on either side of the /-mà-/ are H-toned. It is not clear whether the absence of $\{\mathrm{LH}\}$ stems is significant or just a gap in the data.

### 4.1.6 Expressive triple iteration

There are a small number of cases in which nouns and adjectives have a triple iteration pattern x́-x̀-x with the vocalism of the middle element changed to all /a/. Often such forms are onomatopoeic, such as /hóó-hàà-hóó/ 'hubbub' or /kóró-kàrà-kóró/ 'mad scramble, sudden frenzy'.

The same iteration is seen in some adverbials like /bílé-bàlà-bílé/ 'crooked in several places' or /déé-dàà-déé/ 'face to face'.

This same iteration pattern is found in Jamsay (Heath 2008) and could be related to the the x́-mà-x́ reduplication pattern seen above.

### 5.1.6 Diminutive

The diminutive suffix /-ý/ is widely used in Tommo So. It is derived from the word for child /íí/, both semantically and morphologically: added to noun X, it creates "little X", and it induces tone lowering on the preceding noun, exactly as if a compound had been created with /íi/ (widely attested in tree-seed relations or if a piece of equipment has a large part and a small part; see section XXX). It is not simply such a compound, however, since the plural form is entirely regular as opposed to using the suppletive plural form of 'child' /úlùm/. Compare (xxa) and (b).
a. $\begin{array}{ll}\text { ènjè íí 'chick' } & \text { ènjè úlùm 'chicks' } \\ \text { pèdù íí 'lamb' } & \text { pèdù úlùm 'lambs' }\end{array}$,
b. kòrò-ý 'little calabash' kòrò-ý = mbe 'little calabashes' dùgò-ý 'bead' dùgò-ý= mbe 'beads'

The diminutive is suffixed to the noun and thus becomes part of the prosodic word. This means that if it is added to a final long vowel, the vowel must be shortened to avoid a superheavy syllable:
a. /tòndòò-ý/ $\rightarrow$ [tòndǒy] 'little water jar'
b. /tànnàà-ý/ $\rightarrow$ [tànnǎy] 'little stick'

As noted in section XXX, the final vowel will front before the palatal $/-y /$, even if that vowel is epenthetic:
a. pòlú 'knife'
[pòlì-ý] 'little knife'
b. tòndòó 'water jar'
[tòndè-ý] 'little water jar'
c. kòró ‘calabash’
[kòrè-ý] ‘little calabash’

### 5.1.7 Frozen initial aN- in nouns

A few nouns in Tommo So, as in Jamsay (Heath 2008), have a frozen prefix /aN-/ (occasionally /a-/), no longer productive in the language. This is most clearly noticeable when the morpheme is followed by a voiceless stop, since this combination is otherwise forbidden stem-internally. Often these words can be traced to another verb or noun, though for some, their origins have been lost with time.

| Gloss $\quad$ Noun | Related stem |  |  |
| :--- | :--- | :--- | :--- |
| a. 'hunter' àn-tólú | táálá | 'hunt' |  |
| b. 'handful of food' àn-kòmmó | kómmó | 'contract, shrivel' |  |
| c. 'residue left àn-tóygó | tóngó | 'repound' |  |
|  | from the first winnowing <br>  <br>  <br> of millet spikes' |  |  |

d. 'traditions' à-témbu 'témbé' 'find'
e. 'tiny splinter-like à-sógó
chaff of young
millet grains'

While in some cases (xxa,c), the semantic connection is clear, in cases like (b) it takes more of an imagination to see how 'contract, shrivel' could lead to a squeezed handful of food. In (xxd), we could imagine that customs or traditions are things we find, left from the ancestors, though this is a stretch. There is no clear origin of the prefixed noun in (xxe).

The word for European, common to many languages of West Africa, seems to have been interpreted to have this prefix. In Tommo So, it is /àn-sáárá/ (cf. Moore nasara, etc.).

### 5.2 Nominalization

The other way in which single nouns may carry affixes is when they are derived from other grammatical categories, such as verbs and adjectives.

### 5.2.1 Deverbal derivation

There are many ways of deriving nouns from verbs. Sometimes the different morphological processes are correlated with different semantics, but at other times, it simply depends on the verb stem which method is used, or two morphological changes may result in largely the same meaning (in the case of the gerundives). I will begin with a discussion of the derivation of cognate nominal, which can be marked either by a tone change alone or by the deletion of the final vowel of the stem (sometimes filled in with /-w/ or /-y/ on monosyllabic verbs), then move on to the closely related topic of instrumental nominals, followed by a discussion of gerundives and infinitives.

### 5.2.1.1 Agentive nominals

The human suffixes discussed in section 5.1.1 can be added to any verb stem to derive the agentive nominal. When this happens, the final of the verb is changed to [i] and the whole word takes on a $\{\mathrm{H}\}$ overlay:

| (xx) | jángí-né | 'student' | from | jàngá | 'study' |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | sวิí-né | 'speaker' | from | sóó | 'speak' |
|  | gวí-né | 'dancer' | from | gò | 'dance' |
|  | kál-né | 'liar' | from | kálá | 'lie' |

The last form shows post-sonorant syncope, discussed in section XXX. The plural form of all these simply uses the /-m/ suffix (e.g. jángí-m 'students'). This is often accompanied by the labial assimilation of $/ \mathrm{i} /$ to $[\mathrm{u}]$, leaving the final form closer to the pronunciation [jángúm].

### 5.2.1.2 Unsuffixed derivation

Some deverbal nouns are identical to the verb stem segmentally, though they may differ in tone. All known cases are restricted to verbs of vocalic classes $\{\mathrm{iE}\}$ or $\{\mathrm{uO}\}$. (xx) lists common verbal nouns of this sort.

|  | Noun | Gloss | Cognate verb |  |
| :--- | :--- | :--- | :--- | :--- |
| a. | gó | 'dance' | gòó | 'dance' |
| b. sò | 'speech' | sóó | 'speak' |  |
| c. núyó | 'song' | núyó | 'sing' |  |
| d. bíré | 'work' | bìré | 'work' |  |
| e. gíyé | 'harvest' | gìyé | 'harvest' |  |

Since the tone of the noun is unpredictable, while the verb's tone is almost entirely predictable, we could in fact view these pairs of stems in the opposite way, with the verbs being derived from the nouns. This would explain why this set of cognate nominals do not involve any sort of affixation or vowel change. The tone issue must remain unresolved, though, since other cognate nominal that involve deletion of the final vowel also do not have predictable tone.

For unsuffixed derivation with predictable tone, see the gerundive compounds in section XXX.

### 5.2.1.3 $[-\mathrm{u}]$ or $[-\mathrm{y}]$ derivation **Return to this section**

More commonly, verbs have a corresponding deverbal noun ending in high vowel $/ \mathrm{u} /$ if polysyllabic or semivowels $/ \mathrm{y} /$ or $/ \mathrm{w} /$ if monosyllabic. Additionally, if the first vowel of the verb stem is $/ \mathrm{a} /$ or -ATR $/ \varepsilon, \rho /$, this will sometimes raise to + ATR or to $/ 0 /$, in the case of /a/. For instance:

```
a. nó⿱㇒ 'sew' nǒy 'sewing'
    dòó 'pound' dǒy 'pounding'
    tós 'plant' tów`seed (for planting)'
```

```
b. tálá 'lay' tálú 'egg'
    yímé 'die’ yìmú 'death'
    wàlá 'farm' wòlú 'farming'
    dònó 'sell’ dónú 'sale’
    c. ádúbá 'think' ádúbú 'thinking'
```

As can be seen above, there is no consistent tone pattern for these derived nominals. At times, the tone is identical to the verb stems, but just as frequently, it changes. This derivational process is still highly productive in Tommo-So, and such a noun can be derived from nearly any verb. The meaning of the derived noun in relation to the verb can vary from the action of the verb itself, to an object involved (as in 'egg' from 'to lay'), or an instrument (see §4.2.3).

### 5.2.1.4 Instrumental nominal

Instrumental nominals may be derived differently from basic cognate nouns shown above, either in tone or in vowel changes. Otherwise, most instrumental nominal are formed from the same $[-u]$ and/or vowel deletion process (the correct analysis remains to be determined). This can result in two different nominalizations of the same verb, each following a different tone or vowel pattern. Generally, instrumental nominals have a $\{\mathrm{LH}\}$ tone pattern but vary in how closely they follow the vocalism of the verb. For instance:

| (xx) | a. wàlú | 'plow' | from /wàlá/ 'to farm' | (cf. wòlú 'farming') |
| :--- | :--- | :--- | :--- | :--- |
| b. tǒy | 'pick-hoe' | from /tóś/ 'to plant' | (cf. tów 'seeds') |  |
| c. bùbú | 'chewstick' | from /bùbó/ 'to brush one's teeth' |  |  |
| d. tǒy | 'flint, lighter' | from /táá/ 'to strike or light' |  |  |
| e. bìmbú 'saw' | from /bìmbé/ 'to saw' |  |  |  |
| f. kèdú 'awl' | from /kédél 'to cut' |  |  |  |
| g. èmmú 'tweezers' | from /émmé/ 'to pinch' |  |  |  |

There is no general pattern such as "instrumental nominals preserve the vowel of the stem" or "instrumental nominals change the vowel of the stem". In (xxa-b) we see the former, while in (xxd, f-g), we see the latter.

### 5.2.1.5 Gerundive nominals

To refer specifically to the action itself rather than to an instrument or an object, the deverbal gerundive suffixes /-yé/ or /-lé/ are added. Both suffixes change the final vowel to [i], just as most verb-to-verb derivational suffixes (see section XXX). In the case of /-yé/, the tone pattern of the derived form is $\{\mathrm{LH}\}$ with the tone break after the first syllable, whereas with /-lé/, it is all $\{\mathrm{H}\}$. As with other inflected forms, it is not clear whether the suffix is independently H -toned or whether it receives its H tone as part of the grammatical overlay. The following examples demonstrate the two suffixes:
(xx)

| a.dìmbé <br> sínní-yé <br> yàá | 'double up' <br> 'tie (child) on back' <br> 'go' | dímbí-lé 'act of doubling up' <br> sínní-yí-lé 'act of tying a child on back' <br> yáí-lé 'act of going' |
| :--- | :--- | :--- |
| b. númbó | 'fall' | nùmbí-yé 'act of falling' |
| nánná | 'chase' | nànní-yé 'act of chasing' <br> yèlé |
| 'come' | yèlí-yé 'act of coming' |  |

These two forms can be used interchangeably, and the following examples show that any given verb stem may form its gerundive in either way:
a. Jòbù jóbílé wómo síyé=ỳ.

Run.Nom run-Ger 3sgPoss good=Cop
'His running is good.'
b. Jòbù jòbí-yé wómo síyé = j̀.

Run.Nom run-Ger 3sgPoss good=Cop 'His running is good.'

Even the gerundives are often combined with a cognate nominal to form a compound. The fact that they take objects shows that they retain their argument structure when nominalized.

In the majority of cases, these suffixes have no effect on the vowels of the stem (except for the change to [i] in the final vowel). In one case, however, the stem vowel /a/ is changed to [o] with the addition of the /-lé/ suffix: /náá/ 'forget' but /nóílé/ 'act of forgetting'.
5.2.1.6 /-go/ or /-ge/ derivation

A finite number of deverbal nouns have been derived using the suffix /-gó/ or /-gé/ added to the verb stem. The final vowel of the stem is changed to $/ \mathrm{i} /$, as above, and the resulting form is all $\{\mathrm{H}\}$. These words are listed below:

| a. bíí-gé | 'being' | from /bìyé/ |
| :--- | :--- | :--- |
| b. túmmí-gó | 'east' | from /túmmó/ '(sun) rise' |
| c. númbí-gó | 'west' | from /númbó/ 'fall, (sun) set' |
| d. jól-gé | 'row of plants' | from /jòló/ 'plant or harvest beans or sesame' |

(xxd) displays the post-sonorant syncope discussed in section XXX. As we can see, there is some vowel harmony (shown by xxa-c), but (xxd) violates both harmony processes, so the pattern is not exceptionless. These derivational suffixes are not productive.

### 5.2.1.7 /-dìm/ infinitives

The final deverbal noun to discuss is the infinitive. I leave this one until last since it remains the most verbal of any other form. In fact, it may be seen as related to or historically derived from a headless relative clause consisting only of an imperfect verb with a generic 3 pl subject. In that case, the suffix would be /-dìn/. In the case of the infinitive, it is /-dìm/.

Like imperfect verbs in subordinate clauses, the verb stem in the infinitive retains both its regular vowels and its regular tones. For example:

| (xx) | yàá-dìm | 'to go' | yàá | 'go' |
| :--- | :--- | :--- | :--- | :--- |
|  | jòbó-dìm | 'to run' | jòbó | 'run' |
|  | káná-dìm | 'to do' | káná | 'do' |

These infinitives are often used as the object of the verb 'like' or 'want':

$$
\begin{array}{llll}
\text { (xx) } & \text { Tò-Tóทó } & \text { yàá-dìm } & \text { m̀bé-gó = wo-m. } \\
& \text { village.name } & \text { go-Inf } & \text { want-Adv = be-1sgS } \\
& \text { 'I want to go to Tongo-Tongo.' }
\end{array}
$$

This suffix is entirely productive.

### 5.2.2 Deadjectival derivation

Just as nouns can be derived from verbs, so too can they be from adjectives. The first process, reduplication, derives the nominal version of adjectives (e.g. "happiness" from "happy"). The second derivational process I will address actually begins with a suffix deriving adjectives from nouns, which can then be suffixed again with the human suffixes to derive a noun once more.

### 5.2.2.1 Reduplicative derivation

Nouns are derived from adjectives via either initial CV reduplication or full stem reduplication, as seen in nouns above. As usual, the initial reduplicant is L-toned, but the tone of the root is unpredictable, at times retaining the same tone as the related adjective and at others deviating.

| Gloss | Noun | Adjective |
| :--- | :--- | :--- |
| a. thickness | kù-kúnó | kúnó |
| b. width | wà-wànnú | wánnú |
| c. length | pà-pàlá | pàlá |

Even the same form in different utterances can show tonal variation. (xxc), for instance, for which three tokens were recorded in a row, had the three following pronunciations: [pàpàlá], [pàlà-pálá], [pàlà-pàlá]. Perhaps further data will allow us to systematize these nominalizations. In the meantime, we must say that these nominalizations are lexicalized and not productively created, since there appears to be no principled way in which the tone is determined.

### 5.2.2.2 Characteristic derivation (-gú)

The suffix /-gú/ can be added to a noun X to derive an adjective with roughly the meaning "possessing X " or "who has X ". This is accompanied by tone lowering on the stem. For instance:

| a. | kùlò-gú | 'hairy' | from kúló |
| :--- | :--- | :--- | :--- |
| b. | 'hair' |  |  |
| bò̀ò-gú | 'who has a navel' from bòngó | 'navel' |  |

Once these adjectives are in place, human nouns can be derived from them by the addition of the human singular or plural suffixes. This changes the vowel of the suffix /-gú/ to [i], just as adding the suffixes to a verb stem to form an agentive would do, though no $\{\mathrm{H}\}$ overlay occurs in this case:
a. gìyè-gí-né 'one who is hungry' cf. gíyé 'hunger'
b. sèmbè-gí-né 'authority'
cf. sémbé 'power'
c. tà-tàgà-gí-né 'joker’
cf. tà-tágá 'joke'
d. dèg(ù)-gí-n $\varepsilon^{6}$ 'poor person'
cf. dègú 'poverty'

Note that these forms can be used as the second element in a left-headed nominal compound ${ }^{7}$ to describe a noun, as in:
$(x x)$ a. pèdù gòlònù-gí-né 'lazy sheep' ${ }^{8}$
b. ǹdè jìm-gí-né
'sick person’

Often, though, this stage is skipped, particularly for non-human nouns, and the adjectival /gú/ form is used.
(xx) kòrò bòygò-gú 'calabash with hard elongated stem'
cf. bòngó 'bellybutton'

In some cases, the adjectival /-gú/ form may be used as a headless $\mathrm{N}+$ Adj phrase (or differently put, simply as a noun):
( xx ) kìnù-gú 'critter'
cf. kínú 'nose'

### 5.3 Pronouns

There are three basic forms of the personal pronouns, which I will refer to as independent, possessive, and suffixal. In about half of the cases, the possessive pronouns are transparently the independent pronoun plus the possessive enclitic $/=\mathrm{mo} /$, but at other times these have fused and evolved, and so I treat them as units. The chart below summarizes these forms.

Independent Possessive Suffixal

[^6]

After discussing these pronouns, I will turn to reflexive and reciprocal pronouns. For logophoric pronouns, see section 5.4.3.2.

### 5.3.1 Independent pronouns

The independent pronoun is used as the subject in relative and other subordinated clauses (in the absence of a subject suffix) (xxa), in independent clauses where the subject is focalized (in conjunction with the subject suffix on the verb) (xxb), preverbally as the theme or goal with the object case marker $/=\mathrm{y} /(\mathrm{xxc})$, with most postpositions except the dative $/=\mathrm{n} \varepsilon /$ and locative $/=\mathrm{baa} /$ (which take the possessive pronoun) (xxd), and prenominally as the pronominal kinship (inalienable) possessor (xxe).
(xx)a. nàà gèm mí sémè $=\mathrm{g}$ è
cow.L black.L 1sgPro slaughter.Perf.Rel = Def
'the black cow I slaughtered'
b. Mí yàé-lè-m, ú yáà-dè-w.

1sgPro go.Impf-Neg.Impf-1sgS 2sgPro go.Impf-Impf-2sgS
'I won't go, you'll go.'
c. Màngóró ú=j̀ óbò-dìn.
mango $2 \mathrm{sgPro}=\mathrm{Obj}$ give.Impf-Impf.3plS
'They will give you a mango.'
d. Ú $=$ le mí=le émmé túmó-gó yáà-dè-y.
$2 \mathrm{sgPro}=$ Assoc $1 \mathrm{sgPro}=$ Assoc 1plPro one-Adv go.Impf-Impf-1plS
'You and me, we'll go together.'
e. Bé níné yéllè.

3plPro aunt.H come.Impf
'Their aunt will come.'

Notice that the independent pronouns are subminimal, being monomoraic, but that unlike enclitics, they have underlying H tone. It is possible that they are proclitics, but I do not have any clear evidence either way.

### 5.3.2 Possessive pronouns

The possessive form can often be directly decomposed into the base pronoun and an enclitic with a possessive meaning somewhat like "for" (e.g. /ń= mo/'for me', /pédu=mo/ 'for the sheep'), which I will discuss further in section XXX. I leave them unsegmented, since in many forms, the possessive pronoun is not what one would expect based on the independent pronoun and $/=\mathrm{mo} /$. The following chart highlights these differences:

## (xx) Actual pronoun

1sg ńmo
2 sg úwo
3sg wómo
1 pl émme
2 pl éwo
3 pl béme

## Expected combination

$$
\begin{aligned}
& \text { mí= mo } \\
& \dot{u}=\mathrm{m} \boldsymbol{\jmath} \\
& \text { wó = mo (same) } \\
& \text { émmé }=\mathrm{mo} \\
& \text { é }=\mathrm{m} \boldsymbol{\mathrm { c }} \\
& \text { bé }=\mathrm{mo}
\end{aligned}
$$

We see unusual harmony in the $1^{\text {st }}$ and $3^{\text {rd }}$ plural weakening of the $/ \mathrm{m} /$ to $[\mathrm{w}]$ after the $2^{\text {nd }}$ person pronouns. Note also that the 3 sg pronoun can be pronounced as ATR harmonic [wómo] in rapid speech.

The possessive pronouns are used before the postposition $/=\mathrm{n} \varepsilon /$ in some dative constructions (xxa), the locative postposition / = baa/ to mean 'one's home' (xxb), and postnominally as the possessor of non-kinship (alienable) nouns (xxc).
a. Ḿmっ=ne sǒm èbè-yó, m̀bé-gó=wo-m
$1 \mathrm{sgPoss}=$ Obl horse buy.Perf-if, love-Adv $=$ be- 1 sgS
'If he buys me a horse, I will love him.'
b. Wóm( $)=$ baa yáà-dè.

3 sgPoss $=$ Loc go.Impf-Impf
'She is going home [Lit. to her place].'
c. Ìsé wómo díyè-gò bógò-dè.
dog 3sgPoss big-Adv bark.Impf-Impf
'His dog barks a lot.'

In (xxb), the vowel in the $/ \mathrm{mo} /$ portion of the possessive pronoun sometimes elides before the labial /b/.

### 5.3.3 Suffixal pronouns

The suffixal subject pronouns are used in all main clauses after the TAN suffixes on the inflected verb:
(xx) a. yàé-lè-w
go.Impf-Neg.Impf-2sgS
'you won't go'
b. ศ́yè-dè-y
eat.Impf-Impf-1/2plS
'we/you all will eat'

As noted in the chart above, the 3plS suffix fuses with the various TAN suffixes, making it impossible to cite a single form of the suffix. (xx) summarizes these combinations:
(xx)

| AN Category | Suffix | Suffix with 3plS | Example |
| :---: | :---: | :---: | :---: |
| Habitual | -dè | -dìn | /ógì-rò-dìn/ 'they will heat' |
| Imperfect negative | -lè | -nnè | /ògì-ró-nnè/ 'they will not heat' |
| Perfect negative | -lí | -nní | /ògìrò-nní/ 'they did not heat' |
| Perfect | -ø | $-\varepsilon^{\text {n }}$ | /ògìrì- $\mathrm{E}^{\mathrm{n}}$ ( 'they heated' |

The same suffix listed for the perfect is also used with the auxiliaries /wo/, /be/ and $/ \mathrm{s} \hat{\mathrm{e}} /$ :
(xx)
a. Díí ógí-ráá bi- $\mathrm{\varepsilon}^{\mathrm{n}}$.
water heat-Trans.Perf was-3plS
'They had heated water.'
b. Díí ógí-ró-gú $s \varepsilon-\varepsilon^{n}$.
water heat-Trans-Ppl have-3plS
'They are heating water.'
c. Díí ógí-ráá wo-è.
water heat-Trans.Perf be-3plS
'They heated water.'

Notice that this suffix changes the vowel of past auxiliary/be/ to [i]. Apart from the nasal addition to each of the suffixes in (xx), it is hard to explain the vowel changes $(\varepsilon \rightarrow i$ in the imperfect, $\mathrm{e} \rightarrow \varepsilon$ in the imperfect negative, no change in the perfect negative).

The suffixes are conspicuously absent in embedded clauses, including relative clauses. In these cases, the subject is marked with an independent pronoun, shown above.

### 5.3.4 Reflexive and reciprocal pronouns

The reflexive consists of /kúú/ 'head' plus a possessive pronoun. Simply using the accusative pronoun is not allowed. However, when the subject is plural and the same accusative pronoun is used, it gives a reciprocal meaning (xxc).
 head 1 sgPoss $=$ Obj hit.Impf-Impf- 1 sgS 'I hit myself.'

head 1plPoss = Obj hit.Impf-Impf-1plS
'We hit ourselves.'
c. Émmé émmé = j̀ béndè-dè-y.

1plPro 1plPro = Obj hit.Impf-Impf-1plS
'We hit one another.'

Alternatively, the reciprocal pronoun /túmə̀m/ may be used in place of the accusative pronoun:
(103) Túmòm béndè-dìn.

Recip hit.Impf-Impf.3plS
'They hit one another.'

### 5.4 Definites and demonstratives

This section is centered around demonstrative pronouns, but it brings in other related topics, including determiners (definite and demonstrative), logophoric pronouns.

### 5.4.1 Definite determiners

Tommo So has one definite marker $/=\mathrm{g} \varepsilon /$, which cliticizes to the end of the NP it modifies, between any adjectives and the plural clitic. As discussed in section XXX, it is underspecified for tone, receiving its pitch by interpolation between specified tonal points on either side. It has no effect on the tone of the preceding words.
a. Jàndùlù gém $=\mathrm{g} \varepsilon \quad$ kém bándán-kálá $=\mathrm{n} \varepsilon$ kó- $\mathrm{\varepsilon}^{\mathrm{n}}$.
donkey.L black $=$ Def all courtyard $=\mathrm{Obl}$ be-3plS.
'All of the black donkeys are in the courtyard.'
b. Bóóló $=\mathrm{g} \varepsilon$ párá-gú $=\mathrm{s} \varepsilon$.
thread $=$ Def snap $-\mathrm{Ppl}=$ have
'The thread is snapping.'
c. Àn-ná $=\mathrm{g} \varepsilon \quad$ dàgí $=\mathrm{j}$
man-HumSg = Def small= Cop
'The man is small.'

Whereas in English, a possessor and the determiner are often mutually exclusive (*Ramata's the dog, *her the dog), in Tommo So, the two can optionally coexist. For instance:

$$
\begin{aligned}
& \text { a. Yàa-ná }=\mathrm{g} \varepsilon \text { sòw yàà }=\mathrm{g} \varepsilon \quad \text { gìnè- } y=\mathrm{n} \varepsilon=\mathrm{y} \text {. } \\
& \text { woman-HumSg = Def cloth. } \mathrm{L} \text { woman. } \mathrm{L}=\mathrm{Def} \text { house- } \mathrm{Dim}=\mathrm{Obl}=\text { is } \\
& \text { 'The woman's blanket is in the house.' }
\end{aligned}
$$

b. Ènè í́ $=\mathrm{g} \varepsilon$ wó náá $=\mathrm{g} \varepsilon$ jóbò-dè.
goat.L child $=$ Def 3 sgPro mother. $\mathrm{H}=$ Def run.Impf-Impf
'The baby goat's mother will run.'
c. Ìsé wóm $0=\mathrm{g} \varepsilon$ sáy-ní bógò-dè.
dog 3 sgPoss $=$ Def much-Adv bark.Impf-Impf
'Her dog barks a lot.'

### 5.4.2 Deictic demonstratives

Tommo So makes a three-way deictic distinction of /nǒ/ 'this (by the speaker', /kó/ or /wó/ 'that (by the listener)', and /nǐ/ 'that (by neither)'. All of these demonstratives can be used as determiners or pronouns.

### 5.4.2.1 Demonstrative determiners

In addition to definite $/=\mathrm{g} \varepsilon /$, Tommo So has four demonstrative determiners, namely, the demonstratives listed above. All four induce tone lowering on the preceding NP. /kó/ or /wó/ may also be used as discourse-definite demonstratives, meaning 'that (aforementioned)'; see section 5.4.3.
$/ \mathrm{n} \check{/}$ / and /ň̌/, as discussed in section XXX, have an underlying rising tone on a single mora, something which is prohibited on the surface. Phonetically, the vowel length of these determiners lies somewhere between a true long vowel and a short vowel. When used in the singular to modify a noun, the realization of the tone varies between an amputated rise (with some lengthening of the vowel) and simply H :
(xx) a. ì̀ nı̂ ~ ì̀ ní 'that child'
b. gìnè nॅॅ ~ gìnè nó 'this house'

As discussed in section XXX, when followed by a toneless enclitic like the plural / = mbe/, this rising tone gets resyllabified:
a. nàà nò= mbé 'these cows'
b. ùlùm nò = mbé 'these children'
c. $\varepsilon$ ह̀jè nì = mbé 'those chickens'

Here, the H component of the rise docks on the toneless enclitic /mbe/, simplifying the tone of the demonstrative to L . What is important to remember from section XXX is that nouns ending in a rising tone, including monosyllabic nouns (xx), do not show this behavior before the plural clitic; that is, they retain the rising tone:
a. nàá=mbe
'cows'
b. tòndòó = mbe 'water jars'

No tone shift takes place since the nouns themselves have enough morae to host the rising tone. The lightness of the demonstratives may indicate that they are enclitics, and that when they combine with the plural clitic, the two clitics then have enough material and tones to be considered their own prosodic word. (Groups of toneless enclitics do not have any tone of their own, which could prevent them from forming their own words.)

The demonstratives /kó/ or /wó/ refer to something close to the listener ('that [by you]').
a. Sòw kó/wó èsú-gó = wo.
garment.L that pretty-Adv=is
'That garment [by you] is pretty.'
b. Tòndòò kó/wó mí=j̀ óbó.
water.jar.L that $1 \mathrm{sgPro}=\mathrm{Obj}$ give.Imper
'Give me that water jar [by you].'

They can also be used as discourse-definite demonstratives ('that, the aforementioned'). See §5.4.3 below.

Note that in Tommo So, /kó/ and /wó/ can be used interchangeably. It is likely that these two demonstratives are cognate with inanimate and animate pronouns, respectively, in other Dogon languages, and /wó/ certainly seems that it derives from the 3sg pronouns. Tommo So, though, has lost the animate/inanimate distinction in pronouns, and hence either demonstrative may be used anywhere. I have not been able to detect any semantic difference between the two.

### 5.4.2.2 Demonstrative pronouns

Any of the above determiners may be used on their own as pronouns. In the case of /nǒ/ 'this' and /nǐ/ 'that (by neither)', the vowel lengthens when used as a demonstrative, thereby meeting the word minimum:

```
(xx) nòó 'this (thing)'
    nì 'that (thing)'
```

/kó/ and /wó/ remain as is, since they are already identical inform to the independent pronouns discussed in section 5.1.1. As an example of a demonstrative pronoun in use, consider:

> (xx) Nòó èlèlú = wo.
> this delicious $=$ be
> 'This is delicious.'
5.4.3 Discourse definites and logophoric pronouns

Two series of pronouns make reference to elements already brought up in the discourse. The discourse definites (DD) have a wider domain of application, being able to refer to any salient mention in the discourse, while logophoric pronouns are restricted to the same utterance.

### 5.4.3.1 Discourse definites

As I alluded to above, /kó/ and /wó/ have a second important use as discourse definites (DD), either determiners or pronouns. That is, they refer back to something already mentioned in the conversation, and they appear in the place of normal demonstratives. I translate the discourse definite as 'that same' or 'that very'.

```
(xx) a. ù bàbè kó/wó 'that same uncle of yours'
    b. gàndà kó/wó 'that same place'
```

Like other demonstratives, they can be used as full pronouns:

```
(xx) Kó ह̀lèlú=be.
    that.DD delicious= was
    'That (very thing) was delicious.'
```

Occassionally, /kó/ is pre-nominal, used either as a possessor (which induces tone lowering on the following noun) or in a nominal compound (in which it itself is tone dropped). These uses tend to be restricted to DD adverbs:
a. Yàà-nà
kó $=\grave{\mathrm{n}}$
kò
bǎy kò-nó
àwì- ${ }^{\text {n }}$
wà.
woman-HumSg.L that. $\mathrm{DD}=\mathrm{Obj}$ that.DD.L day there.DD catch.Perf-3plS
Quot
'It is said they caught that woman there that day.' [Text 1]
b. Kó wàgàdù kém púlò-m yèlè-nní.
that.DD time.L all Fulbe-HumPl come.Perf-Neg.Perf.3plS
'At that time, no Fulbe had come.' [Text 2]

As can be seen in example (xxa), a discourse-definite locative adverb /kò-nó/ (mirroring /nònó/ 'here') is also derived from /kó/. For demonstrative adverbs, see chapter XXX.

### 5.4.3.2 Logophoric pronouns

The logophoric pronoun /ǹdèmó/ (or [ǹdèmé]) is used in contexts where the pronoun refers back to a person who figures earlier in the phrase with which the pronoun is co-referenced. For instance, compare:
a. Ségíř́ ǹdèmé yéllè =j̀ wa.

Segire LogSg come.Impf=Obj Quot
${ }^{\prime}$ Segir $\varepsilon_{\mathrm{i}}$ says he ${ }_{\mathrm{i}}$ is coming.'
b. Ségíré wó yéllè=j̀ wa.

Segire 3sgPro come.Impf=Obj Quot
'Scgir $\varepsilon_{i}$ says he ${ }_{i j}$ is coming.'

In (xxa), logophoric 'he' is obligatorily coindexed with 'Segire', whereas in (xxb), the 3sg pronoun can refer to a person other than Segire or Segire himself.

The logophoric plural is /ǹdèmbé/:
(xx) [Yàa-ná sè-lé] $=\mathrm{g} \varepsilon \quad$ wó ǹ nèmbé= ̀̀ èlè-ndì-yè-lí woman-HumSg have-Neg = Def 3sgPro LogPl=Obj sweet-Fact-MP.PerfNeg.Perf
wa.
Quot
'[They said the fact that he] doesn't have a wife, that didn't make them happy.'
[Text XXX]

### 5.4.4 Demonstrative adverbs

This section gives an introduction to adverbs derived from demonstratives. For more information on adverbs, see section XXX.

### 5.4.4.1 Locative adverbs

The word for 'here' is the demonstrative /ň̌/ plus a suffix /-nu/ or /-no/. These suffixes must be underlyingly toneless, since the rise resyllabifies: /nò-nú/ or /nò-nó/ (also [nònź], possibly from /nǒ/ plus the enclitic /=nz/). ‘There’ has the equivalent /yè-né/, but this form has been rejected by my younger consultants, suggesting that it is falling out of the language. For my younger consultants, 'there' is /nìmbáa/, patterning with the general (less specific) locative adverb /nòmbáà/ 'around here'. However, older speakers do consider /nìmbáà/ to be more general than /yè-ń́/, making it the counterpart of younger speakers' conceptions of /nòmbáà/. When the sense of 'there' is vague (more like 'over in that direction'), younger speakers use the term /yíbáà/ instead.
a. Pédu úwo nò-ń òndú.
sheep 2sgPoss here is.Neg
'Your sheep isn't here.'
b. ...wó $=1 \varepsilon$ yè-né wó síbáá. $3 \mathrm{sgPro}=$ also there 3 sgPro erect.Perf
'...she also erected [a stone idol] there.' [Text 2]
c. Jàndúlu gágìrà-gò nìmbáà = wo- $\mathrm{\varepsilon}^{\mathrm{n}}$.
donkey eight-Adv there are
'Eight donkeys are over there.'
d. Jàndúlu gágírà-gò yíbáà jòbó-gú $=\mathrm{s} \varepsilon-\mathrm{\varepsilon}^{\mathrm{n}}$.
donkey eight-Adv around.there run-Part have.3plS
'Eight donkeys are running over that way.'
/nìmbáà/, /nòmbáà/, and /yìbáà/ have the locative postposition / = baa/ fused into them, but since the exact morpheme breaks are not clear, I have written them as one morpheme.

### 5.4.4.2 Emphatic modifiers on adverbs

When added to a locative adverb, /téé-ní/ (or reduplicated /té-téé-ní/) gives the emphatic meaning of 'right (here, there)'.
(108) a. nò-nó (té-)téé-ní 'right here’
b. yíbáà (té-)téé-ní 'right there'

To my knowledge, there is no equivalent approximative marker, but rather just the forms noted above.

### 5.4.4.3 Presentatives ('here's...')

In the Tédié dialect of Tommo So, presentatives are derived from the demonstrative pronoun /nòś/ with the copula / = $\mathrm{n} /$, literally translating to something like ' X is this'.
a. Dí́ nòó = j̀.
water this = Cop
'Here's (some) water.'
b. Mí náá nòó=j̀.

1sgPro mother this = Cop
'Here's my mother.'

It can also be used with participial /-gú/ VPs in the way of French le voici qui vient 'here he comes', for instance:
(xx)
a. Yèlé-gú nòó=ỳ
come- Ppl this $=$ Cop
'Here he comes.'
b. Góó gòó-gú nòó=ỳ.
dance dance- Ppl this $=\mathrm{Cop}$
'There he dances.'

The /nòó/ can also come preverbally, interchangeable with /kó/, presumably in subject position:
this/this.DD come.Impf-Impf
'Here he comes.'

In the Sarédina dialect of Tommo So, there is a special presentative form /ìgú/, cognate with Jamsay /nùǩ̌y/ and Beni /ýgòy/. Used phrase-finally, it takes the form [ŋ̀gó̀̀], most likely a blend of /ỳgú = wo/.
(xx) a. Díí ỳgóò.
water here's
'Here's (some) water.'
b. Yèlé-gú ỳgóò.
come-Ppl here's
'Here he comes.'

Pre-verbally, it retains the form /ìgú/, though it cannot be used with all VPs:
(xx) a. ỳgú yદ̀lé-gú $=s \varepsilon$.
here's come-Part = have
'Here he comes.'
-but-
b. *ìgú gòó-gú=sع.
here's dance- $\mathrm{Ppl}=$ have
'There he dances.'

Perhaps transitive verbs do not allow this pre-verbal presentative, but more data on the dialect will be needed to solve this problem.

### 5.5 Adjectives

Simple adjectives behave much like nouns in Tommo So. Unlike Najamba or Jamsay, Tommo adjectives typically do not agree morphologically with the noun in terms of animacy or plurality. Rather, they simply follow the noun they modify, inducing tone lowering, and are then in turn followed by enclitics such as the determiner or plural. For instance:
(xx)
a. yàà-nà
èsú $=\mathrm{g} \varepsilon$
woman-HumSg.L pretty $=$ Def
'the pretty woman'
b. jàndùlù gém ńmo $=$ mbe

```
donkey.L black 1sgPoss = Pl
'my black donkeys'
```

While adjectives as modifiers are straightforward, they split into two classes when predicative. I will refer to these as suffixed adjectives and unsuffixed adjectives.

### 5.5.1 Suffixed adjectives

The suffixed adjectives take the suffix /-gó/ when used as a predicate before quasiverb/wo/ (and its derivatives). I gloss this as an adverbial suffix, since they seem to modify the verb. For instance:
a. Mòòmíyó $=\mathrm{g} \varepsilon$ óg-gó = wo.
scorpion $=$ Def fast-Adv $=$ be
'The scorpion is fast.'
b. Yàa-ná $=\mathrm{g} \varepsilon \quad$ èsú-gó= wo.
woman-HumSg = Def pretty-Adv = be
'The woman is pretty.'
c. Gìné=ge némé-gó=be.
house $=$ Def dirty-Adv $=$ was
'The house was dirty.'

Further evidence that the /-go/ suffix is adverbial comes from true adverbs that have the same suffix:
(xx)
a. Ìsé $=\mathrm{g} \varepsilon$ díyè-gò bógò-dè.
$\operatorname{dog}=$ Def big-Adv bark.Impf-Impf
'The dog barks a lot.'
b. tów pàdà-lú-gó yímé
seed leave-Neg.Perf-Adv die
'die without leaving descendants'

Often these suffixed adjectival forms alternate with the adjective plus the copula $/=\mathrm{j} /$, unsuffixed:
(117) a. némé-gó wo ~ némé= ̀̀ 'is dirty'
b. ságárá-gó wo ~ ságárá = ̀̀ 'is young'
c. dàgú-gó wo $\sim$ dàgí $=$ ǹ 'is small'

My consultants tell me that there is a slightly different nuance when using the /-go/ and when using the copula, but when asked to describe the difference, they cannot and conclude that they are the same. Plungian (1995) describes /-go/ (in his dialect/ge/): "There is also the postposition $g e$, which is used in non-contrastive predicative constructions and which, in this case, adds a supplementary meaning of 'temporary' or 'provisional'" (15). This would explain the necessity of /-go/ in the past tense, since something that is not temporary would not need to be expressed in the past. However, my data have yet to illuminate this difference, and this temporary nuance is even less evident when used with numerals (see §5.7).

Similarly, the negative alternates between the suffixed form plus /òndú/, the suppletive negative of $/ \mathrm{wo} /$, and the negative copular suffix /-ľ́/. With the negative copula, the tone of the adjective can either lower with /-ĺz/ retaining a H tone, or the adjective can retain its tone with $/ \mathrm{l} /$ toneless. I argue that in the former case, the negative is a suffix, while in the latter, it is the negative copular clitic. See section 13.2.1.2 for more discussion.
(xx) a. póó-gó òndú $\sim$ pòò-lé $(\sim$ póó $=l \varepsilon)$ 'is not fat'
b. ùsú-gó òndú $\sim$ ùsù-lé ( $\sim$ ùsú $=l \varepsilon$ ) 'is not slender'
c. dàgú-gó òndú $\sim$ dàgù-lé ( $\sim$ dàgú $=1 \varepsilon$ ) 'is not small'
5.5.2 Unsuffixed adjectives

The unsuffixed adjectives are all underlyingly disyllabic with an optional epenthetic [u]. To form a predicative construction, /wo/ is placed directly after the adjective. Tonally, these adjectives are all $\{\mathrm{H}\}$ when used as modifiers and $\{\mathrm{LH}\}$ when predicative; it is not clear which tonal melody to analyze as the underlying form:
a. Díí $=\mathrm{g} \varepsilon \quad$ yègèlú $=\mathrm{w}$. (cf. dì̀ yégélu)
water $=$ Def cold is
'The water is cold.'
b. Nèmbúru àmǎm = wo. (cf. nèmbùrù ámám)
lemon sour is
'Lemons are sour.'

The negative is formed with the negative quasi-verb /s $\bar{\varepsilon}-1 \bar{\varepsilon} /$ 'does not have':
(xx)
a. Díí=g $\varepsilon$ yègèlú sc̀-lé.
water $=$ Det cold have-Neg
'The water isn't cold.'
b. Nèmbúru àmǎm sè-lé.
lemon sour have-Neg
'Lemons aren't sour.'

This suggests that these adjectives may actually be nominal in form, possibly forming compounds with modified nouns. It is possible that the all $\{\mathrm{H}\}$ overlay as a modifier is related to the $\{H\}$ overlay on verb stems when they form compounds (see section XXX).
( xx ) lists all such modifiers:
a. kálálu 'cold'
b. yégélu 'cool; slow'
c. દ́lélu 'sweet; sharp'
d. ámám 'sour, salty’
e. ádádu 'slightly bitter (as in an unripe fruit)'
f. gálálu 'bitter'
g. pélélu 'good-tasting but not sweet (as in milk)'
h. ह́dédu 'bland'
i. sáyám 'foul (smelling)'
j. túgóm 'heavy; important'
k. yágáru 'rough'
(xxc-i) all pertain to tastes or smells, and all exhibit what appears to be a historical final -VC reduplication; this lends further support to the analysis in which the final $[\mathrm{u}]$ is epenthesized. A possible derivation would be:

| $(\mathrm{xx})$ |  | Root | Reduplicated | Surface form |
| :--- | :--- | :--- | :--- | :--- |
| a. | pél | pél-él | pél-él-u |  |
| b. | sáy | sáy-áy | sáy-ám |  |

For ( xxb ), it is possible that the final $/ \mathrm{y} /$ was reanalyzed as $/ \mathrm{m} /$, a more common and audible final nasal. This is natural deduction, since final nasals often assimilate to the following segment, masking their underlying form. Final VC reduplication is not seen elsewhere in the
language, and (xxj-k) present exceptions to this rule. Nonetheless, even these forms otherwise confirm to the phonological (C)VCVC form of these adjectives.

While typically unsuffixed, even these adjectives may take the suffix/-go/, but it is not obligatory. With this suffix, the nuance is one of immediate experience, i.e. you just tasted a mango or you just felt the water. In this case, you can say /èlèlú-gó wò/ 'it is delicious', with the $\{\mathrm{LH}\}$ form usually used in predicative constructions.

### 5.6 Verbs as modifiers

In many cases where we would use an adjective to describe something, Tommo So speakers use participles or intransitive verbs. As such, the number of "true" adjectives is rather small. Often these verbs are participles in the perfective form ending in /-áá-d $\varepsilon /$, essentially the perfect suffixed with the imperfect. These could be viewed as relative clauses, and as such, it is not surprising that the participles also induce tone lowering.
a. Jùgù gà láá-dé Bàmàkó yàà = bé-m.
week.L pass.Perf-Impf Bamako go.Perf=was-1sgS
'Last week I went to Bamako.'
b. Yàà-nà píynáán-dé yàà = bé-m.
woman-HumSg.L age.Perf-Impf see.Perf=was-1sgS
'I saw an elderly woman.'

Tommo So makes heavy use of intransitive verbs to describe nouns, so such a proliferation of participles is not surprising. The examples below show such intransitive verbs:
a. Màngóró = ge íláá= wo.
mango $=$ Def ripen $\cdot \operatorname{Perf}=$ be
'The mango is ripe [Lit. has ripened].'
b. Pédu $=\mathrm{g} \varepsilon$ dò $\mathfrak{y}$ áá $=$ wo.
sheep $=$ Def weaken.Perf $=$ is
'The sheep is weak [Lit. has weakened].'

For further discussion of participles, see chapter 14 on relativization.

### 5.7 Numerals

While cardinal numbers may modify nouns, they do not interact tonally with the noun being modified.

### 5.7.1.1 'One', 'same (one)'

The number 'one' has three forms: /tíi// (used when counting), /túrú/ (used like the cardinal numbers described above), and finally /túmó/ which functions as an adjective.
/túrú/ is relatively rare. It is not used to modify nouns as the other cardinal numbers do due to the presence of /túmó/. Rather, it appears combined with other numerals in numbers such as 'eleven', 'twenty-one', etc.
a. pélú-gó túrú-gó sígé
'eleven [Lit. one greater than ten]'
b. pè̀̀-néé túrú-gó sígé
'twenty-one [Lit. one greater than twenty]'

In these constructions, /túrú/ displays the /-go/ morphology common to numerals. It also appears in some compounds like /bè-tùrù pònnú/ 'traditional loincloth with one flap'. This suggests that it might have been more productive at one point, or that forms like the compound include borrowings from languages like Jamsay that use /túrú/ more productively.
/túmó/, on the other hand, behaves exactly as an adjective, inducing tone lowering on the noun it modifies. It can mean simply 'one' or also 'sole, single':
( xx ) a. gìnè túmó 'one house'
b. ànà-gùdù túmó 'one year'
c. Dèlè túmó yé-sè-m.
older.brother.L one YE-have-1sgS
'I have one single older brother.'

Several words are derived from /túmó/. One is the reciprocal pronoun /túmə̀m/ seen in section 5.3.4. Another is the adverb /túmó-gó/ 'together (as one)':
(xx) Ú=le mí=le émmé túmó-gó góó góò-dè-y.
$2 \mathrm{sgPro}=$ Assoc $1 \mathrm{sgPro}=$ Assoc 1 plPro one-Adv dance dance.Impf-Impf-1sgS 'You and me, we dance together.'

Finally, /túmó/ is used in the distributive numeral meaning 'each' or 'every' (see section 5.7.1.6 below).

### 5.7.1.2 2 through 10

The numbers ' 2 ' through ' 10 ' are shown below:

| (xx) | 2 | néé |
| :--- | :--- | :--- |
|  | 3 | tààndú |
| 4 | nǎy |  |
| 5 | ǹnó |  |
| 6 | kúlóy |  |
| 7 | sóy |  |
| 8 | gágírà |  |
| 9 | túwwó |  |
|  | 10 | pélu |

When used to modify nouns, these numerals usually (though not obligatorily) take the suffix $/$-go/ seen with the adjectives above:
(xx)
a. Jè̀yè
úlùm néé (-gó) $=\mathrm{s} \varepsilon-\mathrm{m} .{ }^{9}$
great-grandparent.L children $2-A d v=$ have -1 sgS
'I have two great-grandchildren.'
b. Jàndúlu tààndú(-gó) bándáy-kálá $=\mathrm{n} \varepsilon$ ko- $\mathrm{\varepsilon}^{\mathrm{n}}$.
donkey 3-Adv courtyard $=\mathrm{Obl}$ are-3plS
'Three donkeys are in the courtyard.'

There is no tonal interaction between these numerals and the core NP.
5.7.1.3 Decimal multiples $(10,20, \ldots)$ and their combinations ( $22,67, \ldots$ )

[^7]The decimal numbers are listed in (xx).

| (xx) | 20 | p $\varepsilon$ è-néé |
| :--- | :--- | :--- |
| 30 | p -tààndù / pé-rààndù |  |
| 40 | pé-này |  |
| 50 | pé-ǹnò |  |
| 60 | pèlù kúlóy |  |
| 70 | pè-sóy |  |
| 80 | p -gágìrà |  |
| 90 | pè-túwwó |  |

The decimal multiple is formed with a derivative of 'ten' (usually /pe-/) followed by the multiplier. As can be seen, there is some variation in the form of this derivative, with one instance of both long /peq-/ and full /pelu/. The pronunciation of 'thirty' also varies between [pétààndù] and [pérààndù].

The tonology of the decimal numbers was first discussed in section XXX. In short, it is a version of tonal polarity. If the tone of the first mora of the multiplier is H , then the 'ten' portion is L-toned and the numeral retains its lexical tone (20, 60, 70, 80, 90 ). If the first tone is L , however, then the 'ten' portion is H and the numeral lowers its tone ( $30,40,50$ ). The end result is always that one portion or the other is L-toned.

Note that 'eighty' and 'ninety' also have archaic suppletive terms /kè̀-súm/ and $/$ k $\grave{\varepsilon}$-súm $=$ le kè $\grave{\varepsilon} l \grave{\varepsilon}$ p $\varepsilon$ lu/, respectively. These are based on the older base- 8 number system with /kè̀̀-/ derived from /kè̀̀ľ́l 'cowry, money'.

When combining decimal multiples with cardinal numbers, the cardinal number is added directly after the multiple of ten followed by the word /sígé/, meaning 'more' or 'greater':
(xx) a. pè è-néé néé(-gó) sígé 'twenty-two'
b. pèlù kúlóy ìnó(-gó) sígé 'sixty-five'

The addition of these cardinal numbers does not affect the tone of the decimal multiple.
5.7.1.4 Large numerals ( $100,1000, \ldots$ ) and their composites

As mentioned above, the Dogon numerical system was originally a mixed base- 8 and base-10 system, though with the influence of languages like French and Fulfulde, older base-8 expressions are being abandoned (Plungian 1995).
' 100 ' can be expressed in the old base- 8 system by ' $80+20$ ' $/ k \varepsilon ̀ \varepsilon ̀$-súm $=$ le p è̀ $\varepsilon$-néé/. Recently, this has been replaced by /témèndř̀/ or /témèndè/, a Fulfulde loanword. It is this word /témèndè/ that is used when counting up the hundreds, e.g. /témèndè néé/ '200'.
' 1000 ' is expressed by /kèz̀l̀ -mùnjó/, which according Plungian (1995), used to mean ' 800 '.
' 10,000 ' and beyond are expressed by /mùnjó/ followed by the number of thousands $(10,12$, etc.) with L-tone, e.g. /mùnjó pèlù/ ' 10,000 '.
'Million' and 'billion' are French loans, roughly /mìlìy ${ }^{\text {n }}$ / and /mììyár/ respectively (with exact pronunciation dependent on the speaker's level of French).

Larger composite numbers are made by adding the smaller composite number to the largest number, linked by /le/. For instance:

 $1000=$ Assoc $\quad 100 \quad 4 \quad 10-2 \quad 8 \quad$ more ' 1,428 '

In (xxa), the /le/ comes after /témèndè/ ' 100 ', the largest number involved, whereas in (xxb), it follows /kè̀llè-mùnjó/ ' 1000 ', and there is no repetition of the associative postposition from there on out. At times (WHAT TIMES?), the /le/ is not necessary at all, as in /mùnjó tààndú pé-nǹ̀/ ‘ 3,050 ’. All such large numerals can be used as modifiers, with or without /go/, and do not induce tone-dropping.

## (xx) EXAMPLE

### 5.7.1.5 Currency

The currency system is based on the 5 franc coin called /búúdù/. Therefore, all other denominations $(25,100,250)$ are based on multiples of 5 . This is true up to the 500 franc coin, where the word /búúdù/ can be dropped, and simply /témèndrè/ can be used. While in simple numerals this means 100 , in the context of money, it is understood to be $100 \times 5$.

| a. | 5 francs | búúdù |
| :--- | :--- | :--- |
| b. | 10 francs | búúdù néé |
| c. 25 francs | bù-ìnó |  |

d. 50 francs búúdù pélú
e. 100 francs búúdù pè̀̀z-néé
f. 200 francs búúdù pé-này
g. 250 francs búúdù pé-ǹnò
h. 500 francs búúdù témèndrè
i. 1000 francs témèndrè néé

There is no tonal interaction between /búúdù/ and the multiple, except for the irregular form in ( xxc ).

### 5.7.1.6 Distributive numerals

Distributive numerals are modifiers meaning 'one-by-one' or 'two-by-two', etc. They are made by reduplicating the basic numeral ( $\mathrm{x}-\mathrm{x}$ ) with no other morphology. /túmó-túmó/ can also mean 'each' or 'every'.
a. gìnè túmó-túmó kém 'each house'
b. Bé kém màngóró néé-néé óbó.

3plPro all mango 2-2 give.Imper
'Give them two mangoes each.'

Like its unreduplicated counterpart, /túmó-túmó/ forces tone lowering on the preceding noun, but other distributive numerals do not.

### 5.7.1.7 Negative polarity adverb /dògò/

The L-toned adverb /dògò/ added after a number gives the meaning of 'but' as in English 'I have but one brother'. Like its French equivalent, je n'ai que deux maisons, this adverb selects for a negative verb:
a. Dèlè túmó dògò sè-lé-m.
older.brother.L one but have-Neg-1sgS
'I have but one older brother.'
b. Màngóró néé-gó dògò dònò-lí-m. mango 2-Adv but sell-Neg.Perf-1sgS
'I sold but two mangoes.'

This expression is not limited to a numeral context. It can also be placed after a noun X , giving the meaning 'other than X ' or 'but for X '. For example:
a. Àn-sáárá wó yélè $=\mathrm{g} \varepsilon \quad$ gòrò bánu $=\mathrm{g} \varepsilon$ ǹdèmó $=\mathrm{g} \varepsilon$
white.person 3sgPro come.Perf.Rel $=$ Def hat.L red $=$ Def LogPro $=$ Def dògò yàgá òndú gì.
but other be.Neg say.PerfL
[Text XXX]
b. ògó nàm tégé gálè $=n \varepsilon \quad$ yàgá Dè $\mathfrak{n}$ èn $\varepsilon=m o$ nòó dògò kòmbó

Hogon sun.L shining pass.Perf.Rel $=$ Obl other Deyen $\varepsilon=$ Poss this but war ùngùlò-lí.
arise-Neg.Perf
'After the noon time [for] the Hogon passed, except for [the war] for Deyene, no wars were started.' [Text XXX]

For the use of /dògò/ as a conjunction 'but', see section 21.3.2.
5.7.2 Ordinal adjectives

Ordinals, unlike other numerals (with the exception of /túmó/), are true adjectives, and thus induce tone lowering on the preceding noun. For a discussion of the interrogative ordinal /àggì-yém/ 'how many-eth?', see Chapter 13.

### 5.7.2.1 First and last

The word for 'first' is /kúyó/ (or alternate pronunciation [kúyé]), which induces tone lowering on the modified noun:
a. ànà kúyó 'first rains'
b. ì̀yè kúyó 'January [Lit. first month]'
/kúyá/ can be used adverbially with suffix /-gó/ to mean 'at first'. An alternate adverb is /tòlú = né/ 'in the beginning'.
'Last' is expressed with /dùmò-ndó/ or /dùmó/, both of which can also be nouns meaning 'end' or 'last place'.
a. ànù sày dùmò-ndó 'pinky toe [Lit. last toe]'
b. nùyò dùmó 'last song'

These modifiers derive from the verbs /dùmó/ 'to be finished' and /dùmó-ndó/ 'to finish (transitive)', derived from the former with the factitive suffix.

### 5.7.2.2 Other ordinals (-yém suffix)

Ordinal numerals are formed by adding the H-toned suffix /-yém/ to the numeral, which then undergoes tone lowering. ( xx ) lists the ordinal numerals 2-10.
(xx)
a. nèy-yém
b. tààndì-yém
'second'
c. này-yém
'third'
'fourth'
d. ǹnòy-yém / ǹnù-yém
'fifth'
e. kùlòy-yém 'sixth'
f. sòy-yém 'seventh'
g. gàgìrà-yém 'eighth'
h. tùwwò-yém 'ninth'
i. pèlì-yém 'tenth'

Often, the final segment of the numeral fronts before the palatal suffix, or morphs a little altogether in the case of 'fifth' (xxd).
/-yém/ can be added to large numbers as well, with the whole numeral dropping its tone:
a. p $\grave{\varepsilon}$-nèè-yém
b. pèlù-gò nèè-gò sìgè-yém
c. tèmèndrè-yém
d. tèmèndrè = lè p $\mathfrak{c}$ è-nèè-yém
'twentieth'
'twelfth'
'hundredth'
'hundred and twentieth'

The fact that it can dominate a whole phrase include a postposition in (xxd) suggests that maybe it ought to be reclassified as a clitic.

### 5.7.3 Fractions and portions

Dogon languages in general have no native words for exact fractions; Tommo So is no exception, referring to portions more generally as 'part' or 'division': /kàbì-lú/ (from
/kábí-ľ́/ 'to divide or share') and /tànà túmó/ 'one side/part'. For things that are generally divided into piles (e.g. peanuts), the word for 'pile' /dúm/ is then used.

Alternately, the quantifier 'some' or 'several' /gàmbáá/ can be used. This quantifier behaves as an adjective and induces tone lowering.
(xx) غ̀nè gàmbáá $=\mathrm{mbe} \quad$ ḿmo $=\mathrm{mbe}$.
goat. L some $=\mathrm{Pl} \quad 1$ sgPoss $=\mathrm{CopPl}$
'Some [but not all] of these goats are mine.'

However, Tommo So has borrowed the word for 'half’ from Fulfulde /péjè/ (< feccere). For instance:
(xx) Jáá $=\mathrm{g} \varepsilon$ péjè kánéé mí=j̀ óbó.
meal $=$ Def half do.NF $1 \mathrm{sgPro}=\mathrm{Obj}$ give.Imper
'Give me half of the meal [Lit. halve the meal and give it to me]'

Other fractions can be expressed by adding a numeral after 'half'. For instance, /péjè tààndú-gó/ 'third'.

## Chapter 6 Nominal and adjectival compounds

Tommo So makes wide use of nominal compounds, with compounds taking up just over a third of the nominal entries in the lexicon (1271 out of 4405). These are split between root compounds, those compounds made up of entirely nominal roots (e.g. English "carrot cake"), and synthetic compound, wherein at least one member is a verbal root (e.g. English "horse racer"). The end result of both kinds of compounds is a complex noun. The language also has one adjectival compounding process that derives a sort of bahuvrihi ("blackbeard") compound, discussed in section 6.3.

### 6.1 Root compounds

This section will cover all compounds made up entirely of nominal roots. These fall into two tonal patterns, which can be schematized as [ $\mathrm{x} x$ ] and [ x x̀], wherein the grave accent indicates tone lowering and the bare ' $x$ ' indicates that that element has its lexical tone. These can be thought of as adjective-like tonal behavior and possessor-like tonal behavior, respectively. In addition, there is a small handful of compounds wherein both elements retain their lexical tone; these are extremely rare.

Most compounds are right-headed, cross-linguistically the most common kind of compound, but a small number of left-headed compounds is also attested.

### 6.1.1 Compound type [x x]

In this kind of compound, there is no tonal interaction between the two elements in the compound. As mentioned above, this compound type is very rare. The only consistent examples I have found with this tone pattern are those with final element [nàa-nú] 'master, owner' (plural [nǎm]).

| (xx) | a. | ílmé nàà-nú | 'one who stutters' |
| :--- | :--- | :--- | :--- |
|  | b. | sógúru nàà-nú | 'one who makes noise' |

Even these examples vary between this compound type and pseudogenitive type [n ǹ].
One other isolated incident of this compound type is /kíndé èlèlú/ 'happiness' (lit. 'heart sweetness').

### 6.1.2 Canonical compound [ǹ n]

This compound type is the most common of root compounds in Tommo So, and as such, I will refer to it as the "canonical compound". The first element (or elements) receives a $\{\mathrm{L}\}$ tone overlay, while the final noun retains its lexical tone. The head noun (i.e. the logical referent) is most often on the right (section 6.1.2.1), though occasionally it may occasionally be on the left as well (6.1.2.2) or even external and null (section 6.1.2.3).

### 6.1.2.1 Right-headed canonical compounds

When the head is on the right, the first element in the compound generally describes the head noun in some way (type, ethnicity, etc.) or the head noun may make reference to a part of the whole indicated by the initial element (xxb).

$$
\begin{array}{ll}
\text { a. } & \text { nèm táá }  \tag{143}\\
\text { salt.L door } \\
& \text { 'slab of salt' }
\end{array}
$$

b. kùùlù núyó
waterlily.L leaf
'waterlily leaf'
c. màgà èmmé

Mecca.L sorghum
'sorghum type'
d. màlfâ tìbè-ý
gun.L stone-Dim
'small stone used as a bullet'
6.1.2.2 Left-headed canonical compounds

More rarely, a canonical compound may have its head on the left, in violation of the Right-hand Head Rule (Williams 1981), once thought to be universal. The following are some examples:

```
(xx) a. gòrò bèèré hat.L beret 'beret'
```

b. bòmbòm yògú
candy.L tree.sp
'chewing gum' ${ }^{10}$
c. pònnù àn-déngé
pants.L pant.kind
'short baggy pants’

As these examples suggest, left-headed compounds are often in the semantic domains of food or clothing, where the right-hand word elaborates on the kind of clothing or food indicated by the left-hand head. Unfortunately, we cannot use semantic class to perfectly predict which compounds will be right- or left-headed, since other compounds with 'hat' (for example) are the usual right-headed variety, as in /jùl̀̀m góró/ 'wide-brimmed straw hat'.

### 6.1.2.3 Externally-headed canonical compounds

Externally-headed, or exocentric, compounds are also not nearly as common as right-headed compounds, but we see a handful of them in the lexicon. Typically, the external null head refers to the state of being the person or thing indicated by the overt stems. For example:
(xx) a. gùlònnò náá
quarantine. L mother
'state of being in post-partum quarantine'
b. hòòlàl bàyáá
trust.L owner

[^8]```
'trustworthiness'
```

Neither example refers specifically to the person indicated by the overt stems; (xxa) does not refer to the mother herself, and (xxb) does not refer to a person who is trustworthy. Rather, both refer abstractly to the state of being said persons. As I will show in section 6.2, switching the tone from canonical [ x x ] to pseudo-genitive [ x x] gives the endocentric (internally-headed) reading.

These examples show that, unsurprisingly, tone lowering can only apply to an overt stem. Even though there is a null head, presumably to the right of the overt words in (xx), the final overt word (/náá/ and /bàqáá/) retain their lexical tone.

### 6.1.2.4 Complex canonical compounds

Canonical compounds may be more complex than two stems. They may have a recursive structure, where the head noun on the right is modified not by a single stem but by another canonical compound. Consider the following:

| a. màlbá +dúmmó <br> gun butt |
| :--- |
| màlbà dúmmó <br> gun.L butt 'rifle butt' |
| b. màlbà dúmmó+ pógúru <br> gun.L butt belt |
| $\rightarrow$ | | màlbà dùmmò pógúru |
| :--- |
| gun.L butt.L belt |
| 'leather surrounding the butt-end of a rifle' |

(xxa) shows a regular canonical compound made up of two stems, 'gun' and 'butt'. In (xxb), this whole compound stands in as the modifier of 'belt', the head of the larger compound.

The complex non-head portion may also be a $\mathrm{N}+$ Adj construction, as in:

| ( xx$)$ | ànà-m | pè-m |
| :--- | :--- | :--- |$\quad$ tànnàá (cf. ànà-m pž-m 'old men')

At first glance, this looks like plural inflection inside of a compound, something purported not to occur, but recall that the human plural suffix /-m/ is highly restricted, especially so on adjectives like we see above. Thus, this inflection falls into the category of irregular, which is allowed more freely in compounds (e.g. English "mice-catcher" vs. "rats-catcher").
6.1.2.5 Compounds with /ií/ 'child' and /náá/ 'mother'

There are many canonical compounds with /íi/ 'child' the final element. The meaning of these compounds can be transparent, meaning the young or child of the initial element:
(xx)
a. غ̀njè í́
chicken.L child 'chick'
b. kòròbòrò íí
(pl. kòròbòrò úlùm)
Songhay.L child
'young Songhay'
c. nàà íí
(pl. nàà úlùm)
cow.L child 'calf'

It is from this function that the diminutive is derived (see section XXX). Compounds like those above are yet another example of seemingly left-headed compounds, though the semantics are not entirely clear on this point. In (xxc), for instance, it seems the compound refers to a kind of cow that is characterized by being young, rather than a kind of a child that is characterized by being a cow.

When compounded with plant names, 'child' takes the meaning of 'fruit' or 'seed'. Such forms are not generally used in the plural, but if they are, they would simply add the plural clitic /mbe/ rather than use the suppletive plural /úlùm/.

# a. tìmè íí <br> tree.L child <br> 'fruit (general)' 

b. sìm í
doum.palm.L child
'doum plam fruit'
c. $\grave{\text { èc̀-kèlè íí }}$
peanut.L child
'peanut [nut]'
d. gàw í í
onion.L child 'onion bulb'

Many fruit names, such as /màngóró/ 'mango' and /kàmbé/ 'zaban', already imply the fruit, so /íi/ is optional in these cases.

Sometimes, compounds with 'child' can be used to refer to a smaller part of a whole:
(xx)
a. dàmmà íí
hoe.L child
'blade of a hoe'
b. kènjìgè íí
pick-ax.L child
'pick-ax blade'
c. sèmbèy íi
cotton-spinning.stick.L child
'small earthenware whorl that turns on the cotton-spinning stick'
d. tàà íí
door.L child
'traditional key'

In two cases, these forms alternate with /náá/ 'mother' referring to the larger part. Both examples of this kind have been lexicalized in Tommo So, somewhat obscuring their origins:
$\begin{array}{ll}\text { a. kúy / kù-íí } & \text { 'pestle' } \\ \text { kù-náá } & \text { 'mortar' }\end{array}$
b. nùmí 'small handheld grindstone'
nùm náá 'wide flat grindstone'

In both cases, the /íi/ has fused with the stem, to the extent that 'mortar', in one instance, appears as /kùy náá/, with mother added after child, in the compound 'mortar carver' /kùy nàà nábí-né/.

A final interesting case of a compound with /ií/ includes the possessive clitic /mo/:

```
(xx) bàà=mò íí
    father = Poss.L child
    'legitimate child [Lit. child of a father]'
```

Because possession is only marked tonally, and tone is disrupted in a compound, the possessive clitic $/ \mathrm{mo} /$ can be added to make this relationship clear.

### 6.1.2.6 Compounds with /àná/ 'man' or /yàá/ 'woman'

Nouns /àná/ 'man' and /yàá/ 'woman', when used compound-finally without their human morphology, take on the adjectival meaning of 'male' and 'female'. They retain their lexical tone, and the initial noun is tone lowered.
(xx)
a. غ̀njè àná
chicken.L man
'rooster'
b. غ̀nè yàá
goat.L woman
'nanny-goat'
c. pèdù àná
sheep.L man
'ram'

Once again, these compounds appear left-headed, since in (xxc), the compound refers to a kind of sheep rather than a kind of man.

Whereas animal compounds with 'child' take the suppletive plural form /úlùm/ generally reserved for humans, 'male' and 'female' for animals do not take the suffixes seen in chapter 5.
a. Ànà-m mí $\quad \mathrm{y} \dot{\varepsilon}=\mathrm{g} \varepsilon=\mathrm{mbe}$ yé= yàì- $\varepsilon^{\mathrm{n}}$.
man-HumPl 1sgPro see.Perf.Rel = Def=Pl Exp=go.Perf-3plS
'The men that I saw left.'
b. Nàà ànà mí $y \varepsilon ́=g \varepsilon=$ mbe $\quad$ yé $=$ yàì- $\varepsilon^{n}$.
cow.L man.L 1sgPro see.Perf.Rel $=$ Def $=$ Pl Exp $=$ go.Perf-3plS 'The bulls that I saw left.'

When used with plant names, /àná/ means 'sterile’, as in /yùù àná/ 'sterile millet stalk', since it does not bear fruit.
'Male' and 'female' can be used figuratively, as well. /àná/ typically refers to a larger version of whatever noun it follows:
a. yénélé yènèlè àná 'housefly’ 'blowfly’
b. mínné gìrù gìrù àná earth dike.L dike.L man 'dike-ridge’ 'large dike-ridge fortified with logs'

| c. wélu | wèlù àná |
| :--- | :--- |
| 'nerve' | 'tendon' |

/yàá/, used figuratively, is more abstract. Consider the following three examples:
a. bòy yàá
tom-tom.L woman
'small cylindrical tom-tom’
b. sòw yàá
cloth.L woman
'blanket'
c. sèw yàá
ax.L woman
'any ax whose handle is fitted into a sleeve on the back of the blade'
(xxa) shows the female diminutive counterpart of the superlative male usage seen above. (xxb), however, does not refer to a smaller cloth than simply /sów/. Rather, my consultants explain to me that a blanket is called /sòw yàá/ because you marry a woman to keep you warm at night, as does a blanket. Finally, (xxc)/sèw yàa/ may allude to female anatomy, much like the male and female ends of certain electrical cables in English.
/àná/ and /yàá/ are also used compound-initially in place of the suffixed forms of 'man' and 'woman'. For instance:
(xx)
a. ànà pàndé
(pl. ànà pàndé-m)
'widower' (cf. yàà pàndé 'widow')
b. yàà dénnu
'courtship [Lit. seeking a woman]'
c. yàà sáá-na (pl. yàà sáá-m)
'oldest woman in the village'
d. ànà bìrú
'man's engagement' (cf. yàà bìrú 'woman's engagement')

For those cases where the suffixed and unsuffixed forms alternate, see section XXX. We may be tempted to say that these forms are unsuffixed, since the suffixal morphology is not allowed in compounds, but example (xx) shows that on rare occasions, such morphology can indeed surface inside of a compound.

### 6.1.2.7 Compounds with /gùnnó/ and /náá/, ‘fake' and 'authentic'

Especially in the realm of natural species, compounding /gùnnó/ 'slave' with the species name gives the meaning of 'false' or 'fake'. Generally, these are plants that resemble a better known species, often one that is edible (while the fake one is not). The compounding pattern is the standard canonical compound with/gùnnó/ in final position:
(xx)
a. pòlì̀ gùnnó
sesame.L slave
'fake sesame (Sesamum alatum)'
b. gùlùnnù gùnnó
'Amaranthus sp.'
c. ày yògù-mà-yògù gùnnó

## ‘Pupalea lappacea’

The true species indicated by the initial name (pòlíi, gúlúnnú, áy yògù-mà-yògù) can be compounded with /náá/ (literally 'mother') to emphasize its authenticity:
a. pòlì̀ náá
b. gùlùnnù náá
c. ày yògù-mà-yògù náá
'true sesame'
(edible plant sp.)
(plant sp., thornier than the 'fake' version)

Used as an adjective, /náá/ can also mean 'upright' or 'normal', as in /ǹdè náá/ 'an upstanding person', so it is probable that this is the use the compound form is derived from.
6.1.3 Pseudo-genitive compounds [x x̀

### 6.1.3.1 Overview

Another kind of compound in Tommo So looks tonally identical to possessive constructions, and for this reason, I call them "pseudo-genitive compounds". Here, it is the final element in the compound that is tone lowered, with the initial element retaining its lexical tone. All pseudo-genitive compounds are right-headed, so the tonal processes here entail that the head is always L-toned. For example:
(xx) a. nùmó bààgòl
arm amulet.L
'protective amulet worn on the arm'
b. bònnó sàdàà
pounding.area bird.L
'kingfisher'
c. níyé bànjà-y
oil bowl-Dim.L
'small bowl for oil'
d. pègélé sèlù
mountain grave.L
'tomb in the mountains'
e. sáá sòlù
wild.grape cream.L
'cream of millet flavored with wild grape'
f. kóyrá jìm

Koira disease.L
'disease involving thick saliva (treated in the village of Koira Beri)'

### 6.1.3.2 Tonal variation between pseudo-genitive and canonical compounds

As in Jamsay (Heath 2008), the choice of compound type (pseudo-genitive or canonical]) is rather arbitrary, and indeed at times variable, as is illustrated by the following animal names:

| ( xx$)$ | Pseudo-genitive |  | Canonical |  |
| :--- | :--- | :--- | :--- | :--- |
|  | òlú ìsè | 'wild dog' (jackal) | òlù pédu | 'wild sheep' (duiker) |
| òlú jàndùlù | 'wild donkey' (antelope) | òlù gámmá | 'wild cat' (sand cat) |  |
|  | òlú nàà | 'wild cow' (buffalo) | òlù nàá | 'wild cow' (buffalo) |

The last example demonstrates the variability of the compound types.

### 6.1.3.3 Complex pseudo-genitive compounds

Just as canonical compounds could have a recursive structure or a modifying initial element more complex than a simple stem, so too can pseudo-genitive compounds. Here we see an even wider range of potential complex structures, summarized below:
a. [ N Mod] N$]$
[[ǹdé $\quad$ kém] ǹdè]
person all person.L
'most beloved person' (literally 'everybody's person')
b. [[N N.L] N]
[[sáyá dèmbèlè] kànnàà] (cf. sáyá dèmbèle 'granary platform')
space.under.granary platform.L granary.L
'granary built on a raised platform'
c. [N [N.L N.L]]

```
    [ámbá [siràà bàrà-y]] (cf. sìàà bàrà-ý 'snuff box')
    God snuff.L box-Dim.L
    'kneecap (literally 'God's snuff box')
```

d. $[[S] \mathrm{N}]$
[[náá $\quad s \hat{\varepsilon}-\mathrm{m}] \quad$ pònnù $]$
mother have-1sgS pants.L
'type of pants' (literally "I have a mother"'s pants)

In (xxa), the modifier is a $\mathrm{N}+$ Quantifier construction, "all people". Since the universal quantifier 'all' does not interact tonally with what it modifies, we see that both 'person' and 'all' in this compound have their lexical tone, with the head tone lowered. In (xxb), the modifier is itself a pseudo-genitive compound. This is a recursive structure like that seen for canonical compounds above. In (xxc), we see that the modifier is simplex but the head is complex, a canonical compound, now completely tone lowered by the modifying "possessor". Finally, in (xxd), we see that an inflected phrase can be the modifier. This is the most unusual, since as I mentioned above, compounds are not supposed to contain regular inflectional morphology.

This fact, along with the tonal parallels with possessive constructions, suggests that pseudo-genitive compounds are lexicalized phrases rather than true compound words, treated in the lexicon as a single N .

### 6.1.3.4 Unusual pseudo-genitives

I have found one pseudo-genitive compound that proves difficult to classify:

(xx) | j̀lì-ý nàà |  |
| :--- | :--- |
|  | fresh-Dim cow.L |
|  | 'calf' |

/̀lì̀-ý/ is an adjective meaning 'newborn' or 'young and small', but here it is functioning as the possessor of 'cow'; rather than a usual adjectival construction /nàà òì-ý/, we get /ว̀lì-ý nàà/. In no other instance have I found /òlì-ý/ acting nominally or an adjective acting as a possessor.

### 6.2 Synthetic compounds

While there are many different kinds of synthetic compounds in Tommo So, the common factor between them is that they must contain at least one verb stem. This verb stem is typically on the right, though it is not necessarily the head, and it may be either bare or a deverbal noun. The three main kinds of synthetic compounds are agentive compounds, what I call "-u compounds", and gerundive compounds. In addition, there is a class of morphologically mismatched compounds that all have a sort of purposive reading, an " X for Y-ing" reading. These are typically left-headed. The other commonality between all synthetic compounds is that they all take the canonical compound tone pattern [ x x ].

### 6.2.1 Agentive compounds

Chapter 5 discussed the derivation of deverbal agentive nouns using the human suffixes and a $\{\mathrm{H}\}$ overlay. These deverbal nouns are usually compounded with the object of the verb, or occasionally even an adverb or an inflected verb. Consider first agentive compounds whose first member is the direct object of the verb:
a. gàlà kúndí-né
indigo.L put-HumSg.H
'cloth dyer'
b. kùù ع́rí-né
head.L braid-HumSg.H
'braider'
c. ǹdè dáí-né
person.L kill-HumSg.H
'murderer'
d. nùyò núyí-né
song.L sing-HumSg.H
‘singer'

The direct object may either be the cognate nominal of the verb (xxd) or another logical object (xxa-c).

Like other compounds, agentive compounds can be more complex than a simple X Y construction. In the example below, the object of the verb is itself a complex compound:
(xx) [[nàm dènù] bìrè] bírí-nદ́

```
    day.L day.spending.L work.L work-HumSg.H
'day laborer'
```

Here, compound [nàm dénu] 'spending the day' combines with the noun /bíré/ 'work' to form a recursive canonical compound [nàm dènù bíŕ́] 'day labor (lit. spending the day work)', and then this recursive compound again acts as the initial member of an even larger compound with the agentive noun [bírí-né] 'worker'.

In at least one instance, the initial member of the compound is not an object but an adverbial expression:

```
(xx) gìrè tóó-n\varepsiloń
    ahead be.in-HumSg.H
    'winner'
```

In (xx), the initial element, while still nominal, is generally used in the adverbial construction /gíré = ne/, as in /wó gíré = né tóò/ 'he is in the lead'. The verb from which the agentive is derived is also a quasi-verb, and thus does not pattern with the others in having a final /i/ on the stem. In the compound, the postposition is unsurprisingly dropped.

It is not always the case that the postposition is dropped, however. I have one instance in my data of the initial element containing the possessive postposition $/ \mathrm{mo} /$ in conjunction with verbal element /dìyè/, combining with a meaning something like 'what one wants'. Consider the following:

| a. Wó díỳ̀ wó=ỳ | pádà-dè-m. |  |
| :--- | :--- | :--- |
| 3sgPro what.one.wants.Rel | 3sgPro $=$ Obj | leave.Impf-Impf- 1 sgS |
| 'I let him do what he wants.' |  |  |

b. dìỳ̀ = mò sò
what. one. wants $=$ Poss.L speech
'irrelevant or out-of-context speech'
c. dì̀ $\varepsilon$ = mò bírí-né
what.one.wants $=$ Poss.L work-HumSg. H
'poorly behaved person who does things without being told to do them'

It is clear from (xxa) that /díy $\grave{\text { / }}$ is verbal, since it looks to be acting as a headless relative clause with the typical $\{\mathrm{HL}\}$ overlay on the verb and the preverbal subject pronoun. A regular verb /dìjé/ does exist, meaning 'tie' or 'keep up relations', to which this /dínè/ may
be historically related, but there seems to be no modern connection. In (xxb), we see a canonical compound containing the verbal participle followed by/mo/. In (xxc), we see that this is also possible in agentive compounds.

A synonym for /dìǹ̀ = mò bírí-né/ reveals another strange construction:

```
(xx) tò̀̀rò-nnì bírí-n\varepsiloń
let.do-3plS.Neg.Perf.L work-HumSg.H
'poorly behaved person who does things without being told to do them'
(Lit. one who works [what they] did not let [him] do)
```

Here, the initial member is a regular inflected verb, presumably also from a headless relative clause. The verb is tone lowered, just as a noun would be. As mentioned before, regular inflection is cross-linguistically dispreferred in nominal compound. we even see agentive compounds where the initial member is an inflected verb but not a nominalized relative participle, as in:

```
(xx) Ànjù gòàà yćlí-n\varepsiloń
    Anji leave.Perf come-HumSg.H
    'one who left Anji and came (here)'
```

This whole thing forms an agentivized chain verb construction with perfect inflection.
6.2.2 Compounds with final verbal noun; "-u compounds"

Most compounds with deverbal nouns use the /-u/ or vowel deletion nouns, and many of these compounds have idiosyncratic meanings. As opposed to referring to the action designated by the verb, these compounds often refer to the place where the action takes place ( xxd ), the instrument with which is it accomplished ( xxc ), or a person or thing that does the action (xxe). In short, we could assume that these compounds are exocentric, since the meaning is not simply the sum of the compound's parts. Nonetheless, this is not always true, as (xxa-b) shows.
a. gìnàgà
wòlú
rainy.season.L farming 'rainy season farming'
(< wàlá 'farm')
b. gìrè bímmílú
eye.L drunkenness
'dizziness' (< bìmmílí-yé 'be drunk’)
c. ìnù bùbú
tooth.L brushing
'chewstick’ (< bùbó 'brush’)
d. jàà sìrú
meal.L preparation
'kitchen' (< síré 'cook')
e. ǹdè kèrú
person.L biting
'stiletto fly larva'
( < kéré ‘bite’)

When the compound contains a deverbal noun derived by other means, the meaning is usually more transparent, with that deverbal noun acting as head:
(xx) òlù bií-gé
bush.L be-Nom
'strange behavior' (< bì̀ 'be')
6.2.3 Gerundive compounds

These compounds seem to be more productive than the last, and their formation and meaning are both more transparent. In this case, the verb stem on the right carries no deverbal morphology except for a $\{\mathrm{H}\}$ overlay. The element on the right is almost always the object of the verb, and the meaning of the compound always refers to the action itself.
a. bòdò bódó
excrement.L defecate.H
'act of defecating' (cf. bódó bòdó)
b. kùù júngó
head.L bob.H
'act of bobbing one's head' (cf. kúú jùngó)
c. òdù óbó
road.L give.H
'permission' (cf. òdú óbó)

The majority of gerundive compounds look like this, but there are a couple of instances where the initial member is not the direct object of the verb, but either another verb stem or an adjunct. In both cases, there continues to be no morphology on either member-the verb is not inflected in the case of the verb stem, understood to be chained with the rightmost verb, nor are there any postpositions in the case of the adjunct:
(xx)
a. bùndò dáá
hit.L kill.H
'the act of killing a rival in the bush (lit. 'hitting and killing')
b. $\begin{array}{ll}\text { èlù } & \text { góó } \\ \text { favor.L leave. } \mathrm{H} \\ & \text { 'being sick of someone' }\end{array}, \quad$,

The compound in (xxb) comes from an expression like the following:
(xx) Wó èlú ḿmv=ne gòáá= wo.

3 sgPro favor 1 sgPoss $=$ Obl leave. $\operatorname{Perf}=$ is
'I'm sick of him.'

The noun /èlú/ meaning roughly 'favor' is possessed, and this NP is followed by the oblique postposition $/ \mathrm{n} \varepsilon /$. In the compound, all of this is lost, and /غlú/ is used on its own.

There is one attested case of a postposition included in a gerundive compound:
(xx)

$$
\begin{aligned}
& \text { yàà }=\text { mò náá } \\
& \text { yesterday }=\text { Poss.L forget.H } \\
& \text { 'ingratitude }[\text { Lit. forgetting that of yesterday }] \text { ' }
\end{aligned}
$$

Here, the possessive clitic forms a headless possessor phrase, which makes it clear that what is being forgot is not yesterday itself, but what occurred yesterday.

### 6.2.4 Purposive compounds

There are two different forms of purposive compounds ('oil for rubbing' "instrumental compounds", Heath 2008) in Tommo So. The first looks morphologically
identical to deverbal noun compounds with "-u" morphology. The second takes the /-dìm/ infinitive as the second element. In both constructions, the head is on the left.

| a. dì̀ nǒy |  |
| :--- | :--- |
|  | water.L drinking |
|  | 'drinking water' |

tòmmò yùu dùyyú ${ }^{11}$
basket.L millet.L carrying
'basket for carrying millet'
b. dì̀ nòó-dìm
water.L drink-Inf
'drinking water'
dì̀ ǹdí-yé-dìm
water.L bathe-MP-Inf
'water for bathing'

Sòò sóó-dìm mí=ỳ tágá.
speech.L speak-Inf $1 \mathrm{sgPro}=\mathrm{Obj}$ tell.Imp
'Tell me what I should say [Lit. 'tell me the speech they speak].'

It seems that the deverbal noun forms are lexicalized; the infinitival form is more productive.

Since this latter form is identical to the infinitive, ambiguity can arise.

```
(xx) Dì̀ nòó-dìm m̀b\varepsiloń-gó = wo-m.
    water.L drink-Inf like-Adv = is-1sgS
```

The phrase above could translate as both 'I want drinking water' and 'I want to drink water'.

### 5.2 Adjectival compounds

[^9]There is one kind of adjectival compound in Tommo So, and that is the bahuvrihi ("blackbeard") type compound. These compounds are generally made up of a noun retaining its lexical tones followed by an adjective or numeral with a $\{\mathrm{HL}\}$ overlay: $[\mathrm{x} \hat{\mathrm{x}}]$. The tone break on the $\{\mathrm{HL}\}$ overlay comes before the last mora, the only construction where this tonal distribution is seen. Unlike traditional bahuvrihi compounds, which are nominal, these bahuvrihi compounds function exactly like simple adjectives: they follow the noun they modify, inducing tone lowering.

| a. ǹdè $\quad$ áná | wêy |  |
| :--- | :--- | :--- |
|  | person.L mouth | light.HL |
|  | 'gossipy | person' |

b. àn-nà-y dóló póò
man-HumSg-Dim.L testicle fat.HL
'boy with large testicles'
c. ǹdè míyé kúlôy
person.L voice six.HL
‘six-voiced person’

The initial element (the nominal portion) of the bahuvrihi compound may be a compound in and of itself, as in:

```
(xx) àn-nà [[pònnù súm] yórù]
man-HumSg.L pants.L cord quick.HL
'Dom Juan, ladies' man'
```

Such bahuvrihi compounds can also stand alone without a head noun to refer to several animal species, looking more like traditional bahuvrihi compounds. For instance, /dúló pálà/ can refer to a long-tailed bird (often Abyssinian roller or whydah), but to make it clear that it refers to a bird, speakers will often have it modifying 'bird', as in /sàdàà dúló pálà/.

Bahuvrihi compounds in Dogon tend to refer to inherent characteristics of what they modify: physical characteristics, personality types, etc., rather than temporary states of being. See McPherson and Prokhorov (2011) for a discussion of bahuvrihis as indicators of personality type.

## 7 Noun phrase structure

### 7.1 Organization of NP constituents

### 7.1.1 Linear order

Chapter 2 briefly introduced the linear order of NP constituents; (xxx) expands it, with the addition of the rare prenominal demonstrative /kó/ discussed in section XXX. The following represents the maximal linear order if all possible NP elements were present:
(174) a. One of the following:
$\mathrm{a}_{1}$ Prenominal demonstrative/kó/ (very rare)
$\mathrm{a}_{2}$ Possessor (either nonpronominal with optional possessive particle $/ \mathrm{mo} /$ or inalienable possessive pronoun)
b. Noun
c. Adjective or 'each'
d. Postnominal pronominal possessor
e. Cardinal numeral
f. One of the following:
$\mathrm{f}_{1}$ Demonstrative
$\mathrm{f}_{2}$ Definite
g. Plural clitic
h. Cardinal number
i. 'All' or 'each'

The two elements listed in (xxxa) never occur together, since the limited number of cases in which /kó/ is used pronominally generally involve temporal expressions or other more abstract senses in which the possessor would not be used. It could, in a sense, be seen as a demonstrative possessor, since it induces tone lowering on the following noun; this would unify (a). The three sentences that follow indicate the possible prenominal constituents: (a) /kó/, (b) a non-pronominal possessor (either alienable or inalienable), (c) an inalienable pronominal possessor.
a. Kó wàgàdù kém púlò-m yèlè-nní.
that.DD time.L all Fulbe-HumPl come.Perf-Neg.Perf.3p1S
'At that time, no Fulbe had come.' [Text 2]
b. Àràmátá $[s$ òw yàà $]=\mathrm{g} \varepsilon \quad$ gìnc̀-ý $=\mathrm{n} \varepsilon \quad$ yô.

Ramata blanket. $\mathrm{L}=\mathrm{Def}$ house- $\mathrm{Dim}=\mathrm{Obl}$ is
'Ramata's blanket is in the house.'
c. Mí bábé yélè-dè.

1 sgPro paternal.uncle.H come-Impf 'My uncle will come.'

The postnominal possessive pronouns can either precede or follow the adjective, as shown below. If it intervenes between the adjective and the noun, then the noun does not drop its tone, as it would when directly followed by the adjective:
a. Jàndùlù gém ḿmo bándán-kálá $=$ ne
kô.
donkey.L black 1 sgPoss courtyard $=\mathrm{Obl}$ is
'My black donkey is in the courtyard.'
b. Nàá ḿmo pílu=ge màndáá=ỳ.
cow 1sgPoss white $=$ Def run.away.Perf $=$ Cop
'My white cow ran away.'

Demonstratives and the definite follow the postnominal possessor (177a-b), and the plural clitic follows after that (177c-d):
a. Nàà pílú $\quad$ ḿ=mò=gè jóbò-dè.
cow white $1 \mathrm{sgObl}=$ Poss $=$ Det run-Hab
'My white cow will run.'
b. Íí $\quad w o ́=m o ̀=g e ̀ ~ n u ́ y o ́-g u ́ ~ s \hat{\varepsilon}$.
child $3 \mathrm{sgObl}=$ Poss $=$ Det sing-Ppl have 'Her child is singing.'
c. Nàà nò=mbé yàà bé-m.
cow this $=$ Pl see.Perf was-1sgS
'I saw these cows.'
d. Yàá- $\mathrm{m}=\mathrm{g} \hat{\varepsilon}=\mathrm{mbè} \quad$ tìrè $\quad$ yàà $-\mathrm{m}=\mathrm{g} \grave{\varepsilon}=\mathrm{mbè} \quad$ yéllìn. woman- $\mathrm{HumPl}=\mathrm{Det}=\mathrm{Pl} \quad$ grandparent woman- $\mathrm{HumPl}=\mathrm{Det}=\mathrm{Pl}$ come. Hab .3 plS 'The women's grandmothers will come.'

### 7.1.2 Adjective-Numeral inversion

In addition to this variable positioning of the numeral, under certain circumstances, the relative order of the adjective and numeral may be switched from unmarked Adj-Num to marked Num-Adj. This can optionally occur in the presence of a demonstrative, a possessor, or a relative clause (Heath and McPherson, ms.). For instance:

# a. jàndùlù pílu tààndú-gó <br> donkey.L white three-Adv <br> 'three white donkeys' 

[Adj-Num]
*jàndùlù tààndù-gò pílu
b. Sáná jàndùlù pìlù tààndú-gó

Sana donkey.L white.L three-Adv
'Sana's three white donkeys'

Sáná jàndùlù tààndù-gò pìlù
[Num-Adj]
c. jàndùlù pìlù tààndù-gò nò = mbé [Adj-Num]
donkey.L white. L three-Adv.L this $=\mathrm{Pl}$
'these three white donkeys'
jàndùlù tààndù-gò pìlù nò= mbé [Num-Adj]
d. jàndùlù pìlù tààndù-gò mí bénd $\varepsilon=\mathrm{g} \varepsilon=\mathrm{mbe}$ [Adj-Num]
donkey.L white.L three-Adv.L 1sgPro hite.Perf.Rel $=\operatorname{Def}=\mathrm{Pl}$
'the three white donkeys that I hit'
jàndùlù tààndù-gò pìlù mí bénd $\varepsilon$ $=\mathrm{g} \varepsilon=\mathrm{mbe} \quad[\mathrm{Num}-\mathrm{Adj}]$

In all examples, the numeral could also be outside of the determiners and tonally free.
This reordering is not unique to Tommo So. It also occurs in other Dogon languages like Jamsay and Yorno-So (Heath and McPherson, ms.). It is not clear what except a constraint on surface order would drive such reconfigurations. No semantic differences can be identified.

### 7.1.3 Detachability

When an NP is the clause-internal head of a relative clause, the elements of the NP may be split up around the relative participle. We can divide the NP constituents into those preceding the relative participle and those following it. (xxx) presents each category in order.

## (xxx) Preceding

Prenominal possessor
Noun
Adjective
Postnominal possessor
(Numeral)

## Following

Definite or Demonstrative
Plural
(Numeral)
'Each' or 'all'

Loosely one could say that the relative participle is inserted after the postnominal possessor (xxxd) above, but the numeral can no longer follow the determiners. Generally, the elements in the preceding category are all tone lowered, with the exception of the prenominal possessor. For further discussion and examples of the division of NPs in relative clauses, see chapter 14 on relativization.

### 7.1.4 Headless NPs

Headless NPs are NPs wherein the head noun is omitted, leaving only the modifying elements. Most commonly, these are demonstratives and the universal quantifier /kém/, though numerals, possessive phrases with postposition $/ \mathrm{mo} /$, and adjectives may also behave as headless NPs. We can think of stand-alone demonstratives and 'all' as pronouns in their own right, but since there is no morphological change, they may also be seen as an example of a headless NP.

Freestanding demonstratives are pronounced with a slightly longer vowel, equal in length to monosyllabic nouns, than their modifying counterparts, since these could arguably cliticize to what precedes them. This allows the full rise to be realized on [nò́] 'this' and [nií] 'that'. Other than this lengthening of the vowel, their forms are identical:
(xxx) a. Ø nòó ńjé= $\mathfrak{n}$ ?
this what $=$ Cop
'What is this [thing]?'
b. Émmé gòrò bànù jénfí- $\mathrm{m}=\mathrm{g} \varepsilon$ tìgé émm $\varepsilon$

1 plPro hat.L red.L lift-AgntPl=Def name 1 plPoss
tíyáá... Ø nì = mbé dáàlè...
tiyaa... that $=\mathrm{Pl}$ daale... [Hist. text]
'We who wear the red hats, [to] our last name [we say] tiyaa... those [people], daale...'
c. Ø kó è l̀c̀lú bè.
that.DD delicious was
'That [thing] was delicious.'

The universal quantifier /ḱm/ can also be used in this way with no difference in pronunciation.
(xxx) a. Ø kém wó=ỳ bàrì̀yì- $\mathrm{e}^{\mathrm{n}}$.
all $3 \mathrm{sgPl}=$ Obj help-MP.Perf-3plS
'All [of the people] helped him.'
[Hist. text]
b. Ø kém ǹ̀yè-m.
all eat.Perf-1sgS
'I ate everything.'

The demonstratives and 'all' are the most debatable examples of headless NPs.
Clearer are headless NPs whose overt element is a numeral. Just like when the head is overt, the numeral may surface with or without the /-go/suffix.
(xxx)
a. Ø néé (-gó) mí=ỳ óbó.
two(-Adv) 1 sgPro $=\mathrm{Obj}$ give.Imper
'Give me two [things].'
b. Yàá-m jóó-ní bé-bé-èn, mè Ø tààndú-gó dògò woman-HumPl many-Adv RED-were-3plS but three-Adv only yèlè-nní.
come-Perf.Neg.3plS
'There were a lot of women, but only three [women] came.'

Possessives are commonly used without a head noun, translating as '[that] for X '. In this usage, the possessive clitic $/ \mathrm{mo}$ / or a possessive pronoun must be used; a non-pronominal possessor alone would be indistinguishable from a plain noun if the possessed noun were null:
( xxx$)$ a. Ḿmo $=\mathrm{g} \varepsilon \quad$ úwo $=\mathrm{g} \varepsilon \quad$ dì $\quad$ káy.
1 sgPoss $=$ Def 2 sgPoss $=$ Def than better
'Mine [that for me] is better than yours [that for you].'
b. Kè̀ù nǒ pédu $=\mathrm{mo}=\mathrm{y}$.
grass.L this sheep $=$ Poss $=$ Cop
'This grass is the sheep's [thing].'

Adjectives, either simple or bahuvrihi compounds, can be used without a head noun; for the latter, this was seen in chapter 6:
( xxx ) a. [Dúló pálà] yàà bé-m.
tail long.HL see.Perf was-1sgS
'I saw a long-tailed [one].'
b. Bánu $=\mathrm{g} \varepsilon$ mí= j káy.
red $=$ Def $1 \mathrm{sgPro}=\mathrm{Obj}$ better
'I prefer the red [one].'

### 7.2 Noun plus adjective

### 7.2.1 Linear order and tone changes

As mentioned in section XXX, adjectives follow the nouns they modify in Tommo So and induce tone lowering on the noun; the noun's lexical tone is replaced by a $\{\mathrm{L}\}$ overlay:
(xx) a. jàndúlú
donkey
b. pílu
white
c. jàndùlù pílu
donkey.L white
'white donkey'

Tone lowering with adjectives is true of both suffixed and unsuffixed adjectives.
Unlike Jamsay, Tommo So adjectives generally do not agree in animacy with the noun modified:
(xxx)
a. yàà-nà
èsú
woman-HumSg.L pretty
*yàà-nà èsú-nó
'pretty woman'
$\begin{array}{ll}\text { b. dògò-nò } \quad \text { dàgú } \\ \text { Dogon-HumSg.L small } & \\ \text { 'small Dogògò-nò dàgú-nó }\end{array}$

The notable exception is /pè̀ $\bar{\varepsilon}-\mathrm{n} \varepsilon$ / (pl. pěm) 'old'.

### 7.2.2 Multiple adjectives

More than one adjective can be combined after a noun, and when this happens, only the final noun has its lexical tone. That is, the final adjective induces tone lowering on both the noun and the non-final adjective(s).
(xx) jàndùlù pìlù kàndá
donkey.L white.L new
'new white donkey'

As far as my data indicate, Tommo So adjectives are freely ordered. There seems to be no semantic difference between, for instance, the phrase in ( xxx ) and its reverse, [jàndùlù kàndà pílu]; both mean 'new white donkey'.

### 7.2.3 Ordinal adjectives

Ordinals like 'first' or 'second' behave just like regular adjectives. They fall into the same linear position and induce the same tone lowering.

```
(xx) ì̀yè nèy-yém
month.L two-Ord
'second month (February)'
```

Recall that 'first' has a suppletive form, /kúyó/, which is also a run of the mill adjective.

### 7.2.4 'each'

The distributive 'each' is more complicated. It forces tone lowering on the preceding noun, just like a regular adjective, but not on a preceding adjective:
( xxx ) a. Gìnè túmó-túmó kém bándán-kálá yé $=\mathrm{s}$ è- $\varepsilon^{\mathrm{n}}$
house.L each all courtyard Exst-have-3plS
'Each house has a courtyard.'
b. Nàà bánu túmó-túmó nònú yèléé nóò-dìn.
cow.L red each here come.NF drink-Impf.3plS
'Each red cow comes here to drink.'

It could be that 'each' can either fill in the slot of an adjective, in which case it forces tone lowering, or the slot of the quantifier, in which case it has no tonal interaction. DATA: 'each of these' with a determiner-where does it go?

### 7.2.5 'some’

Though a quantifier semantically, /gàmbáá/ 'some' in Tommo So is morphologically an adjective. It linearizes as one and induces tone lowering:
(xx) a. ènè gàmbáá
goat.L several
'some goats'
b. gìnè.L gàmbáá
house.L several

```
'several/some houses'
```

We see that it is in an adjective slot rather than a quantifier slot like 'all' when we see its position relative to demonstratives:

## SOME OF THESE

Like other adjective or quantifiers, 'some' can be used in a headless NP:
(xx) a. Gàmbáá òlú yàì- $\varepsilon^{n}$, gàmbáá kó- $\varepsilon^{n}$.
some field go.PerfL-3plS some be-3plS
'Some people went to the fields, and some people stayed here.'
b. Gàmbáá nàmá bèláá wò-èn, gàmbáá bèlè-nní. some meat find.Perf be-3plS some find.Perf.Neg-Neg.3plS 'Some people found meat, but some people didn't.'
*sukoro gambaa

### 7.2.6 Participles

As mentioned in Chapter 6, many adjectival meanings are expressed with verbal participles. While these may have the semantics of adjectives, they have the morphology of relative clauses; they linearize after numerals rather than before and after any other adjectives rather than being freely variable in order. For more on relative clauses and participles, see Chapter XXX.

### 7.3 Noun plus numeral

The next modifier in the linear order is the numeral (which as mentioned above can precede the adjective under some conditions). The numeral, either simple or complex, causes no tone changes on preceding nouns or adjectives:
(xx) a. jàndúlu tààndú-gó
donkey three-Adv
'three donkeys'

```
b. yàá-m p\varepsiloń-tààndù ǹnó-gó sígé
    woman-HumPl thirty five-Adv more
    'thirty-five women'
```

Numerals can either precede or follow the determiners in Tommo So, which is unlike other Dogon languages. When they follow, they are outside of the tonal NP, since they do not interact tonally at all with the preceding elements (xxxa-b). However, if they precede the demonstrative, they are tone lowered (xxxc).
( xxx ) a. Jàndùlù gém ńmo $=$ mbe tààndú-gó bándán-kálá $=\mathrm{n} \varepsilon$ kó- $\varepsilon^{\mathrm{n}}$. donkey.L black 1sgPoss $=\mathrm{Pl}$ three-Adv courtyard $=\mathrm{Obl}$ is-3p1S 'My three black donkeys are in the courtyard.'
b. Tàgà nò=mbé ǹnó-gó èsú-gó wò- $\varepsilon^{\mathrm{n}}$.
shoe. L this $=\mathrm{Pl}$ five-Adv pretty-Adv are 'These five shoes are pretty.'
c. Tàgà ǹnò-gò nò=mbé èsú-gó wò-èn.
shoe.L five-Adv.L this $=\mathrm{Pl}$ pretty-Adv are 'These five shoes are pretty.'

Q : Can large numerals undergo inversion?
Q: What is the relative ordering of numeral and possessive pronoun?

### 7.4 Noun plus determiner

Demonstratives (but not the definite marker, (xxxc)) also induce tone lowering on the preceding words of the NP, including any adjectives:
( xxx ) a. jàndùlù gèm nǒ
donkey.L black.L this
'this black donkey'
b. غ̀nè gàmbàà nò = mbé
goat. L several. L this $=\mathrm{Pl}$
'several of these goats'

> c. jàndùlù $\mathrm{gém}=\mathrm{g} \varepsilon$
> donkey.L black $=$ Def
> 'the black donkey'

Determiners mark the begin of detachable NP elements, that is, those that follow rather than precede a relative participle.

### 7.5 Noun plus quantifier

### 7.5.1 'all'

The universal quantifier /kém/ 'all' was introduced at the beginning of this chapter as commonly standing alone in a headless NP. When it has a head, it is the last element in the NP, following any other modifiers, determiners, or the plural. It is also tonally independent:
(xx) ìsè pillù tààndù-gò nì = mbé kém dog.L white. L three-Adv. L that $=\mathrm{Pl}$ all 'all of those three white dogs'

There is no distinction between 'all' and 'each'. /kém/ represents both.
7.5.2 'each'

## SEE IF EACH BELONGS HERE OR BEFORE

### 7.6 Possession

Possession in Tommo So divides nouns into two classes: kinship and other relationship terms, and everything else. The kinship terms take what I will call the inalienable possessive construction, while everything else takes the alienable possessive construction. By and large, these differ only when the possessor is pronominal, but subtle tone differences on modifiers of the possessed noun can also indicate whether the possession is alienable or inalienable.

### 7.6.1 Alienable possession

Most nouns in Tommo So are alienable, including body parts, wives, men (but not husbands), and children. Nonpronominal (full noun) possessors precede the possessed noun, while pronominal possessors follow.

### 7.6.1.1 Nonpronominal NP possessor

When the possessor is a full (nonpronominal) noun or NP, it comes directly before the possessed noun. The possessor retains its lexical tone, and phonologically, the possessor induces tone lowering (a $\{\mathrm{L}\}$ overlay) on the possessed noun. However, there appears to be some variation in the exact realization of this tonal overlay. For younger generations, the overlay is phonologically $\{\mathrm{L}\}$, but there seems to be a phonetic effect where if the final mora of the possessor is H , this H tone spills over slightly onto the possessed noun, creating a fall that can be instantiated even on a light syllable. There are a few instances in texts with older speakers that seem to show a true phonological $\{\mathrm{HL}\}$ on the possessed noun, at least for inalienable nouns to be discussed below.
(xxx) a. Sáná gìnè=ge némé-gí-yáá= wò. (Alt. [sáná 'gínè])

Sana house.L = Def dirty-GI-MP.Perf $=$ is
'Sana's house got dirty.'
b. Púlò-nò nàà $=\mathrm{g} \varepsilon$ sémè-dìn.

Fulani-HumSg cow.L=Def slaughter-Impf.3plS
'They will slaughter the Fulani's cow.'

I have no instances in the data of a final L-toned possessor being followed by a HL possed noun (*[púlò-nò gínc̀]).

The possessor may be a complex NP (compound noun or $\mathrm{N}+$ modifier). The tonal effects on the possessed noun are the same, and the tonology of the possessor NP is as expected (displaying the full range of tonal effects in a regular NP).

$$
\begin{array}{lll}
(\mathrm{xxx}) & {[\text { yàà-nà }} & \text { èsú }=\mathrm{g} \varepsilon]
\end{array} \text { jàndùlù }=\mathrm{g} \varepsilon \quad 10 \text { woman-HumSg.L pretty = Def } \begin{aligned}
& \text { donkey.L = Def } \\
& \\
& \text { 'the pretty woman's black donkeys' }
\end{aligned}
$$

For the tonology of possessed nouns with modifiers, see section XXX.
7.6.1.2 Treatment of modifiers following the possessed noun

An adjectival modifier following the possessed noun will also lower its tone under the influence of the possessor.
(xxx)

$$
\begin{array}{llll}
\text { a. } & \text { yàa-ná }=\text { g } \varepsilon & \text { [gìnè } & \text { dì̀ }] \\
& \text { woman-HumSg }=\text { Def } & \text { house.L } & \text { big.L } \\
\text { 'the woman's big house' }
\end{array}
$$

b. Sáná [jàndùlù gèm] $=\mathrm{g} \varepsilon$

Sana donkey.L black.L=Def
'Sana's black donkey'

How about two adjectives?

Numerals are more complicated. The numeral, complete with the final /-go/ suffix, can either come after the determiner and plural clitics, as we saw in $\S 6.1$, or it can directly follow the noun. If it comes after the noun, preceding the enclitics, its tone is lowered, just like an adjective. If it is outside the determiner, then it retains its tone.

| a. àn-ná $=\mathrm{g} \varepsilon$ | yàà-m | tààndù- $\mathrm{gò}=\mathrm{g} \varepsilon=\mathrm{mbe}$ |
| :--- | :--- | :--- |
| man-HumSg $=$ Def | woman-HumPl.L three-Adv. $\mathrm{L}=\mathrm{Det}=\mathrm{Pl}$ |  | 'the man's three wives'

b. [yàà-nà $\varepsilon$ sú $=\mathrm{g} \varepsilon$ ] jàndùlù gèm $=\mathrm{g} \varepsilon$ tààndú-gó
woman-HumSg.L pretty $=$ Def donkey.L black.L=Def three-Adv 'the pretty woman's three black donkeys'

Determiners are not obligatory, and as such, we can get a window onto the structure being used by a speaker (pre- or post-D) by whether or not the numeral undergoes tone lowering.

When a possessed noun modified by a cardinal number is followed by distributive numeral 'each', the numeral is tone lowered, while the distributive is not:

$$
\begin{array}{llll}
(\mathrm{xxx}) & \text { àn-ná }=\mathrm{g} \varepsilon & \text { yàà-m } & \text { này-gò túmó-túmó kém } \\
\text { man-HumSg = Def woman-HumPl.L four-Adv each } & \text { all } \\
\text { 'each of the man's four wives' }
\end{array}
$$

A demonstrative also will drop its tone when modifying a possessed noun:

```
(xxx)
a. Àràmátá kòrò nò
Ramata calabash.L this.L
'this calabash of Ramata's'
```

b. દ́ndé sòm nì عnd $\varepsilon$ horse.L that.L 'that horse of $\varepsilon n d \varepsilon$ 's'

The tonal interactions between a possessive NP and a relative clause are complex and interesting. They will be treated in Chapter XXX.
7.6.1.3 Nonpronominal possessor with genitive clitic / mo /

Typically, the possessor is immediately juxtaposed with the possessed noun without the use of any genitive particle. In some cases, however, the clitic $/ \mathrm{mo} /$ is used, with no apparent change in meaning. This is seen particularly in texts with older speakers and is almost never offered as a genitive in elicitation

The tone of such constructions is not consistent. At times, the possessed noun undergoes tone lowering (xxa), just as it would in the absence of the clitic, and at other times, it retains its lexical tone (xxb):
a. Móólu = mo jàw
[Text 1]
Mori $=$ Poss fight.L
'the Mori war'
b. Bènjù-ámbì̀m $=\mathrm{m} \supset$ úndó $=\mathrm{g} \varepsilon$ [Text 2]

Benju Ambiem = Poss ash = Def
'Benju Ambiem's ashes’

This particle is obligatory and very common in texts in headless possessive constructions, as in:
(xx)

Móólu $=\mathrm{mo}=\mathrm{g} \varepsilon \quad$ tà̀ $-\varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon=\mathrm{le}^{12} \quad$ àn-sáárá $\quad$ y $̀$ láá $=\mathrm{w} \nu$.
Mori $=$ Poss $=$ Def shoot.PerfL-3plS $=$ Def $=$ Assoc white.person come.Perf $=$ is
'At [the time when] they started the Mori [war], the white people came.' [Text 2]

[^10]With the genitive particle following a noun, that headless NP refers to anything belonging to or pertaining to that noun.

## MORE DATA

### 7.6.1.4 Pronominal possession

The possessive pronouns seen in chapter 4 are used postnominally in alienable possessive constructions. They derive from a combination of what I call the independent pronouns plus the possessive particle $/ \mathrm{mo} /$, which seems, but many have undergone phonological shifts away from their roots, and I no longer treat the particle as being a separate entity, though it is still toneless, as it would be as a clitic.
(xxx) Singular Plural

1 ḿmo émme
2 úwo éwo
3 wómo béme

These possessors do not induce tone lowering on the preceding noun:
(xxx) a. mìnné wómo
field 3sgPoss
'his/her field'
b. bóy úwo
name 2sgPoss
'your name'

Under one known condition, the pronoun and the possessive clitic may in fact be split, in which case each resumes its regular form. This is in the presence of the adjective /túmó/ 'only', in expressions with the meaning 'for X alone'. This was first reported in Plungian (1995) and is confirmed by the speakers of Tédié:

> (xxx)

$$
\begin{array}{ll}
\text { a. tàgá ú } \quad \text { túmó = mo } \\
\text { shoe } 2 \text { sgPro } & \text { one }=\text { Poss } \\
\text { 'shoes for you alone' }
\end{array}
$$

b. gìné émmé túmó $=$ mo
house 1 plPro one $=$ Poss
'a house for us alone'

HOW DO YOU SAY: For everyone but me?

### 7.6.1.5 Pronominal possession with modifiers

As we saw earlier in the chapter, this pronominal possessor may either precede or follow any modifying adjectives. If it precedes the adjective, then the adjective's tonedropping influence is annulled (xxxa). If it follows, then the core NP (noun + adjective) retains the usual tone-dropped pattern-the possessor does not influence this at all (xxxb).

```
a. nàá ń́mo pílu \(=g \varepsilon\)
    cow 1sgPoss white \(=\) Def
    'my white cow'
b. [jàndùlù gém] ḿmo=mbe
    donkey.L black 1sgPoss \(=\mathrm{Pl}\)
    'my black donkeys'
```

When the possessive phrase is followed by a demonstrative, the tone becomes complicated. The possessed noun drops its tone, as we would expect from the addition of a demonstrative, but the pronominal possessive retains its lexical tone and it is the demonstrative that surfaces as all L:

$$
\begin{array}{ll}
\text { a. ìsè } \quad \dot{m}=\text { mò } \quad \text { nò }  \tag{192}\\
\text { dog.L } 1 \text { sgObl }=\text { Poss } & \text { this.L } \\
\text { 'this dog of mine' }
\end{array}
$$

b. gìnè ḿ $=$ mò nò
house.L $1 \mathrm{sgObl}=$ Poss this.L
'this house of mine'

### 7.6.2 Inalienable possession

Kinship terms and some other human nouns pattern differently with regard to possession. When the possessor is nonpronominal, there is no difference clearly discernible
difference until modifiers are added, but pronominal possession differs from alienable constructions in that the independent pronoun is used prenominally.

The human terms 'wife/woman', 'man', and 'child' are not possessed inalienably. The few inalienable human terms that are not kinship terms include /ánígé/ 'friend', /áí-ne/ 'friend’, and variably /kónní-né/ 'enemy', which can also take alienable possession. Agentive nouns, all human, take XXX.

### 7.6.2.1 Nonpronominal possession

Just like in alienable contructions, the possessor of an inalienable noun precedes the possessed noun, which lowers its tone:
(xxx) a. Sáná bàbè

Sana uncle.L
'Sana's uncle'
b. púlò-nò nàà

Fulani-HumSg mother.L
'a Fulani's mother'

## CONFIRM THAT THERE ARE NO HIDDEN HL OVERLAYS

### 7.6.2.2 Nonpronominal possession with modifiers

It is in this condition that the distinction between alienable and inalienable possession becomes clear tonally. If the kinship term is modified by an adjective, the adjective retains its tone rather than undergoing tone lowering. That is, the kinship term and the modifier form a tonological island, impervious to the effects of the possessor.

```
(xxx) Sáná sàà kómmó
    Sana sister.L skinny
    'Sana's skinny sister'
```

Since the tonological effect of tone lowering already cannot extend past the adjective, it is no surprise that numerals are also tonally free in inalienable possessive constructions:

```
(xx) Sáná sàà néé-gó
    Sana sister.L two-Adv
```

'Sana's two sisters'

A demonstrative is also free of the possessor's tone control, but on the flip side, the possessor is equally free of the demonstrative's. The demonstrative will enforce tone lowering on preceding numerals and adjectives (and possibly the possessed noun, though it is impossible to distinguish this from the control of the possessor), but its tone lowering stops short of the possessor:

```
(xx) Sáná sàà nèè-gò nò=mbé
    Sana sister.L two-Adv.L this = Pl
    'these two sisters of Sana's'
```

The fact that the possessor can control the tone of an adjective in alienable constructions but not inalienable suggests that there is a tighter syntactic relationship between possessor and possessed noun in inalienable constructions that forms a constituent beneath the adjective, while the possessor is higher in the structure in alienable constructions.

### 7.6.2.3 Pronominal possession

When the possessor is pronominal for inalienable possessions, the basic pronouns are used in front of the possessed noun. Tonologically, this construction is the most complicated; the rules for the tonal overlays were introduced in section XXX. To review, if the following kinship term is 1-2 morae (light), the tone is all $\{\mathrm{H}\}$, but if it is three morae or more, it receives a $\{\mathrm{HL}\}$ overlay with the tone break after the first mora.

```
(xxx)
a. bé níné (cf. nìné)
3plPro aunt.H
'their aunt'
```

b. wó náá (cf. náá)
3plPro mother.H
'her mother'
$\begin{array}{lll}\text { c. mí } \quad \text { [tírè yàà-nà] } & \text { (cf. tìrè yàa-ná) } \\ \text { 1sgPro } \quad \text { grandmother.HL } & \\ \text { 'my grandmother' } & \end{array}$
d. ú ánìgè (cf. ánígé)

## 2sgPro friend.HL

We can use tone to distinguish between lexicalized $\mathrm{N}+$ Adj combinations and productively created $\mathrm{N}+$ Adj combinations, in that lexicalized ones will take a $\{\mathrm{HL}\}$ overlay across both stems, whereas productively created ones will show the tone changes noted in section 7.6.2.2. For example, /bàà díz/ 'uncle (father's older brother)' unpossessed looks like productively created 'big father'. When possessed, however, it takes the $\{\mathrm{HL}\}$ overlay of a heavy kinship term, as in /ú báà dì̀/ 'your uncle'.

### 7.6.2.4 Pronominal possession with modifiers

The addition of modifiers to inalienable constructions with a pronominal possessor helps shed light on what exactly is controlling the tone of the noun. While in the constructions discussed in section 7.6.2.5 the tonal overlay of the possessor and the adjective were the same, the $\{\mathrm{H}(\mathrm{L})\}$ overlay of pronominal possessors provides a testing ground for whose control is stronger: the possessor or the adjective. It turns out that the adjective wins. When modified by an adjective, the possessed noun take $\{\mathrm{L}\}$ rather than the $\{\mathrm{H}\}$ or $\{\mathrm{HL}\}$ imposed by the pronominal possessor:
(xx)
$\begin{array}{ll}\text { a. bé nìnè kómmó } \\ \text { 3plPro } & \text { aunt. } L \text { skinny }\end{array}$ 'their skinny aunt'
b. ú ànìgè póó (cf. (xxd))
2sgPro friend.L fat
'your fat friend'

When a possessed kinship term is modified by a demonstrative, the whole possessive phrase, including the possessor, drops its tone:

# a. [wò nìnjù] nǒ <br> 3sgPro.L uncle.L this 'this uncle of hers' 

b. [mì [tìrè yàà-nà]] nǒ 1sgPro grandmother.L this 'this grandmother of mine'

Numerals retain their tone after a possessed kinship term, even with the addition of the distributive 'each':
(201)

# a. mí [náá dì̀] tààndú-gó <br> 1sgPro aunt.HL three-Adv <br> 'my three aunts' 

b. mí nínjú kúlóy-gó túmó-túmó

1sgPro uncle.H six-Adv each
'each of my six uncles'
7.6.3 Recursive possession

It is also possible to form recursive possessive constructions, where a possessive construction (X's Y) forms the possessor of yet a more complex construction (X's Y's Z). In these constructions, the highest possessor ( X ) imposes its tone changes (if any) on the middle word ( Y ), and then this whole construction acts as a possessor of the lowest word $(\mathrm{Z})$, inducing possessive tone lowering on it.
a. [[mí báá] gìnè $]$

1 sgPro father.H house.L
'my father's house'
b. [[Ànjú ògò] gìnè]

Anji chief.L house.L
'the chief of Anji's house'
c. [[ìsé ḿmo] bòy]
dog 1sgPoss name.L
'the name of my dog'

### 7.7 Object marker / = $\mathbf{\jmath} /$

Tommo So has one case marker, a palatal nasal clitic denoting that the noun in question is functioning as a direct object of the verb. The definition of direct and indirect in use here is whether or not the noun requires a separate postposition when preceding a verb.

If no postposition is necessary, the object is direct, regardless of its theta role. Most often, direct objects are either the theme or the goal of a verb.

The nasal of the object marker assimilates to the place of articulation of the following word. When pronounced in isolation with its host word, the palatal nasal can be heard. It appears that the exact pronunciation depends on the dialect, since Plungian (1995) lists it as $/ \mathrm{y} /$ for the dialect he worked on.

Note that the object marker is also used as the copula, discussed in section XXX, and a focus marker, discussed in section XXX.

The object marker comes after the determiner and plural clitics, but before universal quantifier $/ \mathrm{k} \varepsilon \mathrm{m} /$. It itself is low-toned, one of the few clitics to have lexical tone, but it has no effect on the lexical tone of the preceding NP. It is obligatory with personal pronouns, kinship terms, and personal names-essentially, human objects:
a. Sěydu mí=ŋ̀ jáá f́yè-mè-dè (*mí)

Seydou 1 sgPro $=$ Obj meal eat-Caus-Hab 'Seydou makes me eat [a meal].'
b. Mí náá=j̀ ádúbá-gú sê-m. (*mí náá)

1sgPro mother= Obj think-Ppl have-1sgS
'I am thinking about my mother.'
c. Àràmátá $=\mathfrak{\jmath}$ bòn $b o^{n}$ óbò-dè-m.
(*Àràmátá)
Ramata $=$ Obj candy give-Hab-1sgS
'I will give Ramata candy.'

Plungian (1995) notes that in cases where a verb takes two direct objects, both human, the case marker may be omitted on the first but not the second. (xxx) recreates Plungian's data within the format used here, verified by my consultants:
(xxx) a. Sáná $=$ ỳ̀ $)$ Kàndá = ̀̀ tágá.

Sana $=$ Obj Kanda $=$ Obj show.Imper
'Show Sana to Kanda.'
b. *Sáná = j̀ Kàndá tágá.
c. *Sáná Kándá tágá.

On nouns other than kinship terms and proper names, the use of the case marker is optional but generally marks focus; this semantic difference is often not particularly salient.
( xxx ) a. [ènè náá] íí $\quad \operatorname{wómv(=ỳ)~bòó-gú~} s \hat{\varepsilon}$. goat mother child $3 \mathrm{sgPoss}=\mathrm{Obj}$ call-Ppl have 'The mother goat calls her baby.'
b. Mí ùlùm nò=mbé( $=$ ŋ̀) bèndáá bè-m.

1 sgPro child this $=\mathrm{Pl}=\mathrm{Obj}$ hit.Perf was- 1 sgS 'I hit these children.'
c. Nàà pílu(=ỳ) sémè-dè-m.
cow white $=$ Obj slaughter-Hab-1sgS
'I will slaughter a white cow.'

For more uses of the object marker in focus, see chapter XXX.

## 8 Ideophones and onomatopoeia

All of the Dogon languages, like many African languages, make extensive use of ideophones. These tend to fall into two categories: adjectival intensifiers and "expressive adverbials" (Heath 2008). Both have characteristic morphophonology, with reduplication and the use of non-standard phonemes common. This chapter will address both of these classes of ideophones, along with a selection of interesting onomatopoetic words (ex. animal sounds). Finally, I cover sound symbolism in section 8.5, which is seen particularly in the adjectival realm.

### 8.1 Phonology of ideophones

The phonology of ideophones often diverges from the phonology of normal lexical items. Reduplication is more common; the word may be disharmonic; unusual consonants like /c/ (a voiceless palate-alveolar affricate) may be present; the tone pattern may diverge from $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$. I will address each of these in turn.

### 8.1.1 Reduplication

A great many ideophones in Tommo So are reduplicated. This reduplication can be full stem reduplication or final CV reduplication or even retriplication. Some adjectival intensifiers are reduplicated forms of the adjective with /-mà/ in the middle, a reduplication type discussed in section XXX.

Full stem reduplication occurs on stems of all shapes and sizes. Examples of mono-, bi-, and trisyllabic stems are given below:

$$
\begin{array}{ll}
\text { a. } & \text { jáw-jáw } \\
\text { tím-tím } & \text { adjectival intensifier for /ógu/ 'hot' } \\
\text { adjectival intensifier for /gém/ 'black' }
\end{array}
$$

b. kádá-kádá nòyò-nóyó
adjectival intensifier for /ógu/ 'fast' ${ }^{13}$
crawling on all fours (used with /yàá/ 'go')
c. gègélè-gègélè-ni runty and weak (expressive adverbial) nàgádèy-nàgádèy expressive adverbial for a tall, skinny person walking

We can make a few observations about these reduplicated forms. First, the monosyllabic forms almost never have simply a long vowel as the coda. The one such example, /kúú-kúúgo/, an expressive adverbial meaning 'entering head first', is derived from the noun /kúú/ 'head'. All other monosyllabic verbs have coda consonants or at the very least are nasalized (ex. /k $\varepsilon$ ह́n ${ }^{n}-k \varepsilon \varepsilon^{n}{ }^{n} /$ adjectival intensifier for /wéru/ 'green').

Second, while both adjectival intensifiers and expressive adverbials can be either mono- or bisyllabic, there are no trisyllabic adjectival intensifiers of which I am aware. These are not uncommon for expressive adverbials, as can be seen in the complete list at the end of this section.

Some fully reduplicated stems do not show complete identity between the base and the reduplicant. In some cases, the vowels differ. When they do, the first copy typically has a high vowel (either $/ \mathrm{i} / \mathrm{or} / \mathrm{u} /$ ) and the second copy has a low vowel $/ \mathrm{a} /$ :
(xx) yùgú-yàgu-ni expressive adverbial for 'fat (woman, cow)'

These vowel changes are also seen in retriplicated forms.
Retriplication (triple iteration) is also seen in ideophones, but the three copies in thee words are almost never identical. Most commonly, the changes are in the vowels, with copies 1 and 3 identical and copy 2 having the low vowel/a/. Examples of this are in (xxa). In other cases, the third copy may have a slightly different form, shown in (xxb):
a. déé-dàà-dé expressive adverbial for 'face-to-face'
b. dàn-dàn-dǎy ${ }^{n}$ adjectival intensifier for /díyé/ 'big'

Turning to partial reduplication, we see both initial and final CV reduplication. While initial CV reduplication is by far more common elsewhere in the lexicon, it is relatively rare for ideophones. The only attested example is /kè-kéw-ni/ 'having small teeth without gaps'. The final CV reduplicated forms can either show lengthening of the final vowel or retain its short form:

[^11]a. pédédé adjectival intensifier for /yégélu/ 'cold'
b. pélćlé $\varepsilon$ adjectival intensifier for 'straight' púdúdúú adjectival intensifier for /wàgú/ 'far' némèmè $\varepsilon$ expressive adverbial for 'a lot of identical small things’

There are a couple ideophones that look as though they have undergone final CV reduplication, but $\mathrm{C}_{2}$ and $\mathrm{C}_{3}$ do not match exactly. In both cases, $\mathrm{C}_{2}$ is $/ \mathrm{r} /$ and $\mathrm{C}_{3}$ is $/ \mathrm{d} /$. Since the examples in ( xx ) show that $\mathrm{C}_{2}$ and $\mathrm{C}_{3}$ can both be $/ \mathrm{d} /$, it seems likely that these two deviant cases are the result of the dissimilation of the second $/ \mathrm{r} /$ into $/ \mathrm{d} /$. This is not a productive change in the language (recall from section XXX that rhotic dissimilation usually results in an /1/), but it could be a historical process fossilized in these ideophones. The two forms in question are the following:
(xx) sérédéq́-ni expressive adverbial for 'straight-nosed' bèrèdé́ $\quad$ adjectival intensifier for 'supple' (used with intransitive /mìn / XXX)

Many other ideophones are trisyllabic with a long final vowel without showing any signs of being reduplicated, as in /yùgùdíí-ni/ 'wooly'.

### 8.1.2 Disharmonic stems

Ideophones differ phonologically from the normal lexicon in that their vowels can be disharmonic. The most common disharmony is having a final vowel /ii/, which is reminiscent of diminutives (see section XXX), but the tone pattern indicates that they are not (or no longer) diminutive in nature.

```
yùgùdíí-ni expressive adverbial for 'wooly'
    gògìlílini expressive adverbial for 'rickety (door)'
    súíí-ni expressive adverbial for 'having small eyes'
```

In a small handful of other cases, the stems are fully disharmonic, always in terms of backness harmony rather than ATR harmony. For example:

```
pìlá-ni
púdèz̀-ni
    nùmbùràn-ní
expressive adverbial for 'swoosh' used with /gàlá/ 'pass'
expressive adverbial for 'foaming' expressive adverbial for 'fat (cow, woman)'
```

These vowel patterns are extremely rare or unattested in the normal lexicon.

### 8.1.3 Unusual segments and phonotactics

The set of consonants used in ideophones is wider than the set used in the normal lexicon. In particular, the consonant/c/ (IPA [XXX]) is attested in ideophones, such as /cákàm-cákàm/, an expressive adverbial for the sound of chewing loudly, or /córòy-ni/, en expressive adverbial combined with the verb /gòó/ 'go out' to yield the meaning 'shoot out (ex. bullet)'.

An unusual vowel segment seen in ideophones but not the normal lexicon is the high nasalized vowel /úún/. We find this segment in the ideophone /búún-ni/, an expressive adverbial for 'solidly built (ex. donkey)'.

Phonotactics also differ in ideophones, particularly pertaining to acceptable coda consonants. While the nasal $/ \mathfrak{y} /$ is not typically used as a coda in the normal lexicon, it is frequently attested in coda position in ideophones. For example:

(xx) káy-káy-ni $\quad$| adjectival intensifier for participle /jòáá/ 'full' |  |
| :--- | :--- |
| kólón-kólón | adjectival intensifier for /máá/ 'dry' |
| gáy-gáy | expressive adverbial for 'stocky' (possible Fulfulde loan) |

The sample size is small, but it is still interesting to note that all ideophones with final velar nasals also begin in a velar stop.

Another thing we see is a collection of ideophones with unrepaired coda obstruents. For example:

$$
\begin{array}{ll}
\text { rék } & \text { adjectival intensifier for /túmó/ 'one' }  \tag{xx}\\
\text { gík-ni } & \text { expressive adverbial used with /ííí-yé/ 'stop for 'stop abruptly' } \\
\text { ték-ték-ni } & \text { expressive adverbial for 'falling one drop at a time' }
\end{array}
$$

In all cases, the unrepaired coda is $/ \mathrm{k} /$. Note also the unusual $/ \mathrm{r} /$ onset in adjectival intensifier /rék/; this is an unattested onset in the normal lexicon.

### 8.1.4 Tone patterns

The tone patterns of ideophonic "stems" can also differ from the normal lexicon. Taking the stem to be either the full ideophone or half with a non-L tone pattern in a reduplicated word, we find the following tone patterns:

| $(\mathrm{xx})$ | $\{\mathrm{H}\}$ | jáw-jáw | adjectival intensifier for /ógu/ 'hot' |
| :--- | :--- | :--- | :--- |
|  | $\{\mathrm{LH}\}$ | jàgú-jàgù | adjectival intensifier for /kóló/ 'rare, bloody' |
|  | $\{\mathrm{HL}\}$ | púdè̀e-ni | expressive adverbial for 'foaming' |
|  | $\{\mathrm{LHL}\}$ | gègélè-gègélè-ni | expressive adverbial for 'runty' |

Recall that in the normal lexicon, only $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$ are found on stems.
There are also two ideophones that carry the so-called $<$ LHL $>$ bell-shaped contour tone. This is normally not found in Tommo So, though it is attested in other Dogon languages, like Nanga (Heath ms.). These ideophones are /wùû-ni/, an expressive adverbial used with the verb /úngúló/ 'get up' to mean 'get up abruptly', and /bèêm/, an adjectival intensifier for / ̀̀lì-ý/ 'fresh' to mean 'newborn'. The latter has the alternative form /bèmmé/.

The tone in reduplicated ideophones is relatively consistent. If the initial copy has all $\{H\}$ tone, then the tone is $\{H\}$ in the second copy too (xxa). If the initial copy has $\{\mathrm{LH}\}$, then the second copy has $\{L\}$ (xxb). If the first copy is $\{L\}$, the second is $\{H\}$ (xxc). Finally, if the first copy is $\{\mathrm{LHL}\}$, so is the second (xxd):
(xx) a. kéw-kéw adjectival intensifier for /yégélu/ 'cold'
b. wàdá-wàdà adjectival intensifier for /pílu/ 'white'
c. nòyò-_nóyó expressive adverbial for 'crawling (on one's knees)'
d. gègélè-gègélè-ni expressive adverbial for 'runty'

There are a couple of expressive adverbial exceptions, where a $\{\mathrm{LH}\}$ initial copy is followed by an identical $\{\mathrm{LH}\}$, as in /nùllí-nùllííni/ 'walk with a permanent limp' and /bàmbú-bàmbú-go/ 'staggering along like a drunk'. Similarly, one expressive adverbial derived from a verb /témbí-yé/ 'feel' has the first copy $\{\mathrm{H}\}$ and the second copy $\{\mathrm{L}\}$ : /témbíyé-tèmbìyè/ 'walk along brushing against walls'. These are the only exceptions to the rules laid out before (xx).

### 8.2 Adjectival intensifiers

### 8.2.1 Usage and morphology

The first class of ideophones I will discuss are adjectival intensifiers, which for the most part consist of a bound, fully reduplicated stem. They generally function as adverbs, modifiying an adjective, but morphologically they differ from the expressive adverbials to be discussed in the next section. Since nouns can be modified by both participles and
adjectives, both of these modifiers can take intensifiers, but their behavior is slightly different, with participial intensifiers patterning more like expressive adverbials.

If an intensifier is added to an adjective in the modifier (non-predicative) position, the adjective is tone lowered, as is of course the noun being modified:
(xx)
a. nìyè gèm $\quad \operatorname{síy}^{n} \varepsilon ́-$ Síy $^{n} \varepsilon ́$
oil.L black.L Intens
'jet-black [thick] oil'
b. nàmà bànù dǎy ${ }^{n}$-dà $y^{n}$
meat.L red.L Intens
'very bloody (rare) meat'

In the predicate position, the intensifier takes the toneless adverbial suffix /-ni/, and it can either precede or follow the adjective. If it follows, as it does in the modifier position, the adjective remains tone lowered and the intensifier is followed by quasi-verb/wo/ (xxa-b). If it precedes the adjective, the adjective is outside of the tonal scope of the intensifier (which, like adjectives, extends leftward tone control) and retains its lexical tones and predicative morphology, whether suffixed or unsuffixed (208c-d).
a. Òmmólu $=\mathrm{g} \varepsilon$ àmàm [tóróm-tóróm]-ni $=\mathrm{w} 0$.
tamarind $=$ Def sour.L Intens-Adv is
'Tamarind is very sour.'
b. Yàà-nà nǒ ùsì-ỳ [kénu-kénu]-ni = wo.
woman-HumSg.L this slim-Dim.L Intens-Adv $=$ is
'This woman is very slim.'
c. Díí $=\mathrm{g} \varepsilon$ pédédé-ni yègèlú $=\mathrm{wo}$.
water $=$ Def Intens-Adv cold $=$ is
'The water is very cold.'
d. Nǎm $=$ ge [sél-sél]-ni ógu-go = wo.
sun $=$ Def Intens-Adv hot-Adv $=$ is
'The sun is very hot.'

If the modifier is not an adjective but a participle, the situation is different. Consider first what a participial modifier looks like without an adjectival intensifier:
(xx) jibù énní-yáá-d $\varepsilon$
skirt.L wet-MP.Perf-Impf
'wet skirt'

The participial modifier form takes the /-áá-d $\varepsilon /$ ending, an unusual combination of perfective morphology followed by the imperfect /-d $\varepsilon /$ suffix.

If an intensifier is added, this /-d $\varepsilon /$ suffix is lost, and instead the participle takes simply the /-áá/ form, which combines to make a chain verb construction with the intensifier plus quasi-verb/wo/. It does not undergo tone-dropping. As a modifier, the intensifier still takes the adverbial suffix /-ni/ followed by /wo/, as it would in the predicate position seen above. In this construction, the whole modifying phrase acts more like a relative clause:
a. Jìbù [énní-yáá [jábu-jábu]-ni =wo] mí=ỳ óbó. skirt.L wet-MP.Perf Intens-Adv $=$ is $1 \mathrm{sgPro}=\mathrm{Obj}$ give.Imper 'Give me the very wet skirt (the skirt that is very wet).'
b. Tòndòò [jòáá [káy-káy $]$-ni $=$ wo $]$ yàà bé-m. water.jug.L be.filled.Perf Intens-Adv $=$ is see.Perf was-1sgS 'I saw a very full water jar (a water jar that was very full).'

## CAN YOU SAY jábú-jábú-ni énní-yáá-dع?

The predicate position for participles with intensifiers is much like what was described for adjectives above, in that the intensifier can either precede or follow the modifier. In either position, no tone lowering occurs. If the intensifier precedes the intransitive verb, the intransitive verb is conjugated as the final verb in the sentence (xxa). If the intransitive verb precedes the modifier, then it takes the /-áá/ chain form seen in modifier position (xxb).
(xxx)
$\begin{array}{lll}\text { a. } & \text { Súm }=\mathrm{g} \varepsilon & {[\text { kám-kám]-ni }} \\ \text { हैnáá = wò. } \\ \text { rope }=\text { Def } & \text { Intens-Adv } & \text { be.tight.Perf=is }\end{array}$
'The rope is very taut.'
b. Bándán-kálá $=$ ge ésáá $\quad$ [tál-tál]-ni $=$ wo. courtyard = Def be.clear.Perf Intens-Adv=is 'The courtyard is very clean.'
8.2.2 List of adjectival intensifiers by phonological shape

The table below lists all reduplicated intensifiers for true adjectives:

| (xx) | Gloss | Adjective | Intensifier |
| :---: | :---: | :---: | :---: |
|  | 'big' | gàá (optional) | dàn-dàn-dǎy |
|  | 'uncooked, red' | bánu | dǎy ${ }^{\text {n }}$ dày ${ }^{\text {n }}$ |
|  | 'rare, bloody' | kóló | jàgú-jàgù |
|  | 'hot' | ógu | jáw-jáw |
|  | 'light' | wéy | jébu-jébu |
|  | 'fast' | ógu | kádá-kádá |
|  | 'bitter' | gálálu | kádu-kádu |
|  | 'hard' | $\varepsilon \varepsilon^{\text {c }}$ | káy ${ }^{\text {n }}$-káy ${ }^{\text {n }}$ |
|  | 'short' | dùmbú | kédu-kédu |
|  | 'green' | wéru |  |
|  | 'thin' | ùsì-ý | kénu-kénu |
|  | 'cold' | yégélu | kéw-kéw |
|  | 'black' | gém | kírím-kírím |
|  | 'dry' | máá | kólóy-kólóy |
|  | 'stiff' | sándé | náy-náy |
|  | 'hot (water)' | ógu | pálu-pálu |
|  | 'new' | kàndá | pélé-pélé |
|  | 'unripe' | kóló | péy ${ }^{\text {n }}$-péy ${ }^{\text {n }}$ |
|  | 'soft' | búru | póró-póró |
|  | 'long and thin' | ùsì-ý | sébu-sébu |
|  | 'fast' | ógu | séléw-sćléw |
|  | 'hot (sun)' | ógu | sél-sél |
|  | 'sour' | ámám | tám-tám |
|  | 'white, bright' | pílu | táw-táw |
|  | 'bland' | ćdédu | tébu-tébu |
|  | 'black (dense)' | gém | tím-tím |
|  | 'sour' | ámám | tóróm-tóróm |
|  | 'white' | pílu | wàdá-wàdà |

As this list suggests, the same adjective can take different intensifiers depending on the object modified. /ógu/, meaning both 'fast' and 'hot', has five different intensifiers above,
two with the meaning of 'fast' and three for 'hot'. Among the 'hot' intensifiers, these are further split into hot food or water, hot weather, or hot in general.

Reduplicated intensifiers modifying participles are shown below:

| (xx) | Gloss | Intransitive | Intensifier |
| :---: | :---: | :---: | :---: |
|  | 'tight' | ćén ${ }^{\text {n }}$ | gérém-gérém |
|  | 'wet' | ย́nní-yé | jábu-jábu |
|  | 'tight' | ¢́én ${ }^{\text {n }}$ | kám-kám |
|  | 'full' | jòó | kán-káy |
|  | 'clean' | és $\underbrace{\prime}$ | tál-tál |

In addition to separate reduplicated intensifiers, the meaning of an adjective can also be intensified by reduplicating the adjective itself with the $x$-ma-x reduplication pattern seen in species names. The general pattern is to have the same adjective with lexical tone on either side of the /-mà-/, but in one case, the second copy is replaced with ideophonic /náy/ (xxc).
(xx) a. póó-mà-póó
'stocky' (from póó 'fat')
b. pàlá-mà-pàlá
'very tall' (from pàlá 'tall')
c. pàlà-mà-náy
'very tall'
(xxc) is the only instance I have seen in any arena where the /-mà-/ does not separate identical copies.

In two cases, there is a final CV reduplication:
(xx) a. yègèlù pédédé
cold.L Intens
'very cold'
b. wàgù púdúdúú
far.L Intens
'very far away'

One other expressive adverbial has this reduplication pattern, /péléĺź/ 'very straight', but it stands alone rather than modifying an adjective or participle.

Otherwise, unreduplicated intensifiers for adjectives are listed below in (xxa) and for participles of intransitive verbs in (xxb):

| (xx) | Gloss | Adjective | Intensifier |
| :---: | :---: | :---: | :---: |
| a. | 'newborn' | j̀lì́ | bèẑm or bèmmé |
|  | 'emaciated' | kómmó | kòéy $^{\mathrm{n}} \Rightarrow$ (prosodically lengthened) |
|  | 'emaciated' | kómmó | nágádu |
|  | 'fast' | ógú | píí |
|  | 'one' | túmóy | rék |
|  | Gloss | Verb | Intensifier |
| b. | 'fine, supple' | mìnć | bèrèdè́ |
|  | 'overloaded' | dùyí-yó | gǐn-gàn-gǐm or gìngìlî́ |
|  | 'thick, bloated' | píirílyé | gúndúm |

### 8.3 Expressive adverbials

The other main use of ideophones is as expressive adverbials. As adverbs, these typically modify a verb to describe its action in a precise way, but others are adjective-like descriptive predicates, followed by the quasi-verb /ẁ̀/; essentially, they are adjectival intensifiers without the adjective. As modifiers, they behave like relative clauses, inducing tone lowering.

I will begin with a discussion of adjective-like expressive adverbials, followed by true adverbs, and adverbs derived from nouns and verbs. For further discussion of adverbs in general, see Chapter XXX.

### 8.3.1 Adjective-like expressive adverbials

Basic categories of physical description such as 'fat', 'thin', 'tall', or 'pretty' are regular adjectives (see Chapter 5), but many precise descriptions involving hair, face shape, or stance require an expressive adverbial to describe. These differ from the adjectival intensifiers in that they stand alone and do not modify a basic adjective. Most take the adverbial suffix /-ni/, though some take /-go/, and unlike more strictly adverbial expressive adverbs, they only modify the quasi-verb/wo/ and never an action verb.

As a predicate, the adverb is followed by the quasi-verb/wo/. For instance:
$\mathrm{xx} . \mathrm{a} . \quad$ Péd $=\mathrm{g} \varepsilon \quad$ yùgùdíi-ni $=\mathrm{w}$.
sheep $=$ Def wooly-Adv $=$ is
'The sheep is wooly.'
b. 1 Í $=\mathrm{g} \varepsilon \quad$ súíí-ni $=$ wo.
child $=$ Def small.eyed-Adv $=$ is
'The child has small eyes.'

Some such adverbials have an associated noun they always describe. Take, for instance, the adverbial /nǎy-ni/ which always refers to teeth. Without such reference, /nǎy-ní/ has no meaning.

## ( $x x$ ) İnú wómo nǎy-ni = wo. <br> tooth 3 sgPoss sticking.out-Adv $=$ is <br> 'He has front teeth that stick out.'

A relative clause construction is used to turn the adverbs into modifiers. The adverb is followed by /kánì/ 'did' (often pronounced [kànù]), and the modified noun, as head of the relative, undergoes tone lowering:
a. Pèdù yùgùdíí-ní kánì yàà bé-m. sheep.L wooly-Adv do.Perf.Rel see.Perf was-1sgS 'I saw a wooly sheep.'
b. Ìnù jǎy-ní kánì m̀bé-lغ̀-m. tooth.L sticking.out-Adv do.Perf.Rel like-Neg-1sgS 'I don't like teeth that stick out.'

Notice that this is a different form than adjectival intensifiers take when used as modifiers. With adjectival intensifiers, the relative participle remains /wo/, but that is not a possible construction here, nor is /kánì/ possible for adjectival intensifiers.

The following is a representative list of adjective-like expressive adverbials, grouped by phonological form:
(xx) a. $C V$ - reduplication
(ìnú) kè-kéw-ni 'having small teeth without gaps'
b. Full reduplication

| kóy-kóy-ni | 'worn out, used' |
| :--- | :--- |
| gègélè-gègélè-ni | 'runty and weak' |
| tín-tín-ni | 'elongated, filled out (sack)' |
| sìdú-sìdù-go | 'striped' |

c. Long final vowel (polysyllabic)

| yùgùdíí-ni | '(sheep, goat) having abundant hairs' |
| :--- | :--- |
| súiín-ni | 'having small eyes' |
| sérédéé-ni | 'straight-nosed' |
| (kínú) pòríí-ni | '(child's nose) pouring lots of snot' |
| púdè̀̀̀-ni | 'foaming' |
| kùmìlí-ni | '(eyes) half-open' |
| gògìíí-ni | '(door) rickety' |
| némèmè | 'as a lot of identical small things (raindrops, cat teeth)' |

d. Monosyllabic

| (ìnú) kîí-ni | 'buck-toothed' |
| :--- | :--- |
| (ìnú) kón-ni | 'buck-toothed' |
| (ìnú) nǎy-ni | 'having upper front teeth protruding (when smiling)' |
| gěy-go | 'tilted' |
| mǒy-ni | 'oily' |
| pǎy-ni | '(eyes) wide open' |
| búún'-ni | 'solidly built (like a donkey)' |

e. Other

| (ií) mámbú-ni | '(tree) having many fruits' |
| :--- | :--- |
| jùngòy-ní | '(fruit, offspring) in clusters' |
| nùmbùràn-ní | '(cow, woman) fat' |
| yùgú-yàgù-ni | '(cow, woman) fat' (partial reduplication) |
| júrúm-ni | 'withdrawn, sullen' |
| bòògú-ni | 'somewhat filled (sack)' |
| sórò-ni | 'cylindrical' |

For adjective-like adverbials, monosyllabic forms and forms with long final vowels are the most common. The long final vowel is probably related to the intonational final lengthening found in languages like Jamsay (see Heath 2008), which takes the place of adverbial suffixes. Phonological form is another area in which adjectival intensifiers and
adjective-like adverbials differ, since the former lean much more heavily towards reduplicated forms.

### 8.3.2 Adverb-like expressive adverbials

Many expressive adverbials are just that-adverbial. They modify verbs to give a precise manner in which the action was carried out. These can take the suffixes /-ni/ or /-go/, the postposition $/ \mathrm{le} /$, or nothing at all.

While in some domains (cutting, hitting, pouring), the Dogon languages have a large proliferation of stems specifying the manner of the action (Heath and McPherson 2009), other domains have a limited number of stems. In these domains, specific actions are described with expressive adverbials. One such domain is that of motion. While English has different stems for 'walk', 'run', 'crawl', 'limp', ‘skip', etc., nearly all motion verbs in Tommo So involve an adverb with /yàá/ 'go' (with the exception of /jòbó/ 'run'). Examples include:
(xx) a. gùmmú-gùmmù-ni yàá
b. nùllí-nùllíí-ni yàá
c. jòyò-nóyó yàá
d. yùmbó-yùmbò-ni yàá
e. yóndú-yóndú-ni yàá
'(person with big butt) lumber along clumsily' 'walk with a permanent limp'
'crawl on all fours'
'(child) walk clumsily’
'walk slowly and stiffly (like a tall lanky
person)'
f. gàngálíyé-go yàá
'walk leaning to one side, then to another'
g. dòndú-dòndù-ni yàá
'walk with head bent down (when going
downhill)'
h. bàmbú-bàmbú-go yàá 'stumble along like a drunk'

Example ( xxc ) is probably derived from /yóyóló/ 'knee'. A synonym is /yòyòlò sóm yàá/ 'crawl' (lit. go [on the] knee horse). All of these are reduplicated, displaying the tonal patterns discussed in section 8.1.4.

Below is a list of other expressive adverbials, with their associated verb in parentheses, once again organized by phonological shape:
(xx) a. Reduplicated

| ték-ték-ni (XXX) | 'fall one drip at a time' |
| :--- | :--- |
| déé-dàà-déé-ni (XXX) | 'xxx face-to-face' |
| péré-péré-ni (bèlé 'find') | 'eke out a living' |
| wíléé-wílé (káná 'do') | 'flap in the breeze' |

```
pér-péri-ni (káádí-yé 'rip') 'tear into little pieces'
```

b. Long final vowel

dúyááw-ni (yóó ‘enter’)
kè̀̀n $1 i ́ 1$ íni (píl-lé 'open')
bùíí-ni (gòó 'go out')
c. Monosyllabic
gík-ni (íní-yé 'stop’)
wùû-ni (úngúló 'get up')
(gìrè 'eye') kôy-ni (XXX)
póó-ni ${ }^{14}$ (píllí-yé 'be open')
pǎy-ni (gòmbó 'open wide')
sǎr-ni (gòó 'go out')
séw-ni (káná ‘do')
'(horse) stop abruptly' 'get up abruptly' 'recognize each other face-to-face' 'be wide open' 'open (eyes) wide' 'stick way out' 'be silent for a minute'
d. Other
èmèy-ní (káná ‘do’)
gèmbìlí-ni (dànní-yé 'sit')
pìlá-ni (gàlá 'pass')
córòy-ni (gòó 'go out')
kúrùm-ni (dèmmí-yé 'collapse')
'smile widely so that upper teeth show' 'perch on the edge of a chair' 'pass with a swoosh' '(bullet, animal) shoot out' 'land with a thud'

### 8.3.3 Expressive adverbials derived from nouns or verbs

There are a handful of adverbs made from reduplicating a noun or verb. While these are not purely ideophonic like the ones above, I will describe them in this section due to their similar usage and phonological form. Most take the suffix/-go/, the postposition /le/ or nothing instead of the adverbial suffix /-ni/.
(xx) kúú-kúú-gó (yóó 'enter')
Derived from: /kúú/ 'head'
'dive headfirst (into water)'
tòrú-tòrù $=$ le
Derived from: /tòrú/ 'group'

[^12]```
dúm-dúm-go 'in small groups'
    Derived from: /dúm/ 'pile’
nònò-nóyó (yàa 'go') 'crawl on all fours'
    Derived from: /yóyóló/ 'knee'?
témbíyé-tèmbìyè (yàá 'go’) 'walk along brushing up against the walls'
Derived from: /témbí-yé/ 'bump, rub lightly'
```


### 8.4 Onomatopoeia

The ideophones listed above are not like our onomatopoeia-splash! burp! oink! These are words that are meant to sound like the sound they describe. Tommo So also has a vocabulary of these words, though. These fall into several domains, which I will expand upon below: animal calls, body noises, and everyday noises.

### 8.4.1 Animal calls

The list below lays out several onomatopoetic animal calls, with their corresponding English word, if applicable.

| (xx) | Animal sheep goat | Tommo So | English |
| :---: | :---: | :---: | :---: |
|  |  | bàé | 'baa' |
|  |  | bèèè |  |
|  |  | mèég̀ |  |
|  | laughing dove | gù-gúróbù |  |
|  |  | kù-kúrù-kúù |  |
|  | dog (yelping) | hǎy ${ }^{\text {n}}$-hăy ${ }^{\text {n }}$ |  |
|  | dog (barking) | wówó | 'woof' |
|  | donkey | hòn-gí-hòn-gí | 'hee-haw' |
|  | little bird | î́-ílíílí | 'tweet' |
|  | rooster | kèngérè-kéè | 'cock-a-doodle doo |
|  | cow | mòsò | 'moo' |
|  | cat | jáò | 'meow' |
|  | bullfrog |  | 'croak' |
|  | toad |  | 'croak' |
|  | pigeon | wùǔù | 'coo' |

We see a large number of bell-shaped tones in these animal calls, along with both CV and full reduplication.

### 8.4.2 Body noises

Tommo So has a colorful vocabulary of body noises, from chewing, to farting, to talking.

First, let us consider chewing. Most of the onomatopoeias refer to people chewing with force, just as in English, with words like 'chomp!':
(xx) cákàm-cákàm sound of someone chewing with force
kòém-kòém yògóbù-yògóbù
sound of someone chewing with force sound of someone chewing with force

All three onomatopoeia refer to more or less the same chewing action. All are reduplicated and show a lot of pitch movement in the tone.

Onomatopoeia can distinguish many different kinds of farts as well. These are summarized below:

| (xx) bùún | sound of a long, melodious fart |
| :--- | :--- | :--- |
| p $\varepsilon \varepsilon^{n}$ | sound of a fart one tries to keep in |
| pór | sound of a splattering fart |

All fart sounds begin with bilabial stops, and with the exception of the last, the vowel is nasalized.

A couple onomatopoeias characterize lots of talking or commotion. Once again, we see a phonological characterization that ties them together:

| hóó-hàà-hóó | loud chatter |
| :--- | :--- |
| kóró-kàrà-kóró | sudden noisy action, mad scramble |

Both have the triple iteration form in which the middle copy takes /a/ and the outer copies take /o/.

### 8.4.3 Other noises

Other manmade noises are also represented as onomatopoeias. These are summarized in the following list, grouped together by common theme:


### 8.5 Sound symbolism

The last topic to be addressed in this chapter is sound symbolism. We find in Tommo So sets of adjectives in particular that are closely related in meaning, with differences in vowels generally indicating differences in scope or size. For example, consider the following pair:
a. kébéré
'small and flat'
b. kábárá
'flat (and slightly larger)'

## Chapter $9 \quad$ Coordination

This chapter focuses on how constituents, particularly NPs, are combined. First I will discuss coordination ('and') followed by disjunction ('or'). VP coordination will not be treated here, due to Tommo So's heavy use of verb serialization, which I will discuss in chapter 15 .

### 9.1 Conjunction

### 9.1.1 NP conjunction

Tommo So typically combines two NPs with the associative postposition /le/ after each element ( $\mathrm{X}=\mathrm{le} \mathrm{Y}=\mathrm{le}$, ' X and $\mathrm{Y}^{\prime}$ ). Like other postpositions in the language, it is underlyingly toneless and the F0 simply interpolates over the postposition between specified tones on either side. HOW DOES PHRASING WORK WITH THE ASSOCIATIVE?
'Associative' is a catch-all term, since it is the same postposition that is used for instrumentals and comitatives. Since all of these uses are semantically similar, I gloss all instances of /le/ as Assoc for 'associative'. For example:
(xx)

$$
\begin{array}{ll}
\text { a. } & \text { ènj } \dot{\varepsilon}=\text { le } \quad \text { jàndúlu }=\text { le } \\
\text { chicken }=\text { Assoc } & \text { donkey }=\text { Assoc } \\
\text { 'a chicken and a donkey' }
\end{array}
$$

b. Sò̀̀-dámmá $=$ le émmé $=l e \quad[b a ̀ a ̀ ~ i ́ i ́] ~=\grave{~} \quad$ dè...

Sos-damma=Assoc 1plPro=Assoc father child=Cop Emph
'Us and Soo-damma, we're children of the same father...' [Text 1]
c. Hálè Ámàdu $=$ le Máárìyàm $=l e$ fédù bém $\varepsilon=$ nè núyó

```
even Amadou=Assoc Mariam=Assoc party 3plPoss=Obl song
núy\grave{-dìn = yó = lè, mí yàé-lè-m.}
sing-Impf.3plS = if=Neg 1sgPro go-Neg.Impf-1sgS
'Even if Amadou and Mariam sing at their party, I won't go.'
```

If the NPs being coordinated are plural, marked with the plural clitic /mbe/, the associative postposition is optional. The two can be used together (xxa), or it can be absent when conjoining either two (xxb) or more (xxc) elements:
a. $\dot{\text { n }} \varepsilon \dot{\varepsilon}=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{le} \quad$ pédu $=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{le} \quad$ bándán-kálá $=\mathrm{n} \varepsilon$ kó- $\mathrm{\varepsilon}^{\mathrm{n}}$. goat $=\mathrm{Def}=\mathrm{Pl}=$ Assoc sheep $=\mathrm{Def}=\mathrm{Pl}=$ Assoc courtyard $=\mathrm{Obl}$ are 'The goats and the sheep are in the courtyard.'
b. $\grave{\mathrm{n} j} \mathrm{j}$ = mbe jàndúlu $=\mathrm{mbe}$
chicken $=\mathrm{Pl}$ donkey $=\mathrm{Pl}$
'chickens and donkeys'
c. $̇$ ènjé $=$ mbe jàndúlu $=$ mbe pédu $=$ mbe
chicken $=\mathrm{Pl}$ donkey $=\mathrm{Pl} \quad$ sheep $=\mathrm{Pl}$
'chickens, donkeys and sheep'

Note that it is not possible to add the associative clitic to only one of the two conjuncts (*غ̀njé = mbe = le jàndúlu=mbe). For the behavior of coordinated phrases as the head of a relative clause, see chapter 14.

The set of conjuncts can also be followed by the quantifier /kém/ 'all', which depending on the number of conjuncts, translates to roughly 'both' or 'all':
(xx) a. Nìměm kày néé Mùgàà-tà $\mathfrak{y}$ á $=$ le $\Rightarrow$ Tó-tóyó $=l e \Rightarrow$ now Top now Muga Taya = Assoc Tongo Tongo=Assoc
kém Ámbá-kànù gìn $\grave{=}=\mathrm{n} \varepsilon \quad$ gọ́áá- $\mathrm{d} \grave{\varepsilon}=$ j̀.
all Amba Kanu house. $\mathrm{L}=\mathrm{Obl}$ leave.Perf-Hab = Cop
'As for now, now Muga Taya and Tongo Tongo, both came from the house of
Amba Kanu.'
[Origin text]

## EXAMPLE "ALL OF THE GOATS AND CHICKENS AND SHEEP DIED IN THE FLOOD"

The order of the two nominal elements is free; that is, we find no indication that there is a fixed order or hierarchy, be that between two pronouns or between a pronoun and an overt noun. The first two examples in (xxa) come from the same speaker at different points in the same text, and we see that the 1 pl and 3 pl pronouns can come in either order. The two examples in (xxb) are spoken by two different speakers, one directly after the first, the second confirming what the first speaker said. Here, the pronoun and the proper name can come in either order:
(xx)
a. Émmé $=$ le bé $=$ le kábílí-yáá...

1 plPro $=$ Assoc 3 plPro $=$ Assoc divide-MP.Perf...
'Us and them, we divided up...' [History text]

Bé=le émmé $=1 \mathrm{l}$ báá 'túmó 'náá 'túmó $=\mathrm{n}$ kòy.
$3 \mathrm{plPro}=$ Assoc $1 \mathrm{plPro}=$ Assoc father one mother one $=$ Cop Emph
'Them and us, we have the same father, same mother!' [History text]
b. Émmé $=$ le Sèmmèlè tà $\mathfrak{y}$ á $=$ le náá túmó $=$ ǹ, báá $=g \varepsilon$
$1 \mathrm{plPro}=$ Assoc Semmele Taya $=$ Assoc mother one $=$ Cop father $=$ Def $\mathrm{d} \varepsilon \mathrm{y}_{\mathrm{y}}=\mathrm{j}$.
different $=$ Cop
'Us and Semmele Taya, [our] mother is the same, the father is different.'

Sèmmèlè tàyá $=$ le émmé $=$ le náá $=\mathrm{g} \varepsilon \quad$ túmó $=\mathrm{n} \quad$ báá $=\mathrm{g} \varepsilon$
Scmmele Taya $=$ Assoc 1 plPro $=$ Assoc mother $=$ Def one $=$ Cop father $=$ Def $d \varepsilon ́ y=\grave{\jmath}$.
different $=$ Cop
'[For] Semmele Tana and us, the mother is the same, the father is different.'
[Origin text]

Ask-me and you went to town, vs. you and me went to town
All the cows and a chicken died, vs. a chicken and all the cows died

### 9.1.3 Conjunction of adjectival predicates

If a noun is modified by more than one adjectival predicate ('the lettuce is crisp and delicious'), the two predicates are simply listed one after another with no change of tone,
both with their quasi-verbs. In this case, no associative particle is required:
a. Gìn $\varepsilon=\mathrm{g} \varepsilon \quad$ pílu-go $=$ wo $\begin{gathered}\text { sún }-g o=w o . ~\end{gathered}$
house $=$ Def white- $\mathrm{Adv}=$ is pretty- $\mathrm{Adv}=$ is
'The house is white and pretty.'
b. Díí $=\mathrm{g} \varepsilon \quad$ yègèlú $=\mathrm{w} 0$ pèlèlú $=\mathrm{w} 0$.
water $=$ Def cold $=$ is nice $=$ is
'The water is cold and nice.'

The apple is red and sweet (combine -go and wo adjectives)

### 9.1.4 Clause-level conjunction

Like adjectival predicate conjunction, simple clauses are often conjoined in texts by juxtaposition alone; they are simply put side-by-side without the associative /le/:
a. Sèmmèlè-tàná yé=tô émmé yé=tô-y.

Scmmele-taŋa Exist = be.in 1plPro Exist=be.in-1plS
'Semmele-taya is in [it] and we are in [it].' [TEXT]
b. ò’’́, [Dènènè-dúú $=\mathrm{m} \supset=\mathrm{g} \varepsilon$ ] Kàndà-tùgéŕru, nì́ Kàndày-tóru.
no Denene-duu = Poss = Def Kanda-tugeeru, that Kanday-toru 'No, Kanda-tugeeru was for Denene Duu, this is Kanday-toru.'

Note that this construction only seems possible for those sentences that use quasi-verbs or the copula (which may be omitted, as example (xxb) shows). If the verb is a standard, conjugating verb, a serial construction will be used to link the two phrases. There is no separate serial verb form of quasi-verbs. For more on verb chaining, see chapter 15 .

The goats are on top of and inside of the house.

### 9.2 Disjunction

The disjunctive postposition particle is the $/ \mathrm{ma} /$; once again, it is a toneless enclitic, which I gloss as 'or?' following Heath (2008), since this postposition doubles as an interrogative particle placed at the end of a clause. See chapter 13 for further discussion.

### 9.2.1 Word-level disjunction

When eliciting sentences of the type 'do you like X or Y ?' I expected a response such as: $/ \mathrm{X}=\mathrm{ma} \mathrm{Y}=\mathrm{ma}$ ḿbé-go = wo-w?/, paralleling the conjoined constructions. In all cases, the elicited response was rather clause-level disjunction of the form 'do you like X OR (ma) do you like Y?':
(xx) a. Sááríyè ḿbé-w = ma [gòrò gìbélé] ńbé-w.
cotton.hat like-2sgS = or? straw.hat like-2sgS
'Do you like the cotton hat or the wide-brimmed straw hat?'
b. Árgállà kúndò-dè-w=ma dóllónkè kúndò-dè-w=ma elegant.boubou put-Impf-2sgS $=$ or? open.boubou put-Impf-2sgS $=$ or?
súlíyà kúndò-dè-w?
folded.boubou put-Impf-2sgS
'Will you wear the elegant boubou, the boubou open under the arms, or the boubou with many folds?'

See the next section for more on clause-level disjunction. Another speaker, however, offered the following construction with pronouns:

$$
\begin{array}{ll}
\text { (xx) a. Ú má } \Rightarrow \text { mí má } \Rightarrow \text { wó = lé } & \text { ś́ò-dè. } \\
& \text { 2sgPro or? } 1 \text { sgPro or? } \quad \text { 3sgPro = Assoc } \text { speak.Hab-Hab } \\
& \text { 'Either you or I will have to talk to him.' }
\end{array}
$$

Is this because of the pronouns or because of the speaker? Could it be because in this case it's an "either-or" construction instead of a question? What if the question were "Will you talk to him or will I?" Or what if with the boubous, we instead say "either you will wear this or you will wear that."

### 9.2.2 Clause-level disjunction

As indicated above, the same particle can be used to join two or more clauses. It is placed after the verb in all non-final clauses; the final post-verbal position is empty. This structure is very close to conditionals, discussed in chapter 16 . Unless the clauses are explicitly future, as in (xx), the verb form used is typically the defocalized perfective, in both clauses. This is true even if the second clause is translated as imperative:
$(x x) \quad$ a. Bàmàkó yàè-m $\quad m a \Rightarrow$ nònú bìyì-m.
Bamako go.Perf-1sgS or here be.Perf-1sgS
'Either I will go to Bamako, or I will stay here.'
b. Jáá $=g \varepsilon$ j̀̀ỳ-w 'má $\Rightarrow$ ùngùlù-w.
meal $=$ Def eat.Perf-2sgS or get.up.PerfL-2sgS
'Eat the meal or get up!'
c. Dóó $=\mathrm{g} \varepsilon$ dò̀̀- $\mathrm{w} \quad$ 'má $\Rightarrow$ kúy $=\mathrm{g} \varepsilon \quad \mathrm{mí}=\mathrm{j}$
pounding $=$ Def pound.PerfL-2sgS.H or pestle $=$ Def $1 \mathrm{sgPro}=\mathrm{Obj}$
òbù-w.
give.Perf-2sgS
'Pound the millet or give me the pestle!'

Examples (b) and (c) could be translated more literally as 'Either you eat the meal or you get up' and 'Either you pound the millet or you give me the pestle', respectively. Why the verb is in the perfective rather than in the imperfective is not clear.

Can these be in the imperative?

Another way of creating 'either... or...' sentences is to use the conditional construction, with /kém/ ‘all' following the 'if' particle /yó/...

Àná nìměm yèlè yò kém, gíyé $=$ gè yàmáá-ỳ.
Either it will rain soon, or the harvest will be ruined.

## Chapter $10 \quad$ Postpositions and adverbials

### 8.1 Postpositions

Tommo So has five main postpositions: the associative postposition /le/, two locative postpositions $/ \mathrm{nz} /$ and $/ \mathrm{baa} /$, the possessive $/ \mathrm{mo} /$, and the purposive $/ \mathrm{di} \varepsilon /$. Of the two locatives, the first, $/ \mathrm{n} \varepsilon /$, can be used more abstractly and also takes a dative meaning. To distinguish the two, I will gloss $/ \mathrm{n} \varepsilon /$ as Obl (oblique) and /baa/ as Loc (locative).

Postpositions, like all other enclitics (i.e. definite, genitive, plural, etc.) lack a specified tone on the surface. Recall from section XXX that they receive their F0 by interpolation between specified tones on either side. The one exception to this may be the locative postposition /baa/, which is also unusual in having a long vowel; most enclitics are subminimal.

While English has a proliferation of specific preposition and prepositional phrases, the postpositions in Tommo So, being fewer in number, must each cover more of the semantic space. In what follows, I will give examples of all attested uses of each postposition. While there are often commonalites between the uses, no hard and fast rules are possible to determine which postposition will be used in which context; it is my hope that by providing ample data, the reader can get a feel for the range of meanings associated with each for his or herself.
10.1.1 Instrumental and associative /le/

In the last chapter, I introduced /le/ as a conjunction 'and'. It also other meanings translated as English 'with'-the instrumental and the comitative.
10.1.1.1 Instrumental

As an instrumental, the postposition /le/ immediately follows the noun serving as the instrument:
a. Yùù kàmbàráá $=l$ le ú $=$ ỳ béndè-dè-m.
millet leaf=Assoc $2 \mathrm{sgPro}=\mathrm{Obj}$ hit-Impf-1sgS
'I will hit you with a millet stalk leaf.'
b. Sěydu tàgá $=\mathrm{g} \varepsilon=\mathrm{le}$ mòòmíyó dàa-gú sè.

Seydou shoe $=$ Def $=$ Assoc scorpoion kill-Ppl have
'Seydou is killing a scorpion with the shoe.'

As (xxb) shows, the instrumental comes at the end of the DP, and thus follows any determiners.

Related to a pure instrumental meaning, this postposition can also be used like English "by" for means of transport:
a. Mòbílú=le yáà-dè-y.
car $=$ Assoc go-Impf-1plS
'We will go by car.'
b. Wògò-tóró=le yáà-dè-y.
donkey.cart = Assoc go-Impf-1plS
'We will go by donkey cart.'

With the verb /dùyí-ý́/ 'load on one's head' and related transitive /dùù-ró/ 'load on someone else's head', the head is treated as a means of transportation, and thus takes /le/ rather than locative $/ \mathrm{n} \varepsilon$ / (which is what we would expect, if translating the phrase literally as 'on one's head'):
a. Yúú dáná=le dùyí-yó-gú sê-m.
millet head=Assoc load-MP-Ppl have-1sgS
'I am loading the millet on my head.'
b. Yúú dáná úwo $=$ le dùù-ró-gú $s \hat{\varepsilon}-m$.
millet head 2sgPoss = Assoc load-Tr-Ppl have-1sgS
'I am loading the millet on your head.'

This same prefix is used for the vehicle of communication, designating what language something is spoken in:

```
(xx) Émmé tòmmò sòó=le dìgém kànì-y.
    1plS Tommo speech = Assoc chat do.Past-1plS
    'We chatted in Tommo So.'
```

All of the above instrumental examples have in common that the noun combined with $/ \mathrm{le} /$ is the main object facilitating the action described by the verb.

Deviating slightly from this formula, the instrumental can also be used to indicate the addition of something to a greater whole, also possible for English 'with':
(xx) Nìŋ́́ něm=le káná-gú sê-m.
sauce salt = Assoc make-Ppl have- 1 sgS
'I'm making sauce with salt.'
10.1.1.2 Comitative

The comitative reading is closely related to the conjunctive use shown in Chapter 9. When used with people, this postposition imparts the meaning 'with (someone)':
a. Mí ú=le Tòmmò sòó sóò-dè-m.
$1 \mathrm{sgPro} 2 \mathrm{sgPro}=$ Assoc Tommo speech speak-Impf-1sgS
'I speak with you in Tommo So.'
b. Mí=le Sěydu=le Bàmàkó yàà=bé-y.
$1 \mathrm{sgPro}=$ Assoc Seydou = Assoc Bamako go.Perf=be.Perf-1plS
'I went to Bamako with Seydou.'

Example (xxa) shows only the non-subject marked with /le/, and the verb agrees in the singular with the subject. This is a true comitative reading. (xxb) is provided for comparison with an associative or conjunctive use, introduced in the last chapter, where both 'I' and 'Seydou' are conjoined and the verb has plural agreement.
10.1.1.3 Other uses of the associative

The above comitative examples show someone being with or near someone else, but in the following, the associative /le/ indicates recoiling or distancing. In this way, the associative again edges into the territory of a locative:

$$
\begin{array}{lll}
\text { Wó mí= le wòrí-yé-n } & \text { bè-lí. } \\
\text { 3sgPro } & 1 \text { sgPro }=\text { Assoc } & \text { move.away-MP-Nom } \\
\text { 'Sant.Perf-Neg } \\
\text { 'She didn't want to move away from me.' } &
\end{array}
$$

The noun marked by /le/ provides a point of reference for the verb of motion.
Still farther afield, /le/ can be used temporally. This is seen mostly after time expressions modified by relative clauses or demonstratives:
a. Wàkàdù gìnè-ý mí yóì $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ Sámbà píyé tóláá
time house-Dim 1sgPro enter.Perf.Rel=Def=Assoc Samba cry start.Perf bè.
was
'When I entered the house, Samba had already started to cry.'
b. Jùgù nò = lè Bàmàkó yáà-dè-m.
week this = Assoc Bamako go-Impf-1sgS
'This week I will go to Bamako.'

Other temporal expressions, like 'in the morning' or 'next year' do not take the associative. See section XXX for examples.

The associative can also be used more abstractly, where its object is less of a tool than a context or situation for an action:
(xx)
a. Ú mómú= le jàbíláá yèléé-lè-w gì-w.

2sgPro laugh = Assoc respond.Perf come-Neg.Impf-2sgS say.Past-2sgS
'Laughing, you replied that you won't come.'
b. Sěydu kùù jím=le j̀jjì-yì.

Seydou head.L sickness = Assoc lie.down-MP.Perf 'Seydou went to bed with a headache.'

Note that the example in (xxa) can also be said in Tommo So by chaining the verb 'laugh' with 'respond'. For more on chaining, see Chapter 15. Both examples in (xx) can be translated into English with 'with' ((xxa) could be 'with a laugh').

In running speech, /le/ can also be used in a few set expressions to make sure the interlocutor is following, including /ègé-w=le/ and /égè-dè-w=le/ 'do you understand?' as well as $/ \mathrm{y} \check{\varepsilon}-\mathrm{w}=\mathrm{le} /$ 'you see?'. This seems to be the same postposition, but it is possible that instead this is some sort of negative marker, homophonous with the associative. In all other cases, $/ \mathrm{ma} /$ is the question marker, and $/ \mathrm{le} /$ cannot be used (see Chapter 15).
10.1.2 Locative /báà/

The postposition /báà/ is phonologically different from the other postpositions in that it has a long vowel. It also has its own underlying falling tone, /báà/, though in fast speech, this sometimes sounds more like a downstepped high. Here, I will write it as /báà/. Its basic meaning is 'in' or 'at'.
(xx)
a. Gìn $\varepsilon=$ báà yój̀.
house $=$ Loc surely.is
'He is at home'
b. Bàmàkó= báà mòbílu kàlé sè-lé.

Bamako = Loc car limit have-Neg
'There are lots of cars in Bamako.'

In most cases where one would put /báà/, one could also put the oblique postposition $/ \mathrm{n} \varepsilon /$. They are more or less interchangeable. We will see more uses of /báà/ below when combined with nouns to form complex PPs.
10.1.3 Oblique $/ \mathrm{n} \varepsilon /$

Arguably the most common postposition in general is $/ \mathrm{n} \varepsilon /$. It is used on its own as a locative, in compound locative expressions ('in back of', 'in front of'), and figuratively ('in my opinion', etc.). It can also be used as a dative marker, typically in conjunction with the possessive or benefactive postposition $/ \mathrm{mo} /$.
10.1.3.1 Simple uses of $/ \mathrm{n} \varepsilon /$

As a locative, $/ \mathrm{n} \varepsilon /$ is used in the place of many different English prepositions. Take, for instance, "to" and "from". This directionality is typically transmitted through the verb in Tommo So, letting $/ \mathrm{n} \varepsilon /$ be a more generic locative.
a. Gìnغ̀-ý $=\mathrm{n} \varepsilon \quad$ yóó-gú sè-m.
house-Dim $=$ Obl enter-Ppl have-1sgS
'I am entering the house.'
b. Gìnغ̀-ý=ne gòó-gú sè-m.
house-Dim = Obl enter-Ppl have-1sgS
'I am leaving the house.'

The postposition $/ \mathrm{n} \varepsilon /$ on its own can act as a general locative. Depending on context, it can translate as either 'in' or 'on'.
(xx)
a. Jàndùlù gém bándáy-kálá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ kô.
donkey.L black courtyard $=\mathrm{Def}=\mathrm{Obl}$ is
'There is a black donkey in the courtyard.'
b. Díí= $n \varepsilon$ mùrí-yó-gú $\quad$ ŝ-m.
water $=$ Obl submerse-MP-Ppl have-1sgS
'I am submersing myself in water.'
c. Òdù-náá $=n \varepsilon$ òd $\check{y} y$ yáà-dè-m.
road $=\mathrm{Obl}$ walk go-Impf-1sgS
'I walk on the road.'
d. Túggúru $=\mathrm{n} \varepsilon$ dànnì-yì-m.
stool $=$ Obl sit.down-MP-1sgS
'I sat down on the stool.'

It can also be used with place names, though it shares this duty with /báà/:
( xx ) a. Mì dèlè Àbíjàn $=\mathrm{n} \varepsilon$ wó $=\mathrm{g}$ è ííyé digé yéllè.
1sgPro older.brother.L Abidjan = Obl is = Def today evening come.Impf.3sgS 'My older brother who lives in Abidjan will come this evening.'
b. Àmèríkí $=\mathrm{n} \varepsilon$ támáá $=$ bè.

America $=$ Obl stay.long.. erf $=$ be. Perf
'He stayed a long time in America.'

While the two locative postpositions are largely interchangeable, consultants report that when referring to a place with $/ \mathrm{n} \varepsilon /$, it implies that the person who was there has returned and is not currently there. With /báà/ on the other hand either reading (currently there or not currently there) is possible.

If the location is marked with a demonstrative, the locative adverbial /nò-nú/ 'here' rather than $/ \mathrm{n} \grave{=}=\mathrm{n} \varepsilon ́ /$ is used. Some dialects, like that of Sarédina, and some older speakers use a harmonized version of the latter, /nò=nó/:
(xx)
a. sàdá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ 'in the garden'
b. sàdà nò-nú 'in this garden'
/ne/ can also be used to mean 'under':
(xx)
a. Tìm $\varepsilon=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ nínnílí-yé.
tree $=$ Def $=$ Obl rest-MP. ImpSg
'Rest under the tree.' AMBIGUOUS WITH 'IN THE TREE'?
b. Mòòmíyó $=\mathrm{g} \varepsilon$ j̀j $\mathrm{jó}=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ màndáá $=y$ y.
scorpion $=$ Def mat $=$ Def $=$ Obl disappear $=$ Cop
'The scorpion disappeared under the mat.'

Abstractly, the postposition $/ \mathrm{n} \varepsilon /$ can be used as a subordinator meaning 'before'. Consider:

$$
\begin{array}{llll}
\text { (xxx) } & \text { Nò-nú mí } \quad \text { yéllè }=\text { nè } & \text { Étas-Unis yáà-dè-m. } \\
& \text { here } 1 \text { sgPro come.Impf.Rel = Obl } & \text { U.S. } & \text { go-Impf- } 1 \operatorname{sgS} \\
& \text { 'I am going to the US before coming here.' }
\end{array}
$$

This subordination will be discussed more in depth in Chapter XXX.
The same postposition is used in expressions of reason or cause, though this meaning is mainly covered by the postposition /die/ (see section 10.1.5). For instance:
a. Sáná sààbù $=n \varepsilon$ kúú úwo gàláá $=w o$.

Sana reason. $\mathrm{L}=\mathrm{Obl}$ head 2 sgPoss pass. $\mathrm{Perf}=$ is
'You are saved thanks to Sana (Lit. your head has passed thanks to Sana).'
10.1.3.2 'On (the head of)'

There are several ways of expressing 'on' in Tommo So. One is the simple oblique, presented above in example (xx). Another way, used especially with trees, people, and other things with a clear "head" or top, is to use a possessive construction translating to 'on the head of X'. For instance:
(xx) Sàdáá tìmé kùù $=n \varepsilon$ dáà.
bird tree head.L $=$ Obl be.sitting
'The bird is perched on the tree.'

Note that this expression is not used for many solid inanimate objects like rocks or mountains-in this case, typically the expression /X dàa/ 'on top of X' is used (see section 10.1.3.5).
10.1.3.3 'Next to, beside'

There are several expressions meaning 'next to' or 'beside.' The first two, like 'on the head of' seen above, involve a possessive construction coupled with the oblique postposition $/ \mathrm{n} \varepsilon /$. The possessed noun in this case is /dúú/, which can mean either 'underside, bottom' or in this case 'side'.
a. Dúú ḿmo $=\mathrm{n} \varepsilon$ yélé dánní-yé.
beside 1sgPoss $=$ Obl come.ImpSg sit-MP.ImpSg
'Come sit beside me.'
b. Táná ńmo $=n \varepsilon$ jáá j̀yè.
side 1 sgPoss $=$ Obl meal eat.Perf
'He ate next to me.'

The other expression involves an adverb, /géngé-ní/:
(xx) Nàà gém=ge èné=g géngé-ní=wo.
cow. L black $=$ Def goat $=$ Def beside-Adv $=$ is
'The black cow is next to the goat.'

While we might expect the associative clitic after 'goat', neither of the nouns is marked with any postpositions; the adverb is simply placed after the second noun. This expression
has more of a nuance of "side by side" than the possessive constructions in (xx), which are largely interchangeable with /bèrú-go =wo/ 'nearby'.

### 10.1.3.4 'In front of/forwards' and 'behind/backwards'

The expression 'in front of', /gíré $=n \varepsilon /$ or /gíré $=$ báa/, appears to be derived from /gìré/ 'face' or 'eye', with a tone change of LH to H. 'Behind' /ónnú = ne/ or /ónnú = báà/ is formed in the same way and means literally 'at the back of', but with a high tone on 'back' rather than the lexical LH /ònnú/. While we could posit a H overlay for adverbialized nouns, the pattern does not appear productive and this change is probably lexicalized. Here again, the two postpositions $/ \mathrm{n} \varepsilon /$ and /báà/ are interchangeable with no ostensible change in meaning. These expressions can be used on their own to give a general meaning of 'in front' or 'in back', or in a possessive construction with whatever it is that something (or someone) is in front of (or behind):
(xx) a. EXAMPLE WITH gire OR onnu ALONE
b. Ú báá gìrè $=n \varepsilon$ sìgàrédí nòó nàà-gú.

2sgPro father.H front.L = Obl cigarette drink Neg.Imp.Sg
'Don't smoke cigarettes in front of your father.'
c. Mòòmíyó $=\mathrm{g} \varepsilon$ tòndòó ònnù $=$ bàà jòbáá gàlè. scorpion = Def water.jug behind.L=Loc run.Perf pass.Perf 'The scorpion ran behind the water jar.'

The same expressions are used for the adverbs 'forwards' and 'backwards':
(xx)
a. Gíré=báà jáá.
front $=$ Loc take. ImpSg
'Bring it forward.'
b. Mòtó $=\mathrm{g} \varepsilon$ jujé díè ónnú = báà yáà-dè?
moto $=$ Def what for behind= Loc go-Impf
'Why is the motorcycle going backwards?'

Confirm that forwards and backwards can also take $/ \mathrm{n} \varepsilon /$.
10.1.3.5 'Above' and 'below'

The expressions 'over' and 'under' are similar to 'in front' and 'behind' in that they are both made up of nouns, which can be put together with a possessor, and a locative postposition. In this case, the nouns involved are /dáá/ 'top' and /dúú/ 'bottom', which was also used for 'next to' in section 10.1.3.2 above. Like /gíré/ 'front' and /ónnú/ 'back', these may be used on their own (xxa) or with a possessor (xxb):
a. Kòró $=\mathrm{g} \varepsilon \quad$ dáá $=\mathrm{g} \varepsilon=$ bàà bòdù-m.
calabash $=$ Def top $=$ Def $=$ Loc put.away- $1 \operatorname{sgS}$
'I put away the calabash up above.'
b. દ́n毛ĺ́ tènné $=\mathrm{g} \varepsilon$ dùù $=\mathrm{g} \varepsilon=$ bàà bògólí-yé-gú $=\mathrm{w} 0$.
frog well $=$ Def bottom. $\mathrm{L}=\mathrm{Def}=$ Loc make.noise- $\mathrm{MP}-\mathrm{Ppl}=$ is
'The frog is making noise at the bottom of the well.'

As these examples show, /dáá/ and /dúú/ are often used with the definite determiner.
The same expressions are used for 'under' and 'over', though 'under' is sometimes expressed simply with the oblique when the context already specifies the exact location (see §10.1.3.1):
a. Sàdáá $=\mathrm{g} \varepsilon=\mathrm{mbe}$ dúmbó $=\mathrm{g} \varepsilon \quad$ dàà $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ kílíli-yé-gú sì ${ }^{\mathrm{n}}$. bird $=\operatorname{Def}=\mathrm{Pl}$ mountain $=$ Def top $=$ Def $=$ Obl fly-MP-Ppl have3plS 'The birds fly above the mountain.'
b. Dí́ tòndòó dùù $=\mathrm{n} \varepsilon=\mathrm{w}$ 。
water water.jar bottom $=\mathrm{Obl}=$ is
'Water is under the water jar.'

In (xxb), using only the oblique would mean that water is in the water jar, since that is the most natural locative reading with this noun. Thus, to deviate from that standard meaning, one has to make a compound locative expression.

### 10.1.3.6 'Between’

There are three ways of saying 'between'. The first uses the noun /mì-mìnné/ (or /mìnnè-mìnné/, with full reduplication) 'middle'. If there is just one plural or mass noun that something is between, this acts as the possessor of /mì-mìnné/ (shown in (xxa)). If there are
two separate things mentioned, however, then these are conjoined with the associative /le/ following each location and /mì-mìnné/ is unpossessed (xxb).
a. Yúú $=\mathrm{g} \varepsilon \quad$ tìm $\varepsilon ́=\mathrm{g} \varepsilon \quad$ mì-mìnn $\varepsilon=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ yì̀bè-m. millet $=$ Def tree $=$ Def Red-middle $\cdot \mathrm{L}=\mathrm{Def}=$ Obl grow.Perf- 1 sgS 'I planted millet between the trees.'
b. Tènné $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ gìn $\varepsilon=\mathrm{g} \varepsilon=\mathrm{le} \quad$ mì-mìnn $\varepsilon=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$
well $=$ Def $=$ Assoc house $=$ Def $=$ Assoc Red-middle $. \mathrm{L}=$ Def $=$ Obl
góró ḿmo màndáá = ỳ.
hat 1sgPoss lose.Perf=Cop
'I lost my hat between the well and the house.'

The second expression is like the first, but instead of /mì-mìnné/, it uses /kóló/:
(xx) Gámmá $=\mathrm{g} \varepsilon$ école $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ ólu $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ kòlò $=\mathrm{n} \varepsilon \quad$ kònó $\mathrm{cat}=$ Def $\quad$ school $=$ Def $=$ Assoc field $=$ Def $=$ Assoc inside. $\mathrm{L}=$ Obl there. Log tèmbè-m.
find.Perf-1 sgS
'I found a cat between school and the field.'

The last expression contains no noun at all, but is only made up of the associative construction coupled with the oblique postposition following the last location:

Nò-nú=le $\quad$ Dúmásá $=1 \mathrm{l}=\mathrm{n} \varepsilon \quad$ bàndí $=\mathrm{mbe}$ jóó-ní= wo $-\mathrm{\varepsilon}^{\mathrm{n}}$.
Here $=$ Assoc Douentza $=$ Assoc $=$ Obl bandit $=\mathrm{Pl} \quad$ many-Adv $=\mathrm{is}-3 \mathrm{plS}$
'There are lots of bandits between here and Douentza.'

The 'between' expression is also used in contexts like 'from X to Y ', such as:

Mótí= le $\quad$ Bànyàgárá $=\mathrm{le}=\mathrm{n} \varepsilon \quad$ jòbì- $\grave{\varepsilon}^{\mathrm{n}}$.
Mopti $=$ Assoc Bandiagara $=$ Assoc $=$ Obl run.Perf-3plS
'They ran from Mopti to Bandiagara.'

This is, of course, derived from the reading 'they ran between Mopti and Bandiagara'.
10.1.3.7 'All the way to'

The Tommo So expression 'all the way to' or 'up to' (French jusqu'à) does not involve either locative postposition, but being semantically related, I include it here. It is a Fulfulde loan, /hálè/, which implies that whatever is being traveled towards is a long way away:
(xx) Jòbáá hálè 'Mótí 'yàì-દ̀n.
10.1.4 Possessive or benefactive / mo /

In many cases, the postposition $/ \mathrm{mo} /$ is strictly possessive, and as such, it stretches the boundaries of postposition-hood. However, it has some postpositional uses as well, such as a benefactive usage and a use in a locative.

The postposition $/ \mathrm{mo} /$ is most common in alienable pronominal possessive constructions, combined with the oblique form of the pronoun. See section 7.2.1.2 for a description of these possessors. Pronouns followed by the possessive clitic combine in special possessive pronoun forms, also discussed in Chapter 7.

Full-fledged non-pronominal possessives are rarely formed with the possessive $/ \mathrm{mo} /$ in Tommo So. As discussed in Chapter 7, there are a few examples in texts, such as /Móślú = mó jáw/ 'the Mori war' or /Tó-tóyó= mò tìgè/ 'the last name of Tongo-Tongo'. All of these involve place names and all were spoken by the oldest man in the village. However, headless possessives are often formed with this postposition, wherein it takes a meaning of 'for' or 'of'. For instance:
(xx) a. Nùyò nǒ pédu $=\mathrm{g} \varepsilon=\mathrm{m} \imath=\mathrm{y}$.
leaf this sheep $=$ Def $=$ Poss $=$ Cop
'These leaves are for the sheep.'
b. òrò níné wómっ Háwá $=\mathrm{m} \supset=\mathrm{g} \varepsilon$ díyé síyè-lદ̀. baobab sauce 3sgPoss Hawa=Poss=Def than good-Neg 'Her toh is not better than Hawa's.'

The order of the definite and the possessive depends on the bracketing. In (xxa), the bracketing is [for [the sheep]], where as in (xxb), it is essentially [the [Hawa's]].
10.1.4.1 $/ \mathrm{mo} /$ in locative constructions

A locative like the French chez $X$ is formed by adding either the oblique or locative postposition after / mo /:
(xx)
a. Ámìru $=\mathrm{g} \varepsilon=\mathrm{m} \jmath=\mathrm{n} \varepsilon \quad$ yàà $=$ bé- m .
chief $=$ Def $=$ Poss $=$ Loc go.Perf $=$ be.Pst. 1 sgS
'I went to the chief's [house].'
b. Bé tírè-yàà-nà úwo = báà yéllè.

3plPro grandparent-woman-HumSg.HL 2sgPoss = Loc come.Impf 'Their grandmother will come to your [house].'

The $/ \mathrm{o} /$ of the postposition is syncopated in the context CVmV = báà, leaving 'his/her house' and 'their house' as /wóm = báà/ and /bém = báà/, respectively. These forms may be related to the locative adverbs /nìmbáà/ 'other there' and /nòmbáà/ 'here (general)'.
10.1.4.2
$/ \mathrm{mo}$ / as a dative

The same postposition can also be used as a dative, with or without the oblique postposition (xxa). In the second example, the oblique must be present:
a. Bògò èsú úwo $\begin{gathered}\text { bè-dè-m. }\end{gathered}$
dress.L pretty 2 sgPoss buy.Hab-Hab-1sgS
'I will buy you a pretty dress.'

Tommo speech $1 \mathrm{sgObl}=$ Poss $=\mathrm{Obl}$ difficult- $\mathrm{Adv}=\mathrm{is}$
'Tommo So is difficult for me.' Not really a dative, but what?
10.1.4.3 $\quad / \mathrm{mo} /$ as a benefactive
$/ \mathrm{mo} /$ can also be used as a benefactive, as in:
a. Ǹdè bèlú sè-lı̀=mo súgó gòénnè. [Funeral text]
person.L animal have-Neg = Poss Sugo dance.Hab.Neg.3plS
'They don't dance the sugo for people who don't have animals.'
b. Mòòmíyó $=\mathrm{g} \varepsilon$ ḿmo $=\mathfrak{\mathrm { n }}$ dàè.
scorpion $=$ Def 1sgPoss $=$ Obj kill.Perf
'He killed the scorpion for me.'

## Why does the second need the object clitic? Does it need it?

In a related sense, this postposition can be used also with a purposive meaning, overlapping semantically with /díy / (see the next section):
(xx) ...dèmbé-dìm $=\mathrm{g} \varepsilon=\mathrm{m}\rangle \quad$ bílu sè-lé. [History text]
build.roof-Inf $=$ Def $=$ Poss ladder have-Neg
'[The house] had no ladder to build the roof.'
10.1.5 Purposive or causal /díy /

The purposive or causal postposition is homophonous with the comparative (see Chapter 12). It is generally even more phonologically independent than the locative, since not only does it satisfy the word minimality requirement, but it also has its own high tone. Thus, I do not treat this postposition as a clitic. However, in fast speech, it can be collapsed into [d $\varepsilon$ ], at which point it seems more clitic-like.

In the purposive use, it means roughly 'for (a reason)'. The first sentence is ambiguous as to whether it should be a purposive or causal meaning (it was for the money that she married him or his money made her want to marry him), but the second is more clearly purposive:
 money 3 sgPoss for marry.Perf 'She married him for his money.'
b. İ̀yé $=\mathrm{g} \varepsilon$ díyé yèlè-y.
honey $=$ Def for come.Perf-1plS
'We came for the honey.'

Note that in the second sentence, the purposive /díýr/ can be replaced by the possessive, forming İìyé $=g \varepsilon=m \bigcirc$ yغ̀lè- $y$.

The causal reading is as follows. For consistency, I continue to gloss the postposition as 'for', although the more accurate translation in these cases is 'because':
a. Àná $=\mathrm{g} \varepsilon$ díyé yò̀ì $\varepsilon^{\mathrm{n}}$.
rain $=$ Def for enter.Perf-3plS
'They went in because of the rain.'
b. Ùgóó= $g \varepsilon$ díyé gìré jùngó-gú=wo. heat $=$ Def for eye bob- $\mathrm{Ppl}=$ is
'He is fainting because of the heat.'

The purpose or cause can also be more abstract, as in doing something "because of God" or for "God's sake":

$$
\begin{align*}
& \text { Mí=ỳ ámbá díyé kè } ̀ \text { lé òbì- }{ }^{\mathrm{n}} \text {. }  \tag{xx}\\
& 1 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj} \text { god for money give.Perf-3plS } \\
& \text { 'They gave me in the name of God.' }
\end{align*}
$$

For more on /díy $\varepsilon$ / in interrogation, see Chapter 15; in purposive clauses, see Chapter 19.
Notice that in all the examples above, the purposive /díy $\varepsilon$ / follows the definite in a position that looks very much like a possessed noun, but it does not undergo any tonal changes nor does it impose different tone on what precedes it.

### 10.2 Adverbs

Some adverbs in Tommo So can be created by pairing a noun with (typically) the associative enclitic /le/ (see example (xx) for 'with a laugh'). Non-postpositional adverbs usually carry either the suffix /-ni/ (or [-nu], especially before /wo/) or the suffix /-go/. These suffixes are also underspecified for tone and behave by the same rules as the human suffixes, discussed in section XXX. The latter suffix appears to be the same as the one found on suffixed adjectives; see Chapter 5. Expressive adverbials, which were already discussed in section XXX, may be unsuffixed. The former suffix, /-ni/, could be related to the participial suffix found on verbs /-nu/.

In terms of use and position, adverbs are used to modify both adjectives and verbs. They typically immediately precede the word they modify, though they can be separated by other adjunct phrases as well (see example (xx jooni bandankala)).

In this section, I will break the discussion of adverbs up into semantic classes, dealing with just a few adverbs in each subsection that are closely related to one another in their semantics.
10.2.1 Similarity

Tommo So combines the two suffixes noted in the introduction to this section to form /-gó-nú/ or /-gé-ní/ (variable harmonic pronunciations), which can be productively added to both individual nouns and nominalized (relativized) phrases to derive adverbs from nouns with the meaning 'like'. For instance:
(xx)
a. Gámmá-go-nu bógòlì-yè-dè.
cat-Adv-Adv make.noise-MP-Impf
'He cries like a cat.'
b. Mí=ỳ yè-ndáá hálè $[m i ́=\grave{n}$ bèndé-dé]-go-nu kànù.
$1 \mathrm{sgPro}=$ Obj see-Fact.Perf even $1 \mathrm{sgPro}=$ Obj hit.Rel-Impf-Adv-Adv do.Perf 'She looked at me as though she was going to hit me.'

Figure out why there is /kànù/ instead of/wo/ or /be/.
The same suffixes can be used with pronouns as well, both interrogative and demonstrative. The interrogative 'how' is /yày-gé-ni/, with the H portion of /yǎy/ surfacing on /-ge/, while the demonstrative adverb 'like this' or 'like that' is /nòn-gó-nú/ (xxa). The latter is probably derived from the demonstrative /ny̌/ with phonological changes such as harmony of $/ 0 /$ to $/ 0 /$, unusual since the vowel change is in the stem. The presence of the nasal in /noy/ could be related to the nasal in locative deictic adverbs like /nòmbáà/ or /nìmbáà/. There is also a separate stem /yém/, which takes no suffixes, and means simply 'like this' (xxb):
(xx)
$\begin{array}{llll}\text { a. } & \text { Mòòmíó }=\mathrm{g} \varepsilon \quad \text { mí= ̀̀ } \quad \text { nòn-gó-nu kèrè. } \\ \text { scorpion }=\text { Def } & 1 \mathrm{sgPro}=\mathrm{Obj} \text { this-Adv-Adv bite.Perf } \\ \text { 'The scorpion stung me like this.' }\end{array}$
b. ...ǹd $\varepsilon=\mathrm{g} \varepsilon$ bèlú nàà-nù = j̀ yò kém yém júgò-mò-dè. person $=$ Def animal owner.L-HumSg $=$ Cop if all like.that know-CausImpf
'If a person is an animal owner, it [the sugo dance] makes it known like that.'
[Funeral text]

Adding the suffix /-go/ to /yém/ derives the adverb 'in that case': /yém-go/, as in /yém-go yáà-dè-m/ 'in that case, I'll go'. For examples with wh-word /yàn-gé-ni/, see Chapter XXX.

A more expanded construction for similarity includes the noun /ànǎy/ 'manner' modified by a relative clause. The following example also shows that/-go-nu/ and /yém/ can co-occur in the same phrase:

| (xxx) | [Jàndúlu ànày | bìré-dz]-go-nu | yém | bírè-dè. |
| :---: | :---: | :---: | :---: | :---: |
|  | donkey manne | work.Rel-Imp | lik | work-Impf |
|  | 'He works like a dog.' (Lit. he works like a donkey) |  |  |  |

The bracketed phrase at the beginning of the sentence is a relative clause in which the head noun, /àyǎy/ 'manner', is internal to the clause, between the subject of the relative /jàndúlu/ 'donkey' and the verb, 'work'. The relative clause thus translates to 'the way a donkey works'. It is this relative clause that takes the adverbial morphology /-go-nu/. The whole sentence could be translated literally as 'In the way that a donkey works, he works like that.'

### 10.2.2 Extent

10.2.2.1 'A lot', 'very’ /díyé-go/, /sáy-ni/, /jóó-ni/

Tommo So has three adverbs that translate to 'a lot' or 'very'. The first, /díý́-go/, typically modifies verbs and translates more closely to 'a lot'. It is derived from the adjective /díyé/ 'big', and as such, it is not surprising that it takes the suffix/-go/ rather than /-ni/:
(xx)
a. Àràmátá ìsè díy $\varepsilon$-go bògó- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \ldots$

Ramata dog.L a.lot bark.Red-Impf= Def
'Ramata's dog that barks a lot...'
b. Mí=̀̀ díyé-go òbì-èn.
$1 \mathrm{sgPro}=\mathrm{Obj}$ a.lot give.Perf-3plS
'They gave me a lot.'
c. Músá sìgàrétí díyé-go nóò-dè.

Mousa cigarette a.lot drink-Impf
'Mousa smokes a lot of cigarettes.'

The next adverb, /sáy-ni/ typically modifies adjectives and means 'very'. In rapid speech, the /a/ has a tendency to raise, resulting a pronunciation closer to [séy-ni]. This adverb could be considered an expressive adverbial; nothing in the phonology or syntax of it distinguishes it from expressive adverbials discussed in Chapter 8. Predicative constructions with /sáy-ni/ are as follows:
(xx) a. Nàm bánu $=$ ne sáy-ni óg-g'wo. sun red $=\mathrm{Obl}$ very hot-Adv'is
'It is very hot in the hot season.'
b. Gìné $=\mathrm{g} \varepsilon$ sáy-ni $\varepsilon$ èsú-g'wo.
house $=$ Def very pretty-Adv'is
'The house is very pretty.'

Recall that/-go/ followed by the quasi-verb/wo/ often contracts to [gwo], written above as g'wo.

When /sáy-ni/ modifies an adjectival modifier rather than a predicate, it causes no tonal changes on the adjective, unlike Jamsay, where XXX. In all cases, /sáy-ni Adj/ can be replaced by the adjective reduplicated, with the second copy tone lowered: check that this is totally productive
(xx)
a. Gìnè èsú-èsù néé-go s s̀-m.
house.L pretty-pretty.L two-Adv have-1sgS
'I have two very pretty houses.'

Gìnè sáy-ni èsú néé-go sè-m.
house.L very pretty two-Adv have-1sgS
b. Ànà-m gàbú-gàbù néé-go yàà = bé-m.
man-HumPl.L tall-tall.L two-Adv see.Perf=be.Perf-1sgS
'I saw two very tall men.'

Ànà-m sáy-ní gàbú néé-gó yàà = bé-m.
man-HumPl.L very tall two-Adv see.Perf=be.Perf-1sgS

Finally, 'a lot' or 'many' is expressed by /jóó-ni/ or simply /jóo $\Rightarrow /$, with the final vowel lengthened to intonationally extend the falling tone. These forms are derived from the verb /jóó/ 'to be full'. This adverb can be used with nouns, verbs and adjectives, thus overlapping with the both of the forms previously given.
a. Jàndúlu jóò $\Rightarrow$ bándáy-kálá $=n \varepsilon$ tô.
donkey many courtyard $=\mathrm{Obl}$ be.in
'Lots of donkeys are in the courtyard.'
b. ǹdé-m jóó-ni mòòlù íbé yáà-dìn. person-HumPl many Mori.L market go-Impf.3plS 'Many people go to the Mori market.'
c. Tòmmò sòó sóó-nú, áí = mbe jóó-ni béllè. Tommo.L speech speak-Ppl friend $=\mathrm{Pl}$ many find.Impf 'By speaking Tommo-So, she will make a lot of friends.'

There is also a non-adverbial expression for 'a lot', /kàlé sè-lé/, which translates to 'it has no limit'. This expression was seen in an example in section 10.1.2, Bàmàkó= báà mòbílu kàlé $s \grave{\varepsilon}-l \bar{\varepsilon}$ 'there are a lot of cars in Bamako'.

When modifying a suffixed adjective, only/sáy-ni/ may be used. With unsuffixed adjectives, however, which are more noun-like, both /sáy-ni/ and /díyé-go/ are possible:
(xx) Dì̀ nǒ sáy-ni/díyé-go yègèlú = wo.
water.L this very/a.lot cold $=$ is
'This water is very cold.'

If the adverb meaning 'a lot' is modifying the verb, on the other hand, typically all three forms may be used:
(xx)
a. Mí báá pédu díyé-go/sáy-ni/jóó-ni sémè-dè.

1sgPro father.H sheep a.lot/very/many slaughter-Impf
'My father slaughters a lot of sheep.'
b. Kà-kàá díyé-go/sáy-ni/jóó-ni dàà = bé-y

Red-locust a.lot/very/many kill.Perf=be.Perf-1plS 'We killed a lot of locusts.'
10.2.2.2 'A little'/gààľ̌y-ni/, /mèé-ni/

There are two adverbs meaning 'a little', /gààléy-ni/ and /mèze-ni/. The first literally breaks down as follows:
(xx) gàà-lè-ý-ni
big-Neg-Dim-Adv

As an adverb, I will simply write it as one morpheme with an adverbial suffix. These two adverbs can be used interchangeably. In the following sentences, /gààľ̌y-ni/ can be replaced with /mèz-ni/, and vice versa:
a. Gààlěy-ni èbè-m.
a.little-Adv buy.Perf-1sgS
'I bought a little bit.'
b. Íí=ge mè eni jímè-dè.
child $=$ Def a.little-Adv be.sick-Impf
'The child is a little bit sick.'
/gàalěy/ can also be reduplicated, in which case the second copy is reduced to $\{\mathrm{L}\}$ tone. This form is most often used with a distributive sense, meaning "a little bit of this, a little bit of that." For instance, if in (xxa) the unreduplicated form were replaced by the reduplicated, it would give a meaning of 'I bought a little bit (of a lot of things).' Similarly, in (xxb), replacing /mè $\varepsilon$-ni/ with /gààľ̌y-gààlèy-ni/ gives the meaning that the child is a little bit sick with a lot of ailments.

There is also a temporal adverb, /mèé-ni kánéé/ 'in a little bit', that includes /mèźni/. Here, /kánéé/ is a chained verb form of 'do' that can then be followed by another clause:
a. Mèと́-ni kánéé yélè-dè a.little-Adv do.NF come-Impf
'He will come in a little bit.'
b. Mèé-ni kánéé góó=ge tólò-dè.
a.little-Adv do.NF dance $=$ Def start.Hab-Hab
'The dance is going to start soon.'
10.2.3 'Exactly', 'specifically'

In Tommo So, the same adverb /téé-ni/ or /téé-téé-ni/ is used to mean both 'exactly' (xxa) and 'specifically' (xxb). For instance:
(xx) a. Téméndré téé-ni sê-m. (Also okay reduplicated)
500.CFA exact-Adv have-1sgS
'I have exactly 500 CFA.'

```
Ámíru=g\varepsilon mídí=le tée-téé-ni yèl̀.
chief=Def noon=Assoc Red-exact-Adv come.Perf
'The chief came at exactly noon.'
```

b. Dàmmà nǒ téé-téé-ni j̀jí-yáá = bè-m.
village.L this Red-exact-Adv lie.down-MP.Perf=was-1sgS
'I spent the night in precisely this village.'

Í́ wómo $=\mathrm{g} \varepsilon=$ ỳ téé-ni òbù.
child 3 sgPoss $=\mathrm{Def}=\mathrm{Obj}$ exact-Adv give.Perf
'He gave it specifically to his child.'

The Fulfulde loan /jáàtì/ can also be used in the same place as /téé-ni/, as in Ámíru $=g \varepsilon$ mídí $=$ le jáàtì yèlè. These adverbs can also modify the subject of a sentence:

# a. Ú téé-ni/jáàtì ámíru $=\mathrm{g} \varepsilon=\mathrm{\jmath}$ yàé yé-ndé. <br> 2sgPro exact-Adv/precisely chief= Def=Obj go.NF see-Fact.Imper.Sg <br> 'You yourself (exactly you) have to go see the chief.' 

b. Yàá- $\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{mbe}$ bíré bém $\varepsilon=\mathrm{g} \varepsilon$ téé-ni/jáàtì woman- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Pl}$ work 3 plPoss $=$ Def exact-Adv/precisely sòw $\quad$ gému $=$ ǹ.
cloth.L black = Cop
'The women, their work is specifically [dying] indigo cloth.'

Both of these forms can be used as interjections, but in the case of /téé-ni/ it is unsuffixed /téé/ that is exclaimed. As such, they mean 'Indeed!' or 'Exactly!' There is one more form that can only be used as an interjection in Tommo So, often to indicate that you have found exactly the thing you have been looking for:

Páy! Nòó wó=ỳ.
exactly this 3 sgPro $=$ Cop
'There we go! That's it exactly.'
10.2.4 Evaluation
10.2.4.1 'Well' and 'badly'

The most common way to say 'well' or 'badly' is not with true adverbs, but rather by modifying a cognate noun with the adjectives 'good' and 'bad'. For instance:
(xx)
a. Bìrè síyé bírè-dè.
work.L good work-Impf
'He works well.' (Lit. he does good work)
b. Yàà úlùm $=g \varepsilon=m b e$ nùyò síyé núyò-dìn.
woman. L children $=\mathrm{Def}=\mathrm{Pl}$ song.L good sing-Impf.3plS
'The girls sing well.' (Lit. they sing a good song)
c. Ànà úlùm $=\mathrm{g} \varepsilon=\mathrm{mbe}$ gòò pàdíyé gó̀̀-dìn.
man. L children $=\mathrm{Def}=\mathrm{Pl}$ dance. L bad dance-Impf.3plS
'The boys dance poorly.' (Lit. they dance a bad dance)

The adjective /síyé/ 'good' can also be made into an adverb /síýs-go/ 'well'; there is no equivalent for 'poorly'. Instead, if one wishes to use an adverb, one simply uses 'well' with a negative verb:
a. Tòmmò Sòś síyé-go sóò-dè-w.

Tommo.L speech good-Adv speak-Impf-2sgS
'You speak Tommo-So well.'
b. Yàa-ná wómっ $=\mathrm{g} \varepsilon$ français síyé-go sòé-lè.
woman-HumSg 3sgPoss = Def French good-Adv speak-Neg.Impf 'His wife doesn’t speak French well.'

### 10.2.4.2 'Appropriate'

Doing what is culturally appropriate is extremely important in many Malian societies, Dogon included. While something appropriate is called /kìdè náá/ 'correct thing' (with /náá/ possibly derived from 'mother'), this is not typically used predicatively. Instead, Tommo So uses two intransitive verbs /dàgá/ ‘be good’ and /háná/ ‘be normal'. In the affirmative, these are used in the participial form (xxa), while the negative is the negative perfective:

$$
\begin{array}{lllll}
\text { a. } & \text { Ǹdè } \quad \text { díý́ }=\mathrm{g} \varepsilon & \text { wó } \quad \text { kúyó ńyé-n dàgáá-dè. }  \tag{xx}\\
& \text { person.L } & \text { big }=\text { Def } & \text { 3sgPro first } & \text { eat-N }
\end{array} \text { be.good.Perf-Impf }
$$

'It is appropriate that the oldest person eats first.'
b. Síí úwo yé= dògò ǹdè yàgá $\varepsilon$ én hànà-lí. caste 2 sgPoss Exist = but person.L other marry be.normal-Neg.Perf 'It's not appropriate to marry outside of your caste.'
10.2.5 Epistemic modals
10.2.5.1 'Certainly’/tájòrò/, /tílày/

Certainty is expressed with the pre-phrasal adverbs /tájòrò/ and /tílày/, both Fulfulde loans. /tílày/ can also be used as a noun meaning 'duty' and can be used as a predicate as well to indicate certainty: EXAMPLE
(xx) a. Tájòrò àná míyè-dè.
certainly rain rain-Impf
'It will certainly rain.'
b. Tílày kánì-yè-dè.
surely do-MP-Impf
'It's sure to happen.'
c. Tílày ííyóò mí éèn$^{n}$-dè-m.
surely this.year 1 sgPro marry-Impf-1sgS
'It's certain that I will get married this year.'

In every case, the adverbial is placed at the beginning of the sentence and a regular clause follows with no unusual morphology. The certainty of (xxc) is enhanced by the emphasis placed on the subject by using the independent pronoun.
10.2.5.2 'Possibly', 'maybe'

Possibility or uncertainty is typically expressed biclausally. The first clause is a headless relative indicating the possible action, and second clause translates to roughly 'it could be'. There is no difference between 'maybe' and 'it's possible' in Tommo So.
a. Yèlć- $\mathrm{d} \varepsilon ̀=\mathrm{g} \varepsilon \quad$ bíc̀-dè.
come.Rel=Def be-Impf
'He might come.'

$$
\begin{array}{ll}
\text { b. Ànná mìyé-lè }=\mathrm{g} \varepsilon & \text { bíc̀-dè. } \\
\text { rain rain-Neg.Impf.Rel = Def } & \text { be-Impf } \\
\text { 'It might not rain.' }
\end{array}
$$

Synonymous with ( xxb ) is an expression that includes /ìnè-ĺz/ meaning 'it is not standing.' It imparts a negative meaning to the other clause involved, like 'maybe it won't be the case that he will come.' This phrase can be either the first or second clause:

stand-Neg sheep slaughter-Ppl have.Rel.3plS = Def
'Maybe they are slaughtering a sheep (or maybe they are not).'

The /bíc̀-d $\varepsilon$ / from above can also be combined with /ìjè-ľ́/ to form the following:

chief $=$ Def $\quad$ Sevare $=O b l$ come. Rel.Impf $=$ Def stand-Neg $=$ Def be-Impf
'It's possible that the chief will come to Sevare (but maybe he won't).'
10.2.6 Manner

The suffix /-go/ can be added to most adjectives of that class (see section 4.5.1) to derive equivalent adverbs:
a. $\varepsilon \varepsilon^{n}{ }^{n}$-gó
'loudly'
(from / $\varepsilon \varepsilon^{n}{ }^{n} /$ 'tough')
b. ólu-go 'softly' (from /ólu/ 'moist')
c. ógu-go 'quickly’ (from /ógu/ 'fast')

For more manner adverbs, see Chapter 8 on expressive adverbials.
10.2.7 Spatio-temporal adverbs
10.2.7.1 Temporal adverbs

The following table lists the most common temporal adverbs, split up by timeframe:
(xx)
a. ííyé
'today'
wàgàdù nò = lé
nìměm

yàgá $\quad$| 'these days, at this time' |
| :--- |
| 'right now' |
| 'again' |

Temporal adverbs are most often pre-clausal. Morphologically, temporal adverbs lack either adverbial suffix. Most often they are nominal followed by the postposition /le/. Note that both types of compounds are attested here. For instance, 'day after tomorrow' is a canonical compound (/yògò déné/), while 'sixth day from today' is a pseudo-genitive compound (/yògó jùgù/).
10.2.7.2 'First'

The adverb /kùyó-go/ meaning 'first' is built from the adjective /kúyó/ 'first'. It is not clear why the tone changes in this case. It typically comes in the immediate preverbal position:

$$
\begin{align*}
& \text { Àgá ùngùlì yó díi kùyó-go ńdì-yè-dè. }  \tag{xx}\\
& \text { morning get.up.Perf if water first-Adv bathe-MP-Impf } \\
& \text { 'He bathes first thing when he gets up.' }
\end{align*}
$$

If more than one action is referred to in the sentence, to make reference to the first one, often the adverb is omitted, and a paraphrase that involves finishing the first action implies that it is done first:
( xx ) $\quad$ Bíré $=\mathrm{g} \varepsilon$ bìráá jè-y yó jáá $=\mathrm{g} \varepsilon \quad$ j́y $̀$ è-dè- y . work $=$ Def work.Perf finish-1plS if meal = Def eat-Impf-1plS
'We will finish work first and then eat.' (Lit. If we finish working, we will eat.)

Here, the 'finish' chained with /biré/ 'work' gives the meaning that the work must occur first before the eating can take place.

### 10.2.7.3 Directions

The most common spatial adverbs like 'forwards' and 'backwards' are given earlier in this chapter, while demonstrative adverbs ('here', 'there', etc.) are discussed in section XXX. Below are the cardinal directions:

| (xx) kólólu | 'north' |
| :--- | :--- |
| túmbálu | 'south' |
|  | túmmú-gó or dúú |
| númbú-gó or dáá | 'east' |
|  | 'west' |

There are two names for both 'east' and 'west'. The first refers to the sun: /túmmú-gó/ is derived from the verb /túmmó/ '(sun) rise' and /númbú-gó/ is derived from the verb /nùmbó/ '(sun) set'. Here, the /-gó/ suffix is not the underspecified adverbial suffix, but a nominalizing suffix first discussed in section XXX. Notice also that the alternate names for 'east' and 'west' are identical to 'bottom' and 'top'. This is a different spatial division than we make in the West, where 'north' and 'south' are more likely to be considered top and bottom. IS THERE SOME GEOGRAPHIC EXPLANATION FOR THIS?

The expressions 'left' and 'right' are adjectives derived from the cultural uses of each hand: left for the bathroom and right for eating. Thus, /nùmò nààndá/ 'left hand' gets its name from /nààndá/ 'area at the edge of the village for defecating' and /nùmò ńy $\varepsilon$ / 'right hand' gets its name from the verb /nyyé/ 'eat'. Used as adverbs, the expressions 'right hand' and 'left hand' are combined with either the locative or oblique postposition or in a compound with the word /táná/ 'side'.
(xx)
a. Tènné $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ dò̀̀- w
yó, nùmò j́y $\varepsilon$ = báà dúlí-yó.
well $=\mathrm{Def}=\mathrm{Obl}$ arrive. $\mathrm{PerfL}-2 \mathrm{sgS}$ if hand.L right $=$ Loc turn-MP.ImperSg 'Turn right at the well.'
b. Gìné $=$ mimo nùmò nààndá $=$ báà $=$ wo.
house $=1$ sgPoss hand. L left $=\mathrm{Loc}=$ is
'My house is on the left hand side.'
c. ...nùmò nààndá tàyà $=n \varepsilon$ gìn $\varepsilon$ kóò $=l \grave{\varepsilon} \Rightarrow \ldots$ hand.L left side.L=Obl house be=Neg
'...on the left hand side, there's a house, isn't there...' [Origin text]
10.2.8 Other adverbials

### 10.2.8.1 'Straight'

Tommo So uses the same adverbial /dém-ni/ for all translations of straight: 'direct (route)', 'straight object', 'straight road', etc. Jamsay and other Dogon languages typically use a different expression for a straight object, like a stick, but Tommo So is economical in this regard. /dém-ni/ can be optionally reduplicated as /dém-dém-ni/ to intensify the meaning.

## EXAMPLES

### 10.2.8.2 'Together', 'apart'

'Together' is expressed by a non-ideophonic adverbial /túmó-go/, derived from /túmó/ 'one', as in:
(xx) Ú=le mí=le émmé túmó-go góó góò-dè-y.
$2 \mathrm{sg} \operatorname{Pro}=$ Assoc $1 \mathrm{sgPro}=$ Assoc 1 plPro one-Adv dance dance-Impf-1sgS 'You and me, we dance together.'
'Apart', on the other hand, looks more like an expressive adverbial, /déy ${ }^{\mathrm{n}}$-d $\varepsilon y^{\mathrm{n}} /$. It is derived from the adjective / déy ${ }^{\mathrm{n}}$ / 'different, distinct'. This can be used on its own or with the noun /tàyá/ 'side':
(xx) Émmé (tàná) déy ${ }^{\mathrm{n}}$-déy ${ }^{\mathrm{n}}$ gòó-gú sè-y.

1plPro side apart dance-Ppl have-1plS
'We dance separately.'

The addition of /tà $\mathfrak{y}$ á/ gives a reading like 'on separate sides'.

### 10.2.8.3 'Always', 'never'

The adverbs 'always' and 'never' can be expressed by the XXXX loan /ábádá/. Used with a negative verb or as an interjection, it means 'never', while used with an affirmative verb, it means 'always'.
(xx)
a. Ábádá kàné-lè-m.
never do-Neg.Impf-1sgS
'I will never do [it].'
b. Ábádá kánà-dè-m.
always do-Impf-1sgS
'I will always do [it].'

The expressive adverbial that functions in the same way is /àsúú/, meaning 'always' in the affirmative and 'never' in the negative. This can always be followed by /kém/ 'all' for emphasis:
(xx) Àsúú kém jáá fiyè-dè-m. always all meal eat-Impf-1sgS 'I always eat.'

In the following exchange from a text, there are two other negative intensifiers of /àsúú/:
(xx) MM: [Kándá kày] néé [nánà àsúú]. ${ }^{15}$

Kanda Top now never never
'As for Kanda, [he will] never again [be chief].'

V: Pés! Kándá [ògó yòé-lè].
never Kanda Hogon enter-Neg.Impf
'Never! Kanda will never be Hogon.'

In the first line, the combination /nánà àsúú/ gives the reading of 'never again', while the ideophonic exclamation /pés/ at the beginning of the second line is an intensifying confirmation for 'never'. The double H tone marking indicates intonational emphatic raising of the pitch.
10.2.8.4 'All, entirely', 'not at all'

The usual word for all is /kém/, but the expressive adverbial /láy-ní/ can be used for emphasis in its place:
(xx)

Yàà jíbu ḿmo kém / láy-ni énní-yáá = ỳ. female.L skirt 1sgPoss all entirely-Adv be.wet-MP.Perf=Cop 'My skirt is all wet.'

Another strategy in use today is to repeat /kém/ three times: /kém-kém-kém/. Consultants tell me that old speakers also use the expressive adverbial /sèlé-sèlè-ni/:
(xx) Kà-kàá $=\mathrm{g} \varepsilon=\mathrm{mbe} \quad$ yúú $=\mathrm{g} \varepsilon \quad$ ḱ́m-kém-kém / sèlé-sèlè-ni témáá

Red-grasshopper $=\mathrm{Def}=\mathrm{Pl}$ millet $=$ Def all-all-all entirely-Adv eat.Perf $j i ̀$ ह̀n.
finish.Perf-3plS
'The grasshoppers ate all the millet.'

A different set of adverbials is used in negative constructions. /láy-láy-ni/, a reduplicated form of the affirmative adverbial, can be used in the negative to mean 'at all', as in (xxa). In (xxb), /péy/ plays the same role.
(xx) a. Mí báá láy-láy-ni kìdè kámá sè-lé.

[^13]1sgPro father.H at.all-Adv thing.L nothing have-Neg 'My father owns nothing at all.'
b. Péy ènnì-yè-lí.
at.all be.wet-MP-Neg.Perf
'[It] is not wet at all.'

## Chapter 11 <br> Verbal derivation

Tommo So has five main derivational suffixes, first introduced in section XXX on vowel harmony. These are, roughly in order, factitive /-ndV/, reversive /-lE/, transitive /-rE/, mediopassive $/-\mathrm{yE} /$, and causative $/-\mathrm{m} /$. Of these suffixes, the most productive is the causative, which can be added to any verb.

### 11.1 Factitive /-ndV/

I have glossed the suffix /-ndV/ as the factitive to distinguish it from /-mo/, though in certain verbs it functions just like a causative. The most common use of the factitive is in deriving inchoative verbs from adjectives, such as 'become red', 'become fat', etc. This is achieved by adding the mediopassive suffix $/-\mathrm{yE} /$ after the factitive. For more on the mediopassive, see section 11.4.

### 11.1.1 Phonological form

Unlike the other derivational suffixes, which all have a mid vowel (either fully specified, as in the causative, or harmonizing, as in the others), the vowel of the factitive is copied fully from the vowel in the last syllable of the stem, which remains unchanged. In contrast, all of the underspecified suffixes cause the final vowel of the stem to change to [i]. The exception to this rule of constant vowels is that if a stem is underlyingly all /i/ (thus not phonologically well-formed, since underived stems may not end in a high vowel), it may remain this way with the factitive, which will take the vowel /e/: /píyí-ndé/ 'close'; /síí-ndé/ 'sharpen' (cf. expressive adverbial/sií-ni/ 'pointed'), etc.

Examples of the factitive suffix include:
(xxx) póó-ndó 'greet' (from /póó/ 'greeting')

```
yè-nd\varepsiloń 'look at' (from /yè/ 'see')
dàgá-ndá 'fix' (from /dàgá/ 'be good')
```

As these examples indicate, the factitive suffix may attach to both nouns and verbs. For denominal verbs, see section 11.7.

Notice also that in (xxx), there are no examples of a rather typical factitive use, that is, in inchoatives. Inchoative examples of the factitive are not very informative when illustrating the stem vowel copy, due to the fact that inchoatives almost always take a combination of the the mediopassive and the factitive; the mediopassive suffix causes the preceding vowel in the factitive to raise to [i], obscuring the vowel copying that had taken place. We can reasonably reconstruct /túgó-ndó/ from [túgó-ndí-yé] ‘become heavy’, even though we never see this form in use.

The other situation where the relationship between the stem-final vowel and the vowel of the factitive is obscured is when the last syllable of a disyllabic stem begins in the velar nasal $/ \mathrm{y} /$. In this case, the vowel of the second syllable (in this case, the stem-final vowel), is nearly always pronounced as a high vowel (or in rapid speech, as a schwa). For instance, we see /táyú-ndá/ 'transfer’ (cf. /táná/ ‘side’?) and /téní-ndé/ 'light (fire)’ (cf. /téý̌/ 'be lit'). When pronounced carefully, the vowel is usually [i] with front vowels and [u] otherwise. This reduction of the stem-final vowel to a high vowel only in disyllabic verbs may be related to the weak second syllable phenomenon, discussed in section XXX.

Like all derivational suffixes, the tone of the factitive is always H , though whether this is due to spread or to lexical tone is not discernible. MAKE SURE THESE ARE ACTUALLY H.

### 11.1.2 Inchoative verbs

The factitive is most commonly found added to an adjective to derive an inchoative verb with the help of the mediopassive. As mentioned in section XXX, Tommo So, like many other African languages, has very few true adjectives. As a result, it also has very few derived inchoative verbs. Below is a list of all 29 known cases:

| (xxx) ámá-ndí-yé | 'become rancid or sour' | < ámám 'sour' |
| :--- | :--- | :--- |
|  | bàná-ndí-yé | 'become red' |
| bèré-ndí-yé | 'become close, approach' | < bánu 'red' |
| bùrúnú-ndí-yé 'close' | 'become soft' | < búru 'soft' |
| dàgí-ndí-yé | 'become small' | < dàgú 'small' |
| dùmbú-ndí-yé | 'become short' | < dùmbú 'short' |
| élé-ndí-yé | 'become sweet/sharp' | < ह́ĺĺlu 'sweet' |


| Émmé-ndí-yé | 'become narrow' | < غ̀mmú 'narrow' |
| :---: | :---: | :---: |
| ésé-ndí-yé ${ }^{16}$ | 'become pretty' | < غ̀sú 'pretty' |
| gàà-ndí-yć | 'become large' | < gáá 'big' |
| gàlá-ndí-yé | 'become bitter' | < gálálu 'bitter' |
| gèmé-ndí-yé | 'become black' | < gém 'black' |
| íré-ndí-yé | 'become better' | < íré 'better' |
| káí-ndí-yé | 'become superior, improve' | < káy 'superior' |
| kálá-ndí-yé | 'become cold' | < kálálu 'cold' |
| kéú-ndí-yé | 'become equal, balanced' | < kéw 'equal' |
| màà-ndí-yé | 'become courageous' | < máá 'dry (stubborn)' |
| óró-ndí-yé | 'become smooth' | < òrǒy 'smooth' |
| pálá-ndí-yé | 'become long' | < pàlá 'long' |
| pílí-ndí-yé | 'become white' | < pílu 'white' |
| póó-ndí-yé | 'become bigger/fatter' | < poó 'fat' |
| síyé-ndí-yé | 'become good' | < síyé 'good' |
| síí-ndí-yé-mó | 'sharpen' | < sií-ni 'sharp' |
| tóó-ndí-yé | 'become deep' | $<$ tòó 'deep' |
| túgó-ndí-yé | 'become heavy' | < túgóm 'heavy' |
| úsí-ndí-yé | 'become thin' | < ùsú 'slim' |
| wàgé-ndí-yé | 'become distant' | < wàgé 'distant' |
| wèí-ndí-yé | 'become light' | < wéy 'light' |
| wèré-ndí-yé | 'become green' | < wéru 'green' |

We see some phonological changes between the adjective and the stem in the inchoative verb. First, the underlying tone of the adjectival stem is overwritten by the predictable tone of verb stems: $\{\mathrm{H}\}$ on deadjectival stems beginning with a voiceless consonant or vowel and $\{\mathrm{LH}\}$ otherwise.

Second, those adjectives with a final epenthetic [u] instead have a copy of the steminitial vowel in the second syllable. For example, /bánu/ $\rightarrow$ [bàná-ndí-yé] 'become red', $/ \varepsilon ̀ s u ́ / \rightarrow$ [ $\varepsilon ́ \varepsilon ́-n d i ́-y \varepsilon ́] ~ ' b e c o m e ~ b e a u t i f u l ' . ~ I t ~ i s ~ c l e a r ~ t h a t ~ t h e ~ u n d e r l y i n g ~ f o r m ~ i s ~ p r e s e n t ~ i n ~ t h e ~$ adjective, not in the verb, since otherwise we would incorrectly expect /pàlú/ 'long' from [pálá-ndí-yé] 'become long' rather than attested /pàlá/. This may bear on the status of vowels in related nominal and verbal stems, suggesting that the final vowel of verb stems may be a harmonic epenthetic one to modify a noun stem into a well-formed verbal stem. See section XXX for the relevant discussion of alternative analyses. It is also clear that it is only those stems with an epenthetic [u] as adjectives that undergo this vowel change, since

[^14]an adjectival stems like /wàgé/ 'far' retain these same vowels as a verb stem. The one unusual case wherein a final high vowel that appears to be epenthetic does not become a copy of the initial vowel is in /dàgí-ndí-yé/ 'become small', derived from /dàgú/ (but often pronounced [dàgí]). This could be to avoid the creation of a homophone with /dàgá-ndá/ 'fix, make good'. However, there is exactly this homophony with /gàlá-ndí-yé/ 'become bitter’ and /gàlá-ndá/ 'make (sth.) pass', so this possibility seems unlikely. The other possibility is that the [dàgí] pronunciation is derived from the diminutive /dàgì-ý, and this underlying /î$y$ ys is retained in the inchoative in the form of [i].

Of course, when the adjective's stem-initial vowel is already a high vowel, as in /ùsú/, the copy of the vowel is simply [u], as in the adjective. In this case, the verb retains the final high vowel.

The third and last phonological change is that the final reduplication seen in unsuffixed adjectives (see section XXX) is undone in the verb. That is, /kálálú/ 'cold' appears to be underlyingly /kál/, with the final VC /ál/ reduplicated, yielding /kál-ál/, but the verb uses the stem /kálá/ instead, with the final vowel of the stem a copy of the first (as discussed above). Trisyllabic verb stems are phonologically licit, so it is not clear why this VC reduplication must be undone.

The factitive suffix carries a rather causative meaning, and we would expect that without the mediopassive suffix, the inchoative verbs above would be true factitives: 'make white', 'make long', etc. However, this is not how these meanings are conveyed in Tommo So. Instead, the transitive counterpart of an inchoative is formed by adding the causative suffix /-mo/ after the factitive and mediopassive suffixes. For instance: /tóó-ndí-yé-mó/ ‘deepen (sth.), make (sth.) become deep’; /kálá-ndí-yé-mó/ ‘cool (sth.), make (sth.) be cool’.

Not all factitive verbs derived from adjectives/expressive adverbials become inchoatives. At least one remains a transitive verb:
(xxx) gèyí-ndé 'tilt (sth.)' < gěy-go 'tilted'

### 11.1.3 Factitives added to intransitive verbs

In addition to its use with adjectives, the factitive can also be added to intransitive verbs, in which case it functions as a causative. Unlike the causative suffix /-mo/, however, this construction is not productive; the factitive appears to be lexicalized in all of these verbs. In a small number of cases, an intransitive stem without the factitive has the inchoative meaning discussed above; in this case, adding the factitive is the equivalent of adding the causative to derived inchoatives. For instance:

| (xx) | £́ $\varepsilon^{n}$-ndé | 'tighten' | $<\varepsilon^{\text {c }}{ }^{\text {n }}$ | 'become tight' |
| :---: | :---: | :---: | :---: | :---: |
|  | dàgá-ndá | 'fix, make good' | < dàgá | 'become good' |
|  | ílé-ndé | 'make (fruit) ripe' | < ílé | 'become ripe' |
|  | mà ${ }^{\text {ú-ndá }}$ | 'dry (sth.) out' | < mààní-yé | 'become dry' |
|  | mìné-ndé | 'grind' | < mìné | 'be powdered' |
|  | jónú-ndó | 'make (sth.) rot' | < nóní-yó | 'become rotten' |
|  | yòró-ndó | 'slow (sb.) down' | < yòró | 'be slow' |

Another common use construction in which the factitive is added to an intransitive verb is in conjunction with verbs of movement:

| (xx) | dò̀̀-ndó | 'put (sth.) beside (sth.)' | < dò | 'arrive' |
| :---: | :---: | :---: | :---: | :---: |
|  | gàlá-ndá | 'make (sth.) pass' | < gàlá | 'pass' |
|  | gòò-ndó | 'remove, take out' | < gòó | 'go out' |
|  | jì̀í-ndé | 'move (sth.) close to (sth.)' | < jì̀ ¢ | 'approach' |
|  | súgó-ndó | 'take (sth.) down' | < súgó | 'come down' |
|  | úló-ndó | 'raise (sth.)' | < úló | 'go up' |
|  | úygúló-ndó | 'make (sb.) get up' | < úygúló | 'get up' |

Notice that monosyllabic verbs with a rising tone simplify to all $\{\mathrm{L}\}$ before the factitive so as not to violate the constraint against word-medial contour tones.

The rest of the verbs to which the factitive is added do not form a natural class. Nonetheless, as with the other verbs listed above, adding the factitive increases the valency of the verb by one:

| (xx) | bà úf $^{-n d a ́ ~}$ <br> dàà-ndá | 'hide' | $\begin{aligned} & \text { < bààní-yé } \\ & \text { < dáà } \end{aligned}$ | 'be hidden' <br> 'be seated |
| :---: | :---: | :---: | :---: | :---: |
| (stative) ${ }^{\prime}$ |  |  |  |  |
|  | dè̀-ndé | 'introduce, teach' | $<$ dèé | 'know, recognize' |
|  | dùmó-ndó | 'finish (sth.)' | < dùmó | 'be done' |
|  | íní-ndé | 'cause to stand, hold up' | < íjè | 'be standing |
| (stative)' |  |  |  |  |
|  | jímé-ndé | 'hurt, injure (sb.)' | < jímé | 'hurt, be sick' |
|  | jò̀̀-ndó | 'fill' | < jôó | 'be full' |
|  | kíbé-ndé | 'bring (exactly the right amount of something), | < kíbé | 'be complete' |
|  | nàlá-ndá | '(midwife) help (sb.) give birth' | < nàlá | 'give birth' |
|  | (gúló) tóó-ı | 'nauseate (sb.)' | < tóó | 'spit' |


| níŋí-ndé | 'scare' | $<$ níyí-yé | 'be afraid' |
| :--- | :--- | :--- | :--- |
| píí-ndé | 'shut (door)' | $<$ *píyí | 'be shut' |
| táyú-ndá | 'transfer, contaminate' | $<$ táyá | 'become |
|  |  |  | contaminated' |
| wàyá-ndá | 'bring to a boil' | $<$ wààyí-yé | 'be boiling' |
| yè-ndé | 'watch' | $<$ yè | 'see' |

All of the derived verbs in the three preceding lists had clear verbal counterparts without the factitive. I know of ten verbs that either have a tenuous relationship with another verb or no known relationship whatsoever. These are:


## CHECK THAT THESE DON'T HAVE COUNTERPARTS

Many of these are either bound stems with the factitive or are "pseudo-factitives": verbs ending in /ndV/ by coincidence that are not morphologically complex at all.

For denominal verbs derived with the factitive suffix, see $\S 9.7$.

### 11.2 Reversive /-1E/

The reversive suffix (like English un-) is common in complementary pairs such as 'shut/open' or 'roll up/unroll', wherein one member of the pair undoes the action of the other. Often which member of the pair is reversive seems unusal to an English speaker. For instance, rather than have a pair 'disappear/reappear', the Tommo equivalent of 'reappear' is the reversive, /bààníl-í-yź/ 'become unhidden' (cf. /bààyí-yź/ 'be hidden'). In the absence of an additional mediopassive suffix, reversive verbs are usually transitive, but not always. In some cases, the transitive/intransitive pair is homophonous, and the valency is clarified
by context (see section XXX on ambi-valent verbs). An example of this is /dèbí-lé/, which can mean either '(vehicle) get unstuck after getting bogged down' or 'unstick a vehicle after it gets bogged down'. In other cases, the reversive suffix alone marks the intransitive and the causative is added to make it transitive. For instance, /nàí-ľ́/ 'remember' (literally 'unforget') vs. /nàí-lé-mó/ 'remind’ (literally 'make unforget'). I will address such combinations of suffixes in section XXX.

### 11.2.1 Phonological form

The reversive suffix has a base form of /-lE/, wherein E stands for any mid vowel of the set $\{\mathrm{e}, \varepsilon, \mathrm{o}, \rho\}$, harmonic with the stem. Patterns of vowel harmony (discussed in section XXX) indicate that the vowel is underlyingly front but underspecified for ATR.

Occasionally, the suffix vowel may be [a] as well in complete harmony with the stem, though in these cases the suffix plus stem combination is probably lexicalized since this full harmony is not productive. As I discussed in section XXX, the suffix always harmonizes with the ATR value of the stem, and also usually with the backness of the stem vowel, though there is some variation in this regard. For instance:

```
(xxx) púlí-yé ~ púlí-yó 'unbraid'
dèbí-lé ~ dèbílló '(vehicle) get unstuck after getting bogged down'
```

The reversive suffix can be added to stems of either one or two syllables. I have no examples of it added to a trisyllabic root, but such roots are quite rare and may not lend themselves easily to a reversive meaning (for examples of trisyllabic roots, see section XXX). Rarely, the stem final vowel syncopates, and even more rarely the onset of the preceding syllable and the /l/ of the reversive metathesize. In terms of tone, the reversive is always high, but it is unclear whether it underlyingly carries this tone or whether the tone of the stem spreads onto it. The same is true for all of the derivational suffixes.

### 11.2.1.1 Treatment of the stem-final vowel

With the addition of the reversive suffix, the final vowel of the stem raises to [i] (pre-suffixal vowel raising, section XXX). For instance:
a. dèní-lદ́
'scoop out (dirt that has accumulated in a hole' (from /dè̀źl/ 'fill up a hole')
b. kúyí-lé

## 'remove animal hide from a drum’ (from /kúyó/ 'cover a drum in hide')

However, this is not always the case. There are a small number of stems whose final vowels do not raise. In these cases, it seems that the final vowel of the stem spreads into the suffix instead, reminiscent of the factitive:

| (xx) | a. dìy ${ }^{\mathrm{n}} \varepsilon$-1自 | 'unprop' | (from /dìy ${ }^{\text {n }}$ / 'prop') |
| :---: | :---: | :---: | :---: |
|  | b. màná-lá | 'unseal' | (from /màná/ 'seal up (eg., mouth of jar)') |
|  | c. té ${ }^{\text {n }}$-lé | 'unhobble' | (from /téén'/ 'hobble (a donkey)') |

It is possible that these are older, lexicalized verbs, which would explain the deviant behavior of their stem vowel; it seems that older generations preferred full harmony for suffixes. Curiously, I am told that younger generations are innovating more with this class of /-CE/ suffixes (the reversive, transitive and mediopassive), and it may be that this productivity is linked with the less complete harmony. See section XXX for discussion of this relationship.

When the onset of the preceding syllable (the final syllable of the stem) is also a liquid, syncope may occur between it and the reversive suffix (xxa). If the final consonant in the stem is an $/ \mathrm{r} /$, it will assimilate to the following $/ \mathrm{l} /(\mathrm{xxb}-\mathrm{c}$ ). This is also occasionally the case if the stem consonant was a/y/ (xxd-f). This, however, is the exception rather than the rule, as example (xxb kuyi-le) above shows.

| (xx) | a. | mùl-ló | 'unplug' |
| :--- | :--- | :--- | :--- | (from /mùló/ 'plug, stop up')

This syncope is most likely due to the weak second syllable discussed in section XXX.

### 11.2.1.2 Monosyllabic stems

Monosyllabic stems that take a reversive suffix are rare. I know of only three cases, two of which I have previously presented. All cases I have evidence for are listed in (xx), with their non-reversive counterparts if applicable:
$\begin{array}{lll}\text { c. sáín-lદ́ } & \text { 'untwist, unravel' } & --- \\ \text { c. téén }-1 \varepsilon ́ & \text { 'unhobble' } & \text { cf. téén 'hobble (a donkey)' }\end{array}$

As noted before, (xxc) is irregular in not changing the second half of the long vowel to [i]. Though I have no non-reversive counterpart, the example in (xxb) clearly seems reversive morphologically. The Beni language has a related word /sání/ for 'unravel', so it is possible that in Tommo So they added a reversive suffix to an already semantically reversive stem. I will discuss questionable reversive cases in section XXX.

### 11.2.1.3 Disyllabic stems

By far the most common stem length, not only with the reversive suffix but in the language in general, is disyllabic. ( xx ) is a complete list of such forms in which the reversive is playing a clear role. Where the reversive is derived from a noun, I have written (n.) after the stem in the comparative list.


|  | (from drum) ${ }^{\text {, }}$ |  |  |
| :---: | :---: | :---: | :---: |
| kúyíl-lé | 'unroll (pant leg)' | cf. kúyí-yé | 'be rolled/inside-out' |
| màná-lá | 'unseal (jar)' | cf. màná | 'seal up (jar)' |
| màndí-lí-yé | 'be recovered' | cf. màndá | 'be lost' |
| mènní-lé | 'unfold' | cf. mènné | 'fold' |
| mùl-ló | 'unplug (hole)' | cf. mùló | 'plug (hole)' |
| mùnní-ló | 'unroll (mat)' | cf. mùnní-yé | 'roll up (mat)' |
| négí-lé | 'remove (inserted object) | 'cf. négí-ré | 'insert (sthg into space between two objects)' |
| nól-ló | 'unlock (door)' | cf. nóró | 'lock (door)' |
| nómmí-lí-yé | '(mattress) spring back' | cf. nómmó | '(mattress) sag under weight' |
| númí-ló | 'undress' | cf. númí-yó | 'dress oneself' |
| pándí-lé | 'marry (a widow)' | cf. pàndé (n.) | 'widowhood' |
| pégí-lé | 'unbutton/unscrew' | cf. pégé | 'button up/screw in' |
| pónní-ló | 'ungird oneself' | cf. pónní-yó | 'gird oneself' |
| ságí-lí-yé | 'come unstuck (from a tree)' | cf. ságá | 'put (sthg) on (sthg)' |
| témmí-lé | 'unfold, open (aloe leaf)' | cf. témmé | 'shut (mouth)' |
| tímmí-lé | 'take lid off' | cf. tímmé | 'put lid on' |
| tóbí-ló | 'unroll turban' | cf. tóbí-yó | 'put on turban' |
| tómí-ló | 'unwind' | cf. tómó | 'wind/coil up' |
| tónjí-ló | 'unbend (wire)' | cf. tóņó | 'bend (wire)' |
| túdí-ló | 'retract one's curse' | --- |  |
| yàmbí-lé | 'uncover' | cf. yàmbá | 'cover' |
| yóŋí-ló | 'unhook' | --- |  |

### 11.2.2 Opaque reversives

There are a handful of stems that seem to include the reversive suffix without a reversive meaning. At times, with a stretch of the imagination, one could find a reversivelike meaning there within, but for others, the suffix simply seems to add a negative meaning, or no discernible meaning at all.

Take, for example, /áyí-lé/ 'separate, restrain (two fighters)'. This appears to be a denominal verb with the reversive suffix on /áyá/ 'mouth', which is used in many idiomatic phrases describing fighting or arguing. For instance:
( xx ) áyá dàlánjí-yé 'have a dispute' (Lit. 'mouths miss one another')

| áná tómbó | " | (Lit. 'mouths jump') |
| :--- | :--- | :--- |
| áná dènné | 'provoke (sb)' | (Lit. 'look for mouth') |

There is no non-reversive equivalent of /áyí-ľ́/. (For more on denominal verbs, see section 11.6.) However, one could imagine that since it was the leaping or missing of mouths that began the fight in the first place, the undoing of such a fight would be an undoing of the mouth.

Other cases have no identifiable reversive meaning. In some, the reversive suffix seems to be historically derived from the transitive suffix. This is perhaps unsurprising given that in some languages such as Jamsay, the two are homophonous (the language does not distinguish $/ \mathrm{r} /$ and $/ 1 /$ ). When the suffix /-lV/ acts transitively, it often lends a causative meaning to the verb. Take, for instance:
a. màndá 'be lost'
b. màndí-lé 'make sthg be lost'

We would expect (xxb) to mean 'be recovered', but instead the suffix seems to make a causative of the simple stem. However, there is a form /màndí-lí-yź/ with the mediopassive suffix as well, which does mean 'be recovered'; in other words, the /-lí/ in this case is reversive. Here we seem to have a lexical accident in which the transitive and reversive suffixes are homophonous in a few lexicalized cases, even though they aren't in the language as a whole. Other examples of transitive-like reversives include:

| (xx) | bòndó <br> yàmá <br> gàná | 'hole (n.)' <br> 'be ruined' '(cripple) drag self along' | bòndí-ló <br> yàmí-lદ́ <br> gànálá/gàní-lé | 'make a hole' <br> 'ruin' <br> 'wipe brow with |
| :---: | :---: | :---: | :---: | :---: |
| forearm'? |  |  |  |  |
|  | gàmbí-yé | 'be lowered' | gàmbílć | 'distribute (to everyone in a group)' |
|  | kábá | '(large group) break up into separate groups' | kábílé | 'separate, divide' |

In many cases, there are pairs of suffixed/unsuffixed verbs where both members of the pair are transitive, but the suffixed version has a more negative meaning than the unsuffixed. These often have a nuance of taking something apart or otherwise undermining the integrity of the object. Examples include:
jùmí-ló 'hold or place (e.g. chicken, squirrel) over fire (to burn off feathers or hairs)'
b. kádá '(sb) collect (honey) from a beehive'
kádíllé 'take off (the layer of food that has hardened)'
c. kúdó 'pierce hole (in wood)'
kúdí-lé 'knick or scratch with pointed object'

Other pairs have no discernible relationship, as in /péndé/ 'be dislocated’ and /péndílé/ 'squeeze out a little bit of milk'.

In one case, there is no unsuffixed counterpart, but another language, Beni, shows evidence of such a form:
(xx) gùmmí-ló 'cut (watermelon) in two' cf. Beni/gùmbó/

Whether this was originally derived as a transitive or as a reversive is not clear.

### 11.3 Transitive /-rE/ and Mediopassive /-yE/

Though the degrees of harmony and the prevalence of the transitive and mediopassive are not identical, I will discuss them here together since they often form pairs of verbs. The mediopassive is much more common than the transitive in the lexicon, and its levels of backness harmony are far lower than the transitive's as well (XXX vs. XXX). Though these suffixes are not productive for most speakers, I am told that like the reversive, younger speakers are beginning to generalize them to new forms.

The transitive suffix denotes that the subject is doing the action denoted by the verb to another actor, while the mediopassive gives the meaning of doing something to oneself (o.s.). For instance: /pónní-ró/ 'put pants (on ex., child)' vs. /pónní-yó/ 'put pants (on o.s.)'. Verb stems bearing these suffixes can come in pairs like this (one with the mediopassive, the other with the transitive) or only one may be suffixed (ex. the transitive is unmarked and the mediopassive is suffixed or vice versa).

It would seem that logically, a stem could not simultaneously take both the transitive and the mediopassive, and that is almost exceptionless. Nonetheless, one stem does appear to carry both: /sóí-rí-yé/ 'sweat', with its cognate nominal /sòó/ 'sweat'. It appears that this
was first derived with the transitive /sóí-ró/ then the mediopassive was added to this. ${ }^{17}$ Another potential case is /gògí-ró/ 'hang (concave object like calabash) on a rock' and /gògí-rí-yé/ 'be hung’. However, there is no evidence for a stem /gògó/, so this case might be better interpreted as /gògóró/ $\rightarrow$ /gògórí-yé/ with the vowel in the weak second syllable position reducing to a schwa or high central vowel.

### 11.3.1 Phonological form

The phonology of the transitive and mediopassive suffixes is nearly identical to that of the reversive. The stem-final vowel becomes [i] before the suffixes. Both harmonize for ATR and optionally for backness with the stem; /a/ stems almost always take the [-ATR] vowels in harmony, but (xxe) presents one exception.
(xx) a. séí-yé 'adorn o.s.'
b. nク́ní-yó 'be rotten'
c. wèdé-gí-ré 'drive (sb.) crazy'
d. ómbí-yó '(millet spike) lose grain'
e. námí-yé 'need something'
f. bààyí-yé 'be hidden'

Again, backness harmony is not constant, particularly with the mediopassive suffix, so we see variation between front and back vowels after back vowel stems. For example, [ómbíyó] varies with [ómbí-yé], but we never see a back vowel after a front stem (*[wèdé-gí-ró]), indicating that the underlying form of the suffixes is probably front.

As with the reversives, there is opacity in the ATR harmony, in that $i E$ or $u O$ stems raise the mid vowel to /i/ before the suffixes; thus on the surface, only the suffix carries an ATR-specified mid vowel. Sometimes the stem-final vowel is attested in other items in the lexicon (xxa), but equally often it is only reconstructable based on the ATR value of the suffix (xxb).
(xx)
a. númí-yó
'dress o.s.'
(cf. /nùmó/ 'arm') dìlí-ý̌ 'evolve, change' (cf. /dìĺ̌/ 'change, transform (sth.)') wìdí-yé 'turn around (intr.)' (cf. /wìdé/ 'turn (sth.) around')
b. buì-yó 'puff up one's cheeks'
bùnjí́-yó 'overflow'
ǹdí-ré 'bathe' (with object /díi/ 'water')

[^15]Some mediopassive/transitive pairs have irregular phonological correspondences. These include:

| (xx) | a. kólí-yé <br> b. dùy-yó | 'pour water (on o.s.)' <br> 'load (on one's head)' | kóí-ré 'pour water (on sb.)' <br> dùú-ró 'load (on cart, another's head, |
| :--- | :--- | :--- | :--- | :--- |
| etc.)' |  |  |  |
|  | c. gàwí-yé | 'watch over' | gàú-ró 'entrust to sb.' |

The alternation in (xxa) is probably due to the language's dispreference for a sequence of two liquids. The examples in (xxb-c) are similar. In (xxb) the /i/ is deleted between the two $/ \mathrm{y} /$ in the mediopassive, and in both examples, a semivowel followed by $/ \mathrm{i} /$ after another vowel is simply realized as [u]: /dùyí-ró/ $\rightarrow$ [dùù-ró], /gàwí-ró/ $\rightarrow$ [gàú-ró]. Note that the only stems that have semivowels in them are $u O$ stems with $/ \mathrm{y} /$, and $/ \varepsilon /$ and $/ \mathrm{a} /$ stems with $/ \mathrm{w} /$, and even these are rare.

### 11.3.2 Transitive/mediopassive pairs

There are a large number of stems that form transitive/mediopassive pairs through the use of each suffix. Below is a representative list of such pairs:

| (xx) | Mediopassive |  | Transitive |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ánjí-yé | 'be ashamed' | ánjír-r | 'shame (sb.)' |
|  | dìgí-yé | 'be connected' | dìgí-ré | 'connect (things)' |
|  | ǹdí-yé | 'bathe (oneself)' | ǹdí-r ¢́ | 'bathe (sb.)' |
|  | négí-yé | 'slide (o.s.) in' | négíl-r | 'slide (sth.) in' |
|  | séí-yé | 'adorn (o.s.)' | séí-ré | 'adorn (sb.)' |
|  | sínní-yé | 'tie child to one's back' | sínfí-ré | 'tie child to (sb.'s) back' |
|  | tágí-yé | 'put on shoes' | tágí-ré | 'put shoes (ex., on child)' |
|  | kónní-yé | 'be sharply bent' | kónní-ré | 'bend sharply' |
|  | náwí-yé | 'be put in' | náú-ró | 'put (sth.) in' |
|  | túní-yó | 'kneel' | túní-ró | 'make (sb.) kneel' |
|  | ógí-yó | 'be heated' | ógíró | 'heat (sth.)' |

As can be seen, some stems with the mediopassive are more simply intransitive than mediopassive in a strict sense, such as /kónní-yé/ 'be sharply bent'.

Examples like those pairs show the transitive suffix acting like a causative on an otherwise intransitive verb. Other such examples include /dìmbí-yé/ 'follow' vs. /dìmbí-ré/ 'make (sb.) follow' and /póí-y $\varepsilon$ / '(grain) ferment' vs. /póí-ré/ 'make (grain) ferment'.

While there are many mediopassive/transitive pairs of verbs in the language, they are by no means the majority of forms containing either the mediopassive or the transitive. Below, I discuss verbs that do not form a neat pair, instead having a non-derived counterpart or no counterpart at all.

### 11.3.3 Mediopassive with bare stem transitive

In some cases, there is a stem with a mediopassive suffix, but rather than having a derived transitive counterpart, the bare stem without either the mediopassive or transitive plays this role. The following is a list of all known cases of this kind:

| (xx) | bàrí-yé | 'get bigger' | bàrá | 'expand (one's herd) ${ }^{18}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | kání-yé | 'happen' | káná | 'do' |
|  | kíbí-yé | '(field) be cleared' | kíbé | 'clear (field) ${ }^{19}$ |
|  | kígílí-yé | 'go back' | kígílé | 'make (sb.) go back' |
|  | (kíndé) kédí | ¢́ 'be frustrated' (kíndé | kédé | 'frustrate (sb.) ${ }^{20}$ |
|  | kóbílílíyó | '(bark) be removed' | kóbíló | 'take off bark' |
|  | kóí-yé | '(pocket) be turned out' | kóe | 'turn out (pocket)' |
|  | kómmí-lí-yó | '(knot) come untied' | kómmí-ló | 'untie (knot)' |
|  | mènní-lí-yé | '(sth.) uncurl' | mènní-lé | 'uncurl (sth.)' |
|  | mùgúlí-yé | 'become muddy' | mùgúló | '(cart) muddy (water)' |
|  | mùnní-yé | 'be bundled up' | mùnnó | 'bundle up' |
|  | mùrí-yó | 'be submerged' | mùró | 'submerge (sth.)' |
|  | nàlí-yé | 'be born' | nàlá | 'give birth to' |
|  | nígídí-yé | 'be mixed' | nígídé | 'mix' |
|  | pééndí-yé | 'spread (selves) out' | pééndé | 'spread out (objects)' |
|  | párí-y ${ }^{\text {c }}$ | 'put perfume on (o.s.)' | párá | 'put perfome on (sb.)' |
|  | pélćlí-yé | 'become straight' | pélćlé | 'straighten (sth.)' |
|  | péndí-yé | 'become crowded' | péndé | 'make tight, narrow' |
|  | pílí-yé | '(door) open' | píllé | 'open (door)' |

[^16]| pógí-yó | 'dodge (sth.)' | pógó | 'knock to the side' |
| :---: | :---: | :---: | :---: |
| р ́í-yé $^{\text {¢ }}$ | '(fruit) ripen' | pó ${ }^{\text {c }}$ | 'make (fruit) ripen' |
| púgúdí-yó | '(sth.) crumble' | púgúdó | 'crumble (sth.)' |
| púlí-yó | '(braids) come undone' | púló | 'undo (braids)' |
| gàgí-yé | 'scrub (o.s.)' | gàgá | 'scrub with a stone' |
| sáain-lí-yé | '(rope) unravel' | sáî́lilć | 'unravel (rope)' |
| sámbí-yé | 'rinse (o.s.)' | sámbá | 'rinse (sb., sth.)' |
| tárí-yé | 'be stuck on' | tárá | 'stick (sth.) on' |
| tígídí-yé | 'get wrinkled' | tígídé | 'wrinkle (sth.)' |
| tímbí-yé | 'be stacked, doubled' | tímbé | 'double up, stack (sth.)' |
| tíndí-yé | '(tree) block road' | tíndé | 'lay (sth.) across (road)' |
| tómí-yó | 'be coiled up' | tómó | 'coil (sth.) up' |
| tónní-yó | '(rope) be jumbled up' | tónnó | 'crumple up (rope)' |
| wànání-yé | '(sth.) stretch out' | wànáná | 'stretch out (sth.)' |
| yàmbí-yé | 'cover (o.s.)' | yàmbá | 'cover (sth.)' |
| yègírí-yé | 'get (o.s.) ready to go' | yègíré | 'get (sb.) ready to go' |
| yí-yé | 'be seen' | yغ̀ | 'see' |
| yùbí-yó | 'be spilled' | yùbó | 'spill' |
| yùmí-yó | '(sth.) shake' | yùmó | 'shake (sth.)' |

Some mediopassives seem to be semantically related to a bare stem, but not in the typical mediopassive/transitive relationship:


The first three of these are more transparently related, while the latter four are too closely related to be coincidence but not closely related enough to suggest synchronic connections.

### 11.3.4 Transitive with bare stem mediopassive

As we saw above, there are a large number of mediopassive verbs with a counterpart bearing neither the mediopassive nor the transitive. Conversely, this situation with the transitive is extremely rare. I know of only one clear case where the semantically mediopassive counterpart of a transitive is a bare stem:
(xx) témbí-ré 'make (sb.) find (sth.)' témbé 'find (o.s.) in a situation'

Even here, the semantics are not exactly that of a mediopassive/transitive pair. Another possible case is /yóí-ró/ 'do spot sowing during the first weeding' (see the following section), which could be a transitivized version of /yóó/ 'enter'.

Why is the transitive so much rarer than the mediopassive? I argue that two factors are at play. First, more stems are already transitive, and the addition of the mediopassive serves to form an intransitive verb; there is not much need to add a transitive suffix to an already transitive verb. Second, since the transitive often derives a causative-like meaning, this role is divided between three suffixes: the transitive, the factitive, and the entirely productive causative.

### 11.3.5 Mediopassive with no transitive counterpart

Many mediopassives have no partner, derived or otherwise. Their phonological form strongly suggests the presence of a mediopassive suffx, but there is no evidence for the stem without the $/-\mathrm{yE} /$; that is, they are bound stems. Below are all such cases, excluding those with the factitive suffix and denominal verbs, which will be discussed in section 11.7.

## Check for counterpart of these stems

(xx) áání-yé 'cross (one's arms)'
ámmú-gí-yé 'hold against one's chest'
bàmbí-yé 'press close to (sth) ${ }^{21}$
dàlánjí-yé 'mix it up, argue' (with object /áná/ 'mouth')
ánnálí-yé 'walk with legs wide apart'
áúríl-yé 'come to an agreement' (with object /àùrú/
'agreement')
bààgí-yź-mó 'cook (bony meat) rapidly with few condiments’
bààní-yé 'hide'
kééní-yé 'listen'
kóĺlí-yó 'scrape off’

[^17]| kúlí-yó | 'mix together' |
| :---: | :---: |
| kúmmúlí-yé | 'mutter, whisper' |
| mò̀̀mbí-yó | 'meet, assemble' |
| mùy-yó | '(shoulder) be dislocated' |
| námbí-gí-yé | 'hold stick on one shoulder' |
| núllí-yé | '(shoulder) get dislocated' |
| őní-yé | 'get tired' |
| páání-yé | 'choke (on food)' |
| píirí-yé | 'become swollen' |
| pîín-y ${ }^{\text {c }}$ | 'get old' |
| pínjí̇-yé | '(water) gush out' |
| pírígí-yé | '(wounded animal) flop around' |
| póóbí-yó | 'whistle' |
| púní-yé | 'tease (sb.) by keeping something away from him/her' |
| púúbí-yó | 'blow on (fire)' |
| sáálí-yé | 'be thoroughly soaked' |
| sáání-yé | 'make a mistake' |
| ságílílíyé | '(sth) become unstuck (after being stuck in a tree)' |
| sóólí-yé | 'grow up' |
| táábí-yć | 'push down on' |
| tándí-gí-yé | 'balance (sth.) on the flat of one's hand like a waiter' |
| teérí-yé | 'guide (sb.)' |
| tídí-yé | 'hold (o.s.) up with a hand on a wall' |
| tímí-yé | 'dodge (by ducking)' |
| tólí-yó | '(knife) be sharpened' |
| tónní-yó | 'curl up in fetal position' |
| túmbúgí-yé | 'lean on (cane)' |
| túmmúlí-yé | 'stalk (prey)' |
| úbí-yé | 'sit on (eggs)' |
| wààní-yé | '(water) boil' |
| wàyí-yć | 'dodge (sth.)' |
| wè̀̀rí-yé | 'become accustomed to' |
| wòrí-yó | 'move away from' |
| yààní-yé | 'go beyond' |
| yàlí-yé | 'go for a stroll' |
| yàrí-yé | 'take a loan' |
| yoóní-yé | 'get caught in tree' |

Many of these mediopassive verbs are combined with the causative suffix to create a roughly transitive version of verb. For instance, /óní-yé-mó/ 'tire (sb.) out', /píin̄-yé-mó/ 'age (sb.)', or /wààyí-yé-mó/ 'boil (water)'.

### 11.3.6 Transitive with no mediopassive counterpart

Once again, there are far fewer transitives lacking a counterpart than mediopassives, due to the same reasons listed in section 11.3.4. The other difficulty with the transitive is morphological segmentation. $/ \mathrm{yV} /$ is a very uncommon ending in stems, so when it appears, especially in polysyllabic stems, its mediopassive role is evident. Not so for polysyllabic stems ending in $/ \mathrm{rV} /$. Especially when the stem has mid vowels already, it is very difficult to tell whether the stem should be interpreted as monomorphemic or whether it has a transitive suffix. For instance, upon first listening, 'get ready' sounds like /yégí-ré/, but judging by the fact that the mediopassive can be added to the end, the correct parsing appears to be rather /yégéré/ with weak second syllable vowel reduction. A similar case was discussed at the beginning of section 11.3.

The following verbs seem to have a transitive with no unsuffixed or mediopassive counterpart:

```
bàú-ró 'request' (with cognate nominal /bóórú/)
bì̀-ré 'cover up (corpse with dirt)'
dògí-ró 'hold (container) mouth-up'22
p\varepsilońgí-ré 'cut wood against the grain'
káygí-ré '(hen) cluck while laying egg' (with object /tálú/ 'egg`)
wì̀-ré 'set out (clothes) to dry in the sun'
yàmbí-ré 'authorize'
yóí-ró 'do spot sowing during the first weeding''23
```

Even these could prove to be monomorphemic with comparative evidence from related languages, which may not have as much second syllable reduction as Tommo So.

### 11.3.7 Inchoatives derived with the mediopassive

Section 11.1 described inchoative verbs derived with the factitive suffix. Some inchoative verbs, however, are derived from the adjective with nothing but the mediopassive

[^18]suffix. In all such cases, with the exception of the final verb in the list, the adjective involved is not a "core" adjective; that is, they are all unsuffixed adjectives that do not suggest historical reduplication (no /élélú/-type adjectives). I am aware of the following verbs:

| (xx) | púrúgí-yé <br> pómbórí-yé | 'become dusty' <br> '(watermelon) become elongated' | < púrúgu 'dusty' <br> < pómbóró 'large and large and |
| :---: | :---: | :---: | :---: |
| elongated' |  |  |  |
|  | yàgárí-yé | 'become rough, itchy' | < yágáru 'rough, itchy' |
|  | yègélí-yé | 'become cold' | < yégélu 'cold' |
|  | mààí1-yé | 'be dry' | < máá 'dry' |

It is interesting to note that /máá/ 'dry' becomes a verb in two different ways, depending on the meaning of the adjective. In its metaphorical meaning of 'stubborn' or 'courageous', it takes the usual factitive-type derivation, but with its core meaning of 'dry', it takes the mediopassive suffix with the insertion of $/ \mathrm{y} /$ at the end. Being the only example of its kind, it is not possible to determine how or why these deadjectival verbs developed this way.

### 11.4 Causative /-mo/

The most productive derivational suffix is the causative suffix /-mo/. Unlike the previous three suffixes, the causative does not harmonize and does not cause the final vowel of the verb to raise to [i]. Both of these facts, taken together with the fact that the causative is always the last suffix in a sequence of derivational suffixes, suggest that the causative is the least tightly connected with the stem. The tone of this suffix is also H , but like the other suffixes, it is not possible to say whether the tone is there underlyingly or whether it spreads from the stem.

The causative can be added to any length of stem, after any other derivational suffixes have been added. The vowel almost always remains $/ \rho /$; there is no backness or ATR harmony. The one recorded case where it seems to optionally harmonize for ATR is in the form [kómmó-mó] ~ [kómmó-mó] 'make skinny’, but this could be due to assimilation to the preceding $/ \mathrm{mo} /$. Also, in the imperfective followed by $/-\mathrm{d} \grave{\varepsilon} /$, the causative can sound more like [-mع], as in [kánà-mè-dè] 'he makes [someone] do'. These, I argue, are all phonetic effects, as opposed to the phonological harmony discussed above.

The causative is the only derivational suffix that can be applied recursively. For instance, to 'make [someone] make [someone] run', Tommo So allows /jòbó-mó-mó/ with two causative suffixes.

The following examples show the causative added to both derived and underived stems of various lengths. A few lexicalized meanings are included that are semantically decomposable but take on a specialized meaning. These are marked with *:
(xx) a. Monosyllabic

| *nóó-mó | 'give a drink to someone' | $>$ nóó 'drink' |
| :--- | :--- | :--- |
| *yóó-mó | 'let (field) lie fallow' | $>$ yóó 'enter' |
| dàá-mó | 'make kill' | $>$ dàá 'kill' |

b. Disyllabic

| ódó-mó | 'erode (tr.)' | > ódó 'erode (intr.)' |
| :--- | :--- | :--- |
| *jàngá-mó | 'teach' | $>$ jàngá 'study' |
| sémé-mó | 'make slaughter' | > sémé 'slaughter' |

c. Underived trisyllabic

| gòróló-mó | 'make snore' | $>$ gòróló 'snore' |
| :--- | :--- | :--- |
| ádúbá-mó | 'make think' | $>$ ádúbá 'think' |

d. Derived trisyllabic
wààní-yé-mó ‘bring to a boil’ > wààní-yé ‘boil'
bàrí-yદ́-mó 'make (animal) put on weight' >bàrí-yé 'put on weight' *nàí-lé-mó 'remind' $\quad>$ nàí-lé 'remember'
e. Derived quadrisyllabic +
síí-ndí-yé-mó 'sharpen’ >síí-ndí-yé ‘become sharp’
túgó-ndí-yé-mó 'make heavy’ > túgó-ndí-yé 'become heavy’
ámá-ndí-yé-mó 'make sour' >ámá-ndí-yé 'become sour'

The causative suffix also has an irregular and unproductive use as a passive marker. This is true of only two verbs that I am aware of:

$$
\begin{array}{ll}
\text { yè-mé ~ yè-mó } & \text { 'be seen' (not 'make see') }>\text { y } \text { 'see' }  \tag{xx}\\
\text { t } \text { 'mbé-mó } & \text { 'be found' (not 'make find') }>\text { t } \text { mb } \text { 'find' }
\end{array}
$$

Notice that in this case, the causative does sometimes harmonize for backness, suggesting that these are treated as one stem and not morphologically complex.

## Can these have the causative meaning?

### 11.6 Ambivalent verbs

Most verbs in Tommo So are either transitive or intransitive; the semantically equivalent verb with a different valency can be derived with one of the suffixes described above. However, some verbs may be ambivalent-that is, the same form of the verb can be used both transitively and intransitively. Though uncommon, a handful of verbs fall into this category.

The first are of the antipassive type, where the object in transitive constructions becomes the subject in the intransitive. An English example would be I read the book vs. This book reads well. Some examples of Tommo So verbs include:

## (xx) jògर́ 'break' or 'be broken' kúndó 'put' or 'be put'...

The following shows /jògó/ used both transitively and intransitively:

## (xx) EXAMPLES OF BOTH

The other ambivalent verbs fall into the unergative type, where there is an understood omitted object. In English, this would be like He hit a homerun vs. He's hitting second today. Examples of this sort include:

| (xx) yéy-yé | 'sleep' | gìrè-ý yéy-yé |
| :--- | :--- | :--- |
| ńyé | 'eat' | sleep a sleep' |
|  | jáa ńyé | 'eat a meal' |

### 11.7 Denominal verbs

The preceding sections all discussed how verbs are derived from other verbs, transitives from intransitives, causatives from non-causatives, etc., with the exception of sections 11.1 and 11.3.7, which discussed the derivation of inchoative and factitive verbs
from adjectives (deadjectival verbs). This section deals with denominal verbs, those verbs that are derived from nouns using one or more of the derivational suffixes introduced above. All suffixes except the causative can be used to derive a denominal verb.

In some cases, it is difficult to say whether a verb is derived from a noun or if the noun is derived from the verb. Where the deverbal noun is simply a nominalization of the action, as in $n$. /wòlú/ 'farming' from $v$. /wàlá/ 'farm', it is clear that the verb came first. But in a case like /pónnu/ 'pants' and /pónní-yó/ 'put pants on (o.s.)', the answer is not so clear-cut. The final epenthetic [u] of /pónnu/ is reminiscent of derived nouns (see section XXX), but the everyday object status of 'pants' suggests that the verb is derived from the noun to denote the action of putting on such a garment.

The following list, grouped by suffix, contains verbs whose corresponding nominal seems to be the base form (thus the verbs are denominal rather than the nouns deverbal):
a. Mediopassive

| kúmbí-yó | 'clench hand into a fist' | < nùmò kúmbó 'fist' |
| :--- | :--- | :--- |
| púní-yó | 'menstruate' | < púnó 'menstruation' |
| sémmélí-yé | 'become ragged' | < sémmélé 'rags' |
| sídí-yé | 'be lined' | < sídu 'line' |
| síyí-gí-yé | 'become fatty' | < síyé 'fat' |
| sílí-yé | 'have an affair' | < sílé 'affair' |
| úmmúgí-yó | 'take a sip' | < ùmmùgó 'mouthful' |
| yùgúdí-yé | 'become wooly' | < yúgúdu 'velvet' |
| *némé-gí-yé | 'become dirty' | < némé 'trash' |

b. Transitive

| tígí-ré | 'call out the names of the <br> ancestors’ | < tígé 'surname' |
| :--- | :--- | :--- |
| *némé-gí-ré | 'make dirty’ | < némé 'trash' |

c. Factitive

| jàà-ndá | 'cook' | < jáá 'meal' |
| :--- | :--- | :--- |
| póó-ndó | 'greet' | < póó 'greeting' |
| yáá-ndá | 'greet in the morning' | < yáá 'morning greeting' |

Only /sídu/ 'line' from /sídí-yé/ seems questionable as to the direction of derivation.
By far most denominal verbs are derived using the mediopassive suffix. The only case of an unpaired transitive derivation of which I am aware is /tígí-ŕ́l 'call out the names of the ancestors' from /tígél 'surname'.

The two forms marked with * above require the characteristic suffix /-gú/ in addition to the verbal derivational suffix to derive a verb.

## Chapter 12 Verbal inflection

This chapter covers in-depth the inflectional system for Tommo So verbs. In section 12.1, I give a schematic overview of verbal inflection in the form of paradigms. In sections 12.2-12.6, I address each of the main aspects: imperfect, perfect (three kinds) and progressive, and their forms in all tenses and in the negative. In section 12.7, I readdress the issue of pronominal subject suffixes, first discussed in section XXX. Finally, section 12.8 covers imperatives and hortatives.

For the inflection of quasi-verbs not used in regular verbal inflection, see Chapter 13. For lexicalized verb chains that fine tune the temporal meaning of a clause, see XXX.

### 12.1 Overview of tense-aspect-negation (TAN) for regular verbs

Before delving into different inflection categories, I will first give schematic paradigms to prepare the reader for the upcoming discussion and to serve as a reference for later use. There are six paradigms given below, split into (a) monosyllabic verb stems, (b) disyllabic verb stems, and (c) trisyllabic verb stems. Each of these larger categories includes two paradigms, one for a $\{H\}$ verb stem and one for a $\{\mathrm{LH}\}$ verb stem. Indicative forms are given first, followed by imperatives and hortatives. For verb forms in relative clauses, see Chapter 16.

The three main aspects are perfect, imperfect, and progressive, but there are a few different kinds of perfects and two varieties of the imperfect. This derives partially from the fact that the Dogon languages have different inflectional forms based on whether the verb is focused, something else in the clause is focused, or whether the clause is neutral. The first I call simply the focused form, while the second is the defocalized form, and the third requires no separate appellation than the name of the aspect. Additionally, there is an experiential perfect construction ("have done something [before]", French avoir l'habitude de faire).
(xxx) a. Monosyllabic paradigms

| Indicative |  | \{ H$\}$ yóó 'enter' |  | \{LH\} gòó 'exit' |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aspect | Tense | Affirmative | Negative | Affirmative | Negative |
| Imperfect | Pres/Fut | yóò-dè | yòé-lè | góò-dè | gòé-lè |
|  | Past | yóò be | yóò bè-lé | góò be | góò bè-lé |
|  | Chain form | yóéé | XXX | gòéé | XXX |
| Imperfect <br> (focused) | Pres/Fut | yò-yóò-dè | yòé-lè | gò-góò-dè | gòé-lè |
| Perfect (-aa) | Present | yóáa wo | yòò-lí | gòáa wo | gòò-lí |
|  | Future | yóáá bíyè-dè | XXX | gòáá bíyè-dè | XXX |
|  | Past | yóáa be | yòò-lí | gòáa be | gòò-lí |
|  | Chain form | yóáá | XXX | gòáá | XXX |
| Perfect <br> (defocalized) | Present | yòè | yòol-lí | gòè | gòò-lí |
|  | Future |  |  |  |  |
|  | Past |  |  |  |  |
| Perfect (focused) | Present | yò-yóè | yòò-lí | gòg-góè | gòò-lí |
| Experiential perfect | Present | yóé tíyáá wo | yóé tìyè-lí | gòy tíyáá wo | gòy tìyè-lí |
|  | Future |  |  |  |  |
|  | Past |  |  |  |  |
| Progressive | Present | yóó-gú se yóó-gú wo | yóó-gú sè-lé yóó-gú òndú | gòó-gú se gòó-gú wo | gòó-gú sè-lé <br> gòó-gú òndú |
|  | Future | yóó-gú síyè- <br> dè <br> yóó-gú bíyè- <br> dè (what <br> about -nu?) | XXX | gòó-gú síyè- <br> dè <br> gòó-gú bíyè- <br> dè (what <br> about -nu?) | XXX |
|  | Past | yóó-gú se be yóó-gú be | XXX | gòó-gú $s \varepsilon$ be gòó-gú be | XXX |
| Imperative |  | yóó | $\begin{aligned} & \text { yòò-gú } \\ & \text { yóó nàà-gú } \end{aligned}$ | góó | $\begin{aligned} & \text { gòò-gú } \\ & \text { góó nàà-gú } \end{aligned}$ |
| Hortative |  | yóó-mó | XXX | góó-mó | XXX |

b. Disyllabic paradigms

| Indicative |  | {H} ébé 'buy' |  | {LH} jòbó 'run' |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Aspect | Tense | Affirmative | Negative | Affirmative | Negative |
| Imperfect | Pres/Fut | ébè-dè | èbé-lè | jóbò-dè | jòbé-lè |


|  | Past | દ́bè be | ébè bè-lé | jóbò be | jóbò bè-lé |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chain form | と́béé | XXX | jòbéé | XXX |
| Imperfect <br> (focused) | Pres/Fut | غ̀-‘́́bè-dè |  | jò-jóbò-dè |  |
| Perfect (-aa) | Present | Ébáá wo | èbè-lí | jòbáá wo | jòbò-lí |
|  | Future | દ́báá bíyè-dè | XXX | jòbáá bíyè-dè | XXX |
|  | Past | Ébáá be | èbè-lí | jòbáá be | jòbò-lí |
|  | Chain form | と́báá | XXX | jòbáá | XXX |
| Perfect <br> (defocalized) | Present | غ̀bè | èbè-lí | jòbè | jòbò-lí |
|  | Future |  |  |  |  |
|  | Past |  |  |  |  |
| Perfect (focused) | Present | è-દ́bè |  | jòj-jóbè |  |
| Experiential perfect | Present | Ébé tíyáá wo | Ébé tìyè-lí | jòbé tíyáá wo | jòbé tìyè-lí |
|  | Future |  |  |  |  |
|  | Past |  |  |  |  |
| Progressive | Present | $\begin{aligned} & \text { ह́bé-gú se } \\ & \text { ع́bé-gú wo } \end{aligned}$ | દ́bé-gú sè-lé <br> દ́bé-gú òndú | jòbó-gú sع <br> jòbó-gú wo | jòbó-gú sè-lદ́ <br> jòbó-gú òndú |
|  | Future | ébé-gú síyè- <br> d $\varepsilon$ <br> દ́bé-gú bíyè- <br> dè (what <br> about -nu?) | XXX | jòbó-gú síyè- <br> dè <br> jòbó-gú bíyè- <br> dè (what <br> about -nu?) | XXX |
|  | Past | દ́bé-gú sع be ébé-gú be | XXX | jòbó-gú sع be jòbó-gú be | XXX |
| Imperative |  | ¢́bé | દ̀bè-gú <br> દ́bé nàà-gú | jóbó | jòbò-gú <br> jóbó nàà-gú |
| Hortative |  | દ́bé-mó | XXX | jóbó-mó | XXX |

c. Trisyllabic paradigms

| Indicative |  | {H} kíĺ́mó 'play' |  | {LH} gòróló 'snore' |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Aspect | Tense | Affirmative | Negative | Affirmative | Negative |
| Imperfect | Pres/Fut | kílèmò-dè | kìlèmé-lè | góròlò-dè | gòròlé-lè |
|  | Past | kílèmò be | kílèmò bè-lé | góròlò be | góròl̀ bè-lé |
|  | Chain form | kíĺméé | XXX | gòróléé | XXX |
|  | Pres/Fut | kì-kíľ̀mò-dè |  | gò-górò̀̀̀-dè |  |


| (focused) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Perfect (-aa) | Present | kílémáá wo | kìlèmò-lí | gı̀róláá wo | gòrò̀̀-lí |
|  | Future | kílémáá bíyèdè | XXX | gòróláá bíyè- <br> dè | XXX |
|  | Past | kílćmáá be | kìlèmò-lí | gòróláá be | gòròò-lí |
|  | Chain form | kílémáá | XXX | gòróláá | XXX |
| Perfect <br> (defocalized) | Present | kìlèmì | kìlèmò-lí | gòròlì | gòròlò-lí |
|  | Future |  |  |  |  |
|  | Past |  |  |  |  |
| Perfect <br> (focused) | Present | kì-kílı̀mì |  | gò-góròlì |  |
| Experiential perfect | Present | kílémú tíyáá wo | kílémú tìyè-lí | górólu tíyáá wo | górólu tìyè-lí |
|  | Future |  |  |  |  |
|  | Past |  |  |  |  |
| Progressive | Present | kílémó-gú sع kílémó-gú wo | kílémó-gú <br> sè-lé <br> kílémó-gú <br> òndú | gòróló-gú sع <br> gòróló-gú wo | gòróló-gú sè- <br> 1と́ <br> gòróló-gú <br> òndú |
|  | Future | kílémó-gú síyè- <br> dè <br> kílémó-gú <br> bíyè-dè (what <br> about -nu?) | XXX | gว̀róló-gú <br> síyè-dè <br> gว̀róló-gú <br> bíyè-dè (what <br> about -nu?) | XXX |
|  | Past | kílémó-gú sع be kíl mó-gú be | XXX | gว̀róló-gú sع be gòróló-gú be | XXX |
| Imperative |  | kílémó | kìlદ̀mò-gú <br> kíĺmó nàà- <br> gú | góróló | gòrò̀̀̀-gú <br> góróló nàà- <br> gú |
| Hortative |  | kílémó-mó | XXX | góróló-mó | XXX |

### 12.2 Imperfect

The first aspect I will address is the imperfect, which denotes that the action expressed by the verb is not completed. The present and future are homophonous, with the
present interpretation expressing a habitual meaning. There is also a past imperfect and an imperfect non-final chaining form.

### 12.2.1 Present/future imperfect

### 12.2.1.1 Affirmative

The form of the affirmative present/future imperfect involves a change of tone and suffixation, but no change in the vocalism of the stem. The verb's tone is overwritten with a $\{\mathrm{HL}\}$ melody, with the H on the first mora, and the suffix added is /-d $\grave{\varepsilon} /$. We can schematize this as follows:
(xx) Affirmative present/future imperfect

Verb: \{HL\}-dè

For example:
(xx) a. Monosyllabic
gòó 'exit' góò-dè 's/he exits/will exit'
yóó 'enter' yóò-dè 's/he enters/will enter'
b. Disyllabic

દ́bé 'buy’ ह́bè-dè 's/he buys/will buy'
jòbó 'run' jóbò-dè 's/he runs/will run'
jàà-ndá 'cook' jáà-ndà-dè 's/he cooks/will cook'
c. Trisyllabic
kílémó 'play' kílèmò-dè 's/he plays/will play'
gòróló 'snore' góròlò-dè 's/he snores/will snore'

Note that the exact phonetic realization of the $\{\mathrm{HL}\}$ overlay is reminiscent of underspecfication and interpolation. The first mora is H , but then it appears that the change to $L$ happens gradually over however much phonetic space is available until the suffix is L . This is illustrated by the following pitch tracks:

## PITCH TRACKS

Recall also from section XXX that with certain disyllabic verbs with coronal sonorant (especially $/ \mathrm{n} /$ and $/ 1 /$ ) as the onset of the second syllable, the stem-final vowel will delete. In the case of at least one $/ 1 /$ verb, /yèl $\varepsilon /$ /come', the $/ \mathrm{d} /$ of $/-\mathrm{d} \varepsilon /$ assimilates to the $/ 1 /$ :
a. káná 'do’ kán-dè 's/he does/will do'
b. yèlé 'come' yél-lı̀ 's/he comes/will come'

This vowel is optional, however, and the forms /kánà-dè/ and /yદ́lغ̀-dè/ may also be used; an example of the former is below in (xxb). The /d/ assimilation is also exceptional, and other /l/ verbs like /kálá/ 'lie' show variation in whether or not the /d/ will assimilate; some speakers accept [kállı̀] while others maintain that it must be [kál-dè].

When used in the present, the imperfect gives a habitual sense; the progressive is used for actions taking place at the time of speaking. For example:
a. Tòmmò Sòś sóò-dè-m.

Tommo.L speech speak-Impf-1sgS
'I speak Tommo So.'
b. Yàà-ná wó [ígè yàà-nà] $=m o=n \varepsilon$ bìrè pàdí́ $=\mathrm{n}$ bírè-dè woman-HumSg 3sgPro co-wife. $\mathrm{HL}=$ Poss $=$ Obl work.L bad $=$ Obj work-Impf wà, nòn-gó-nú yêm kìdé kánà-dè wà. Quot that-Adv-Adv like.that thing do-Impf Quot '[They say that] a woman does bad work with regards to her co-wife, that she does things like that.'

In historical narratives, this form can also be used as a past habitual, as can be seen in the following, where an old man describes how in the old days, if a village decided to go to war, everyone would get together and go kill people. The three uses of the present/future imperfect form are bolded:
( xx ) Dámmá jàwí-yáà kòmbó $=\mathrm{g} \varepsilon$ yáà-dìn yò kèm, áúrí-yí- $\varepsilon^{\mathrm{n}}$
village fight-MP.Perf war $=$ Def go-Impf.3plS if all.L agree-MP.PerfH-3plS
yó, yàí- $\varepsilon^{n 24}$ yó ǹd $\check{\varepsilon}-\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{j}$ ̀ $\quad$ mòmbí-yéé
if go.Perf.H-3plS if person- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Obj}$ get.together-MP.NF
sáà-dìn, $\quad$ ǹd $\check{c}-\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{j}$ तá $\quad$ dáà dìn.
destroy-Impf.3plS person- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Obj}$ kill-Impf. 3 plS

[^19]'if a village fought and went to war, if they agreed, if they went, they would get together and destroy people, they would kill people.'
[Text 2]

Even though this passage is talking about the past, the speaker uses a less marked form of the verb, namely the present/future imperfect. The form /-din/ is a portmanteau of the affirmative present/future imperfect and the 3 plS agreement.

Notice that in two consecutive phrases, the speaker can switch from the present/future imperfect form to the past imperfect form, all the while referring to the same timeframe:
(xx) $\quad .$. ín $\varepsilon=g \varepsilon=$ mbe kém gàmbáá múnjì-lò-dìn, gàmbáá
$\ldots$ iron $=\operatorname{Def}=\mathrm{Pl}$ all some break-Rev-Impf.3plS some
bànjá $=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{le} \quad$ kém jógò bì- $\grave{c}^{\mathrm{n}}$
bowl $=\operatorname{Def}=\mathrm{Pl}=$ Assoc all break. Impf be.Perf-3plS.
'. . and some [people] would break all of the blades, some people would break all of the bowls.'

It is quite likely that the past imperfect form gives a much stronger flavor of the statement being in the past, perhaps translating more exactly to "used to" instead of "would". This difference is subtle, and CHECK WITH SPEAKERS ABOUT IT.

Most commonly, this verb form is used for the future. Consider the following elicited and textual examples:
a. Yògó bògò èsú mí júú = mo ébè-dè-m.
tomorrow dress.L pretty 1sgPro friend= Poss buy-Impf-1sgS
'Tomorrow, I will buy a pretty dress for my friend.'
b. Néと́ gày î́ $=\mathrm{g} \varepsilon$ jòbáá yòè yó nǎm kúndò-dè gàà.
now Top child = Def run.Perf enter.PerfL if fire put-Impf say.Perf
'Now, she said [to herself] that when the child runs into [there], she would light the
fire. $\quad[$ Text XXX]

As these examples show, the same form can be used both in main clauses (xxa) as well as in embedded or quotative clauses (xxb).

For discussion of the present/future imperfect in relative clauses, see Chapter 16.

### 12.2.1.2 Negative

The negative present/future imperfect involves a replacement of the suffix /-dè/ by the negative /-lè/, as well as a change of tone and vocalism of the stem. The verb stem takes $\{\mathrm{LH}\}$, with L up to the final vowel, which takes the H tone and changes to /ée/. This can be schematized as follows:

## (xx) Negative present/future imperfect

Verb: $\{\mathrm{L}\}$, FV/éé/-lè

In the schematization, I have simply marked the H portion of the $\{\mathrm{LH}\}$ on the final vowel (FV).

This is the idealization of the tonal realization. At times, the pronunciation sounds just like this, but at others, it is as though the whole stem receives $\{\mathrm{H}\}$, including the final vowel, with the suffix L . This could be an illusion due to downdrift of the H after the L , but if this were the case, we would expect the initial syllable to be significantly lower than a preceding H , and yet this is not the case. Still at other times, the whole form sounds L , presumably due to the effects of declination and the compression of the pitch range at the end of an utterance. More data are needed to determine what controls the realization of the grammatical overlay. For now, I will provide examples transcribed with what I believe to be the phonological tone: the $\{\mathrm{LH}\}$ overlay.

Below, I have provided examples of each stem length and tone in the negative present/future imperfect:
a. Monosyllabic
gòó 'exit' gòée-lè ' $\mathrm{s} /$ he doesn't exit/will not exit'
yóó 'enter' yòéé-lè 's/he doesn't enter/will not enter'
b. Disyllabic

モ́bé 'buy’ èbéé-lè 's/he doesn't buy/will not buy'
jòbó 'run' jòbéé-lè 's/he doesn't run/will not run' jàà-ndá'cook' jàà-ndéé-lè 's/he doesn't cook/will not cook'
c. Trisyllabic
kílémó 'play’ kìlèméé-lè ‘s/he doesn’t play/will not play’
gòróló 'snore' gòròléé-lè 's/he doesn't snore/will not snore'

Note that when inflection changes the final vowel on a monosyllabic stem, only the second half the vowel is effected; the first half becomes extra short, almost like a glide at the place of articulation of the vowel. This is illustrated in the following spectrogram:

## SPECTROGRAM

The range of meanings of the negative present/future imperfect is exactly the equivalent of the affirmative. It can mark a habitual meaning in the present (xxa), in the past in narratives (xxb), or it can mark a negative future (xxc):
(xx)
a. Mí báá nàmá tèméé-lè.

1 sg Pro father.H meat eat-Neg.Impf
'My father doesn't eat meat.'
b. Ǹdè bèlú sè-lı̀ $=\mathrm{mo}=\mathrm{\jmath}$ súgó gj̀é-nnè. person.L animal have-Neg = Poss sugo dance-Neg.Impf.3plS 'They would not dance the sugo for those who did not have animals.'
c. Nǎm gòò-lí yò, mí= j̀ èlè-ndì-yéé-lè. sun go.out-Neg.Perf if 1 sgPro $=$ Obj please-Fact-MP-Neg.Impf 'If the sun doesn't come out, I will not be happy.'

On rare occasions, the negative progressive can be used for the habitual meaning. For an example of this usage, see (xxx).

### 12.2.2 Past imperfect

### 12.2.2.1 Affirmative

The past imperfect has already made an appearance in section 12.2.1.1 above, where in narratives, it can often be swapped out for the present/future imperfect. The form of the past imperfect is similar to that of the present; the stem portion remains identical (\{HL\} tone overlay, no change in vocalism), but instead of the suffix /-d $\grave{/}$, the past auxiliary clitic /be/ 'was' is added:
(xx) Affirmative past imperfect
$\operatorname{Verb}\{\mathrm{HL}\}=$ be
/be/ is underlylingly toneless, but it always surfaces as all L in the context of the past imperfect, because the verb is nearly always final and so the tone on the clitic interpolates between the L of the $\{\mathrm{HL}\}$ overlay and the final $\mathrm{L}^{-}$boundary tone.

The table below gives examples of the past imperfect for all verb shapes:
(xx) a. Monosyllabic
gòó 'exit' góò = be 's/he used to exit'
yóó 'enter' yóò = be 's/he used to enter'
b. Disyllabic

ह́bé 'buy' $\varepsilon$ ह́bè = be 's/he used to buy'
jòbś 'run' jóbò= be 's/he used to run'
jàà-ndá'cook' jáà-ndà = be 's/he used to cook'
c. Trisyllabic
kílémó 'play' kílèmò= be 's/he used to play'
gə̀róló 'snore' góròloे $=$ be 's/he used to snore'

One may ask what the motivation is for treating /-d $\grave{/}$ as a suffix and /be/ as a clitic. The reason behind this distinction I draw is that while /-dè/ can only attach to verbs (in the imperfect), /be/ can be used after nearly any category (noun, verb, adverb, etc.). It has an independence that the suffix /-d $\grave{/} /$ does not. It itself can be inflected for negation (as we will see), while negation completely replaces $/-\mathrm{d} \varepsilon \varepsilon^{\prime}$. It is possible that it is simply a suffix that subcategorizes for many different categories, but the more likely explanation is that this element/be/ is a clitic auxiliary, as it can be used either as the main verb (in predicative constructions) or to add tense to cases like this.

The past imperfect imparts two different meanings. The first I introduced in section 12.2.1.2 above, in example ( xx ), where this form gives the meaning of a past habitual like 'used to'. Other examples include:

$$
\begin{array}{ll}
\text { a. } & \text { Wó }=1 \text { l̀ yém kánà }=\text { bi- }-\varepsilon^{\mathrm{n}} .  \tag{xx}\\
\text { 3sgPro = also like.that do.Hab be.Perf-3plS } \\
\text { 'They also used to do [things] like that.' [Text 3] }
\end{array}
$$

b. EXAMPLE

In texts, this usage is not as common; the present/future form of the imperfect is generally used instead, since the context of the narrative imparts the past timeframe already.

The other use of the past imperfect is in what I call "past future" constructions like 'was going to'. For instance:
(xx) a. Bàmàkó yáà = be-m mè, I didn't have money.
b. Émmé bàlá $=\mathrm{be}=\mathrm{g} \varepsilon \quad$ wìdí-yáá Bènjù-ààń

1 plPro sweep.up.Impf=be.Perf.Rel=Def return-MP.Perf Benju Aano bàlè.
sweep.up.PerfL
'What we were going to sweep up, Benju Aano came back and swept up.'

The example in (xxb) is in a headless relative clause, in which the tone of the verb is lexical rather than replaced with $\{\mathrm{HL}\}$ (see Chapter 16 for further explanation), but the past future usage is still illustrated.

Just as in English, the past imperfect is not nearly as common as the present or future form.

### 12.2.2.2 Negative

## DATA NEEDED

### 12.2.3 Focused imperfect

Chapter 15 will cover the uses of the focused imperfect, but I will briefly summarize the form of the verb here. It takes the present/future imperfect as the base, but has in addition an initial CV reduplicant. This is schematized below:
(xx) Affirmative focused present/future imperfect

$$
\text { CV.Red-Verb }\{\mathrm{HL}\}-\mathrm{d} \varepsilon \grave{c}^{\prime}
$$

If the verb is V-initial, a glottal stop is inserted between the reduplicant and the stem, as in
 space, I will not give a table of examples for the focused imperfect here; the form is wholly calculable from the table in ( xx ) through the addition of the initial reduplicant.

The focused imperfect is used when the verb alone is focused. See Chapter 15 for examples.

Questions:
Are there focused negative imperfects? Past?

### 12.3 Perfect (non-focused)

In contrast with the imperfect, which indicated that the action of the verb had yet to be completed, the perfect indicates the action is done. The perfect is more complicated than the imperfect in that in addition to plain and focused forms, there is also a very common form that I call "defocalized", used when something else in the sentence is focused or otherwise prominent. All of these forms collapse into a single negative form. I will address only plain (non-focused) perfectives in this section in the interest of organization. Two short sections, 12.4 and 12.5 , will cover defocalized and focused perfects, respectively.

Since the forms of the negative do not change depending on the tense (with the exception of the future perfect), I will instead address all affirmative tenses first in section 12.3.1 followed by the negative in section 12.3.2

### 12.3.1 Affirmative

All affirmative perfect forms are built off of the same base, which is the perfect chaining form. (For the use of this form in verb chains, see Chapter XXX.) This perfect base is formed by changing the final vowel of the verb stem to long /aa/. The tone of the verb is lexical. This can be schematized as follows:

## (xx) Affirmative perfect base

Verb:FV/-aa/

There are no suffixes added, as all tense information is given through auxiliaries. Arguably, all (non-focused) perfects could be seen as a verb chain between the main verb and the auxiliary.

Note the lack of tone marking on /aa/. This is because it is surface underspecified for tone, just like clitics and nominal suffixes, discussed in section XXX. Everything up to the $/ \mathrm{aa} /$ takes lexical tone, then interpolation takes over from the final H (of either $\{\mathrm{H}\}$ or $\{\mathrm{LH}\})$ to the following tone or the end of the clause. However, if the verb is $\{\mathrm{LH}\}$ and the stem before the /aa/ only monosyllabic, then the H portion is assigned to the beginning of the long vowel, serving as the start point for its interpolation. Note again that it is syllabicity in this case that matters, since contour tones cannot be created word-interally.

The tone assignment is illustrated by the following examples. Note the different behavior of $/ \mathrm{a} /$ in $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$ verbs of one to two syllables:
(xx) a. Monosyllabic

| gòó | 'exit' | gòáa | 'exited' |
| :--- | :--- | :--- | :--- |
| yóó | 'enter' | yóaa | 'entered' |

b. Disyllabic

| ع́bé | 'buy' | ह́baa | 'bought' |
| :--- | :--- | :--- | :--- |
| jòbó | 'run' | jòbáa | 'ran' |
| jàà-ndá 'cook' | jàà-ndáa | 'cooked' |  |

c. Trisyllabic
$\begin{array}{lll}\text { kílémó } & \text { 'play' } & \text { kíĺmaa } \\ \text { gòróló } & \text { 'slayed' } \\ \text { 'snore' } & \text { gòrólaa } & \text { 'snored' }\end{array}$

In a trisyllabic verb like /gòrólo/, there is enough room before the /aa/ to assign both the L and H of the stem.

This underspecification of /aa/ may serve as yet another bit of evidence that verb stems actually lack a final vowel, or that the stem itself ends in a consonant. In this case, the $/-\mathrm{a} a /$ is a pure suffix, and as such, it is not bound by the requirements of tonal specification necessary on stems.

### 12.3.1.1 Present

All tense is indicated in the plain perfect through the use of the auxiliary /wo/ 'be', which is a subminimal clitic quasi-verb in Tommo So. Like /be/, its suppletive past form seen in the past imperfect, /wo/ is tonally underspecified, creating a string of underspecified elements in the present perfect.

The present perfect in Tommo So, like the present perfect in English, gives a reading wherein the completed action still has a relevancy to the present. For example:
a. Móólu $=\mathrm{mo}=\mathrm{g} \varepsilon$ tàì- $\varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon=\mathrm{l}^{25}$ ànsáárá yèláa $=\mathrm{wo}$. Mori $=$ Poss $=$ Def shoot.PerfL-3plS $=$ Def $=$ Assoc white.person come. $\operatorname{Perf}=$ be 'At [the time when] they started the Mori [war], the white people came.' [Text 2]

[^20]b. ǹdě-m $=\mathrm{mbe}=\mathrm{g} \varepsilon \quad$ dàgáa $=$ wo gì- èn $^{\mathrm{n}}$ wà. person-HumPl $=\mathrm{Pl}=$ Def be.good.Perf $=$ be say.PerfL-3plS Quot 'The people said it is good.'

In the first case, the timeframe of the narrative is the past, but because the white people arriving still had relevancy to the time being spoken about, the present perfect could also be used. The example in (xxb) illustrates the most common usage for the present perfect: intransitive verbs used predicatively in situations where we would be likely to use an adjective. Outside these two cases (immediate relevancy, as in (xxa), or intransitive descriptive verb, as in (xxb)), the present perfect tends to be rare with most verbs, especially in texts (which tend to have a past time reference).

In everyday conversation, the present perfect does come up in situations like:
a. Mí= ̀̀ $\quad$ ह́gaa = wo-w?
$1 \mathrm{sg} \operatorname{Pro}=$ Obj hear. $\cdot \operatorname{Perf}=$ be- 2 sgS
'Did you hear me?'
b. Nìmém f́yáa = wo-m.
just.now eat.Perf=be-1sgS
'I've just now eaten.'

In cases like this, it gives a reading of immediate past.
It is also common for verbs like 'get up' to give a stative meaning of standing:
(xx) Úngúlaa = wo-m.
get.up.Perf= be-1 sgPro
'I'm standing ( = have gotten up).'

These two main uses, immediate relevancy and descriptive intransitives, could be considered to both fall under the immediate relevancy heading, since in the case of intransitive descriptive verbs, the point of using them predicatively to describe a noun is to describe a state of being that is relevant to the present. Other examples of these intransitive verbs in the present perfect include:
a. Díí=ge wààní-yaa= wo.
water $=$ Def boil-MP.Perf $=$ be
'The water is boiled ( = has boiled).'
b. Màngóró $=\mathrm{g} \varepsilon$ ílaa $=\mathrm{w}$.
mango $=$ Def ripen $. \operatorname{Perf}=$ be
'The mango is ripe ( $=$ has ripened).'

Note that in these cases, /wo/ can be replaced by an allomorph of the copula clitic $/=y$ y $/$. For more on this form, see section 12.XXX.

While morphologically, the clitic /wo/ is present in these forms, in most fast speech, it gets completely absorbed by the preceding /aa/ and only the subject suffix is audible. Thus, the examples in (xx) would come out sounding more like [égaa-w] and [ńyaa-m]. In careful speech or with emphasis, the /wo/ is audible, as it is in the text quoted in (xx), but most often it is lost. I predict that new generations may misparse the present perfect as being simply the /aa/ chain form with subject suffixes, rather than carrying the auxiliary /wo/.

### 12.3.1.2 Past

What we may think of as a preterite or an unmarked past tense in non-focused conditions is the past perfect. This is formed exactly like the present perfect, but in the place of /wo/, the suppletive past clitic /be/ is used. While /be/ is also underspecified for tone, there is a difference in how the tones of a couple monosyllabic $\{\mathrm{LH}\}$ stems get distributed between the present/wo/ and the past/be/. While with/wo/, the L and H get assigned to the stem itself, as in /yàáa = wo/ 's/he has gone', in the past, the H gets assigned to the /be/ and the verb stem plus /aa/ are all L , as in /yàà = bé/ 's/he had gone/went'. This seems to only be the general case for the irregular monomoraic verbs /yغ̀/ and /gè/, whose stems would technically have a slot for only one tone. Nonetheless, /yàá/ 'go' is not monomoraic, and yet in the past perfect it ends up homophonous with 'see'. Both forms are /yàà= bé/. Why the H does not surface on /wo/ in the present could be because most of the time, this auxiliary is absorbed into the verb anyway, so it is not a stable landing site for tone. This area needs more investigation.

## RECORD AA-WO vs. AA-BE.

Once again, in narratives, the past perfect is less common, with past verb chaining forms and the defocalized perfect taking precedence. Nonetheless, when something in the text is of a past timeframe relative to the action, the past perfect may be used. This is seen in the following passage from a folk tale, wherein all the animals get together and talk about getting a wife for the sun. They had thought it was a good idea, but Hare reminded them that with even more sun in the sky, the animals would have a hard time surviving. The past perfect forms are bolded.
(xx) Yêm wó gàà, nàmà úndu $=\mathrm{n} \varepsilon$ tóó $=\mathrm{g} \varepsilon=\mathrm{mbe}$ jàdáá like.that 3 sgPro say.Perf meat.L forest $=$ Obl be.in. $\mathrm{Rel}=\mathrm{Def}=\mathrm{Pl}$ reflect.Perf gàndà kó nàáa $=$ bi- $\varepsilon^{\mathrm{n}}$, jàdáá bé yè-ndáá, wàlláy place.L that.DD forget.Perf= be.Perf-3plS reflect.Perf 3plS see-Fact.Perf my.God
sòó $=\mathrm{g} \varepsilon \quad$ mùlú-go $=$ wo.
speech $=$ Def similar-Adv be
'[The hare] having said that, the animals in the forest thought it over, they had forgotten that part, they thought it over and looked [at the speech and saw], my God, it is like that.'

Mómbu $=\mathrm{g} \varepsilon \Uparrow\left[\begin{array}{ll}\left.\text { gàa } \quad \text { bí }-\varepsilon^{n}\right] \quad \text { wa dògò dàgà-lú wa. }\end{array}\right.$ meeting $=$ Def say.Perf be.Perf-3plS Quot but be.good-Neg.Perf Quot 'They had spoken [at] the meeting, but [they said] [what they said] was not good.'

In the first long sentence, 'they had forgotten' is in the past perfect because it refers back in the text to an earlier meeting, the same time frame referred to by the second use of the past perfect in the second sentence 'they had said'.

The past perfect is commonly offered in elicitation as the translation of a basic past tense (in French, coincidentally, the present perfect). For instance:
a. Ámíru $=\mathrm{g} \varepsilon$ dámmá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ sòó sóó-gú ह́gaa $=\mathrm{be}-\mathrm{m}$.
chief $=$ Def village $=\operatorname{Def}=\mathrm{Obl}$ speech speak -Ppl hear $\cdot \operatorname{Perf}=$ be.Perf- 1 sgS 'I heard ( $j$ 'ai entendu) the chief speaking in the village.'

$$
\begin{array}{llll}
\text { b. } & \text { Mí = le } \quad \text { Séydu }=\text { le } & \text { Bàmàkó } & \text { yàà }=\text { bé-y. } \\
& 1 \text { sgPro }=\text { Assoc Seydou }=\text { Assoc } & \text { Bamako } & \text { go.Perf=be.Perf-1plS } \\
& \text { 'Seydou and I went to Bamako.' }
\end{array}
$$

It would seem that the past perfect can be used as the unmarked past in those cases where the action is no longer immediately relevant to the current situation, which is typically the case when speaking about the past (hence the relative rarity of the present perfect in English compared to the past tense).

### 12.3.1.3 Future

## CAN YOU USE BIYEDE?

### 12.3.1.4 Temporally unmarked

It is worth mentioning that a common strategy for expressing the past or perfect in texts is to simply use the perfect chain form (the /aa/ form that serves as the base for all perfect forms) without any sort of temporal marking at all. Note that this /aa/ form is technically a participle and cannot be inflected for subject marking, and so in these cases, independent pronouns can be recruited to fill this need. For example:

b. $\varepsilon \varepsilon^{\text {n }}=\mathrm{g} \varepsilon$ bàláa wó jéclaa, $\varepsilon \varepsilon^{n}=\mathrm{g} \varepsilon$ díí $=\mathrm{n} \varepsilon \quad$ kúndaa ash $=$ Def sweep.up.Perf 3 sgPro bring.Perf ash $=$ Def water $=$ Obl put.Perf bé tégír-raa.
3plPro drip-Tr.Perf
'[She] swept up the ashes and she brought them [to the other woman], they put the ash in water and made it drip. (Note: Ashes are put in a recipient with small holes in the bottom, then water filters through it.)' [Text 4]

Note that in both of these cases, the use of the bare perfect as the "main verb" of the sentence comes after using several other bare perfect participles in chain verb constructions. It seems that the speaker can choose to end a sentence with an unfinished chain

[^21](intonationally, the utterance has ended) if they will pick it back up in the following sentences.

In at least one instance from elicitation, a perfect chain form is left unfinished at the end of a sentence, once again, following an earlier chain form:
(xx) Bíré bìráá hálè mí óní-yaa.
work work.Perf until 1sgPro get.tired-MP.Perf
'I worked until I got tired.'

Here, since the 1 sg subject cannot be inflected on the final verb 'be tired', it must be marked preverbally with an independent pronoun /mí/.

### 12.3.2 Negative

While present and past perfects are distinguished in the affirmative, this distinction is generally collapsed in the negative. The negative perfect form takes the suffix $/-1 i /$, and while the verb stem is overwritten with $\{\mathrm{L}\}$, there is no change to the vocalism. This can be schematized as follows:
(xx) Negative perfect

Verb\{L\}-lí

Notice that the shape of the negative is always largely /-IV/, but the vowels and tone of the whole verb form changes depending on the aspect. The following chart demonstrates the formation of the negative perfect for all verb types:
(xx) a. Monosyllabic
gòó 'exit' gòò-lí 'did not exit'
yóó 'enter' yòò-lí 'did not enter'
b. Disyllabic

ع́bé 'buy’ èbè-lí 'did not buy'
jòbó 'run' jòbò-lí 'did not run'
jàà-ndá‘cook' jàà-ndà-lí ‘did not cook'
c. Trisyllabic

| kílદ́mó | 'play' | kìlè-mò-lí 'did not play' |
| :--- | :--- | :--- |
| gòróló | 'snore' | gòròlò-lí |

Whenever an action is perfect, so long as it is not future, the negative usually takes this form, though a negated form of the past perfect also exists (see below). In the following exchange from a text on the history of the Dogon people before and around the time of the arrival of Europeans, the present perfect form is used in the affirmative because the arrival of the white people still had relevancy to the present situation (see the discussion around ( xx ) above). Speaking of the same timeframe but a different location ("here", rather than Mali in general), we see the negative perfect used:
( xx ) $\mathrm{V}: \quad \mathrm{Móólu}=\mathrm{m} \supset=\mathrm{g} \varepsilon \quad$ tàì- $\varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon=\mathrm{l}^{28} \quad$ ànsáárá $\quad$ yèláa $=$ wo.
Mori $=$ Poss $=$ Def shoot.PerfL-3plS $=$ Def $=$ Assoc white.person
come.Perf = be
'At [the time when] they started the Mori [war], the white people came.'

MM: M̀báà dò̀̀-lí.
here arrive-Neg.Perf
'They didn't make it here.'

Another example showing that the negative perfect is indeed the negative counterpart of the present perfect comes from negated intransitive verbs of description. For instance, consider the following exchange, wherein /dàgáa $=$ wo/ 'it is good' stands in opposition to /dàgà-lí/ 'it is not good' (pronounced [dàgàlú] before the $/ \mathrm{w} / \mathrm{of} / \mathrm{wa} /$ ).

$$
\begin{align*}
& \text { ǹď̌- } \mathrm{m}=\mathrm{mbe}=\mathrm{g} \varepsilon \quad \text { dàgáa }=\text { wo gì }-\varepsilon^{\mathrm{n}}  \tag{xx}\\
& \text { person- } \mathrm{HumPl}=\mathrm{Pl}=\text { Def be.good.Perf be } \\
& \text { 'The people said it is good.'. }
\end{align*}
$$

Tààmáá ǹdém $=\mathrm{m} \nu=\mathrm{n} \varepsilon$ dàgà-lú wa de.
thought LogPro $=$ Poss $=$ Obl be.good-neg.Perf Quot Emph
'[Hare said], "In my opinion, it's not good!""

Because the past perfect is not commonly used in texts, it is harder to find clear cases where the negative perfect stands as a clear counterpart to it. Nevertheless, the /-lí/ form is common in narratives, regardless of its interpretation (present or past). For example:
(xx) à ǹdémó nònú pádaa òlú yàà dùlí-yaa tèmbè-lí-m

[^22]ah LogPro here leave.Perf field go.Perf return-MP.Perf find-Neg.Perf-1sgS wa. Quot
'[The co-wife said] "Ah! I left him here and went to the field, and when I came back, I [couldn't] find [him]".'

Consultants usually offer the negative perfect as the negative counterpart of the past perfect in elicitation, especially when the verb is an action verb, but when it is a descriptive instransitive verb, a negated form of the past perfect is also available. Compare (xxa) and (xxb) below:
(xx)

> a. Yáá nògòmì-yè-lí-m. yesterday be.sad-MP-Neg.Perf-1sgS
> 'I wasn't sad yesterday.'
> b. Yáá nógómí-yaa= be-li-m.
> yesterday be.sad-MP.Perf= be.Perf-Neg.Perf-1sgS
> 'I wasn't sad yesterday.'

In (xxb), the form is exactly like the affirmative past perfect, but it is the auxiliary /be/ that is inflected for negation with $/-\mathrm{li} /$, in this case tonally underspecified. It is possible that this form exists for these descriptive verbs in order to make the difference between "I am not sad (now)" and "I wasn't sad", a distinction that would be hard to make when the perfect is already required to get the descriptive meaning. For action verbs like "eat", the distinction between "I haven't eaten" or "I didn't eat" or "I hadn't eaten" becomes less crucial.

## Negative future perfect?

In at least one instance, instead of using the negative perfect form in the past tense, a consultant offered a negation of the auxiliary /be/. This is seen in the following conditional sentence:

| (xx) Ú $\quad$ nònú yé $=$ be-be-w | yó mí | yàà | bè-lé-m. |
| :--- | :--- | :--- | :--- | :--- |
| 2sgPro here Exist $=$ Red-be.Perf-2sgS if | 1 sgPro | go.Perf | be.Perf-Neg-1sgS |
| 'If you had been there, I would not have gone.' |  |  |  |

It is not clear whether this negative form is restricted to conditionals or whether it can also be used in regular sentences.

### 12.4 Defocalized perfect

The defocalized perfect is used when some other element in the sentence takes focus, thus de-emphasizing the verb. There is no tense distinction; it seems appropriate being used in the place of both the present perfect and the past perfect. There is also no unique negative form of the defocalized perfect. In these cases, the regular /-lí/ suffixed perfect form is used.

The form of the defocalized perfect is unsuffixed, with a change in the final vowel of the stem and what seems to be a $\{\mathrm{L}\}$ overlay, though this may be intonational at this stage in the language. One consultant has more complicated tone patterns, wherein the verb with a first or second person subject takes $\{\mathrm{LH}\}$, with the H on the last mora, while third person subjects take $\{\mathrm{HL}\}$. If the subject is 3 sg , the H is only on the first mora, while if it is 3 pl , it extends to the last mora. This is exemplified below with the trisyllabic verb /ádúbá/ 'think':

| (xx) | 1 sg | àdùbí-m | 1 pl | àdùbí-y |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 sg | àdùbí-w | 2 pl | àdùbí-y |
|  | 3 sg | ádùbì | 3 pl | ádúbí- $^{\mathrm{n}}$ |

Most often in texts and with other speakers, however, the verb can be said to have no other tone but $\{\mathrm{L}\}$. If this is not yet fully phonologized, I would expect it to be in future generations.

The choice of final vowel is partially predictable, but for many verb forms, particularly disyllabic stems, this choice must be memorized. We can make the following generalizations: If the final vowel of the stem is a -ATR mid vowel and the stem is less than three moras, then the final vowel will be the front mid -ATR vowel $/ \varepsilon /$; If the stem has three moras or more (a long vowel and a short vowel, three short vowels, etc.), the final vowel will be $/ \mathrm{i} /$; If the stem is monosyllabic with a + ATR mid vowel, the final half of the vowel will be the front + ATR mid vowel /e/; If there is a derivational suffix, the final vowel will be /i/ (though often if there is a derivational suffix, the stem will then be three moras or longer and so would take /i/ anyway).

We see unpredictability in the following ways: If a verb stem has the vowel $/ \mathrm{a} /$, the final vowel can be either $/ \mathrm{e} /$ or $/ \varepsilon /$; If a verb stem is disyllabic, the final vowel can either be the harmonizing mid vowel or the vowel /i/. The following schematizations summarize the defocalized perfect. /E/ stands for a harmonizing front vowel:

## (xx) Defocalized perfect

a. Monosyllabic non-low stem

## Verb:FV/E/

b. Monosyllabic low stem

Verb:FV/e, $\varepsilon /$
c. Disyllabic (bimoraic) non-low stem

Verb:FV/E,i/
d. Disyllabic (bimoraic) low stem

Verb:FV/e,, ,i/
e. Stem with three or more moras Verb:FV/i/

While all this between-stem variation exists, patterns can be identified even within variable categories. First, monosyllabic $/ \mathrm{a} /$ stems tend to take $/ \varepsilon /$ as the final vowel (xxa), while disyllabic /a/ stems tend to take /e/ (xxb), or rarely /i/ (xxc). For example:

| a. yàá | 'go' | yà | 'went' |
| :--- | :--- | :--- | :--- |
| dàá | 'kill', | dà̀̀ | 'killed' |
| káá | 'shave' | kà | 'shaved' |

b. áwá 'catch' àwè 'caught'
bàrá 'help' bàrè 'helped'
pádá 'leave' pàdè 'left'
c. káná 'do’ kànì 'did’

What this suggests to me is that phonologically speaking, perhaps all /a/ stems (except those irregularly taking $/ \mathrm{i} /$ ) take /e/ as their defocalized perfect vowel, but in monosyllabic stems where the $/ \mathrm{a} /$ and $/ \varepsilon /$ are in hiatus, there is a tendency to lower $/ \mathrm{e} /$ to $[\varepsilon]$. ASK IF SPEAKERS FEEL THE VOWEL IS THE SAME. In one case, though, a disyllabic /a/ verb seems to take $/ \varepsilon /$ as its defocalized perfect vowel, standing as a counterexample to these rules. This verb is /nágá/ 'hone', with defocalized perfect form /nàgè/ 'honed'.

Examples of the exceptionless rule that mono- and disyllabic -ATR stems take $/ \varepsilon /$ are as follows:
(xx) a. sóý 'speak' sòè 'spoke'

| $\begin{aligned} & \text { dòó } \\ & \text { yè } \end{aligned}$ | 'arrive' <br> 'see' | $\begin{aligned} & \text { dò } \varepsilon ̀ \\ & \text { y } \end{aligned}$ | 'arrived <br> 'saw' |
| :---: | :---: | :---: | :---: |
| b. jòbó | 'run' | jòbè | 'ran' |
| £́gé | 'hear' | غ̀gè | 'heard' |
| núyó | 'sing' | nùyè | 'sang' |

The two other exceptionless categories, + ATR monosyllabic stems that take /e/ and trimoraic stems that take $/ \mathrm{i} /$, are illustrated below. Note that the trimoraic rule applies to be underived (xxb) and derived (xxc) forms:
(xx)

| a. gòó | 'exit' | gòè | 'exited' |
| :--- | :--- | :--- | :--- |
| bòó | 'call' | bòè | 'called' |


| b. ádúbá | 'think' | àdùbì | 'thought' |
| :--- | :--- | :--- | :--- |
| úngúló | 'get up' | ùngùlì | 'got up' |
| nóóló | 'mix' | nò̀lì | 'mixed' |

$\begin{array}{llll}\text { c. gòò-ndó } & \text { 'take out' } & \text { gòò-ndì } & \text { 'took out' } \\ \text { sémé-mó } & \text { 'make slaughter' } & \text { sèmè-mì̀ } & \text { 'made slaughter' }\end{array}$

Disyllabic + ATR stems are idiosyncratic, taking either /i/ or /e/ in the defocalized perfect, as illustrated below:
(xx)

| a. óbó | 'give' | òbì | 'gave' |
| :--- | :--- | :--- | :--- |
| kúndó | 'put' | kùndì | 'put' |
| bòdó | 'put aside' bòdì | 'put aside' |  |

b. mòmó 'laugh' mòmè 'laughed'
gùló 'dig' gùlè 'dug'
póygó 'bump' pòngè 'bumped'

The canonical use of the defocalized perfect is when another element in the sentence is focused, de-emphasizing the verb. This could be with contrastive focus as in (xxa), in a question as in (xxb), or in response to a question as in (xxc). Since the defocalized perfect tends to take $\{\mathrm{L}\}$ tone, I gloss it as .PerfL.
a. Mí=j̀ yà̀̀.
$1 \mathrm{sg} \operatorname{Pro}=$ Foc go.PerfL
'It's me who went.'
b. Yàgú $=n \varepsilon$ èbè-w ma?
where $=$ Obl buy.PerfL-2sgS or?
'Where did you buy it?'
c. Íb $\varepsilon=n \varepsilon \quad$ èbè-m.
market $=$ Obl buy.PerfL-1sgS
'I bought it at the market.'

The unsuffixed perfective also seems to be the unmarked perfective in texts, even if there are no recognizably focused elements, as these examples show:
a. Kònó yàà, kòmbó $=\mathrm{g} \varepsilon$ tàì- $\mathrm{e}^{\mathrm{n}}$, ògò éndé yém there.Log go.PerfNF war = Def shoot.PerfL-3plS Hogon Ende like.that yòè.
enter.PerfL
'They went there, they made war... and it was like that that Ende the Hogon became
chief.' [Text 1]
b. ...íi wóm $=g \varepsilon$ wó $=$ le pádaa dámmá yàè.
child 3 sgPoss $=$ Def 3 sg Pro $=$ Assoc leave.Perf village go.PerfL
'...[the woman] left her child with her and went to the village.' [Text 4]

Given the high prevalence of this form in texts, it would seem that there is something focused in every sentence, despite a lack of any overt focus marking. An alternative analysis is that this verb form has two uses: the first is related to focus, but the second is simply a narrative past tense form.

For more on the interaction between focus and verb marking, see Chapter 15.

$$
\begin{aligned}
& \text { Ìsé }=g \varepsilon=\grave{\jmath} \quad \text { bènd } \grave{\varepsilon}=\text { be-m, } \quad \text { gámmá }=g \varepsilon=1 \varepsilon . \\
& \text { Dog }=\operatorname{Def}=\text { Obj hit.PerfL }=\text { be.Perf- } 1 \operatorname{sgS} \text { cat }=\operatorname{Def}=\text { Neg.Cop } \\
& \text { 'It's the } \operatorname{dog} \text { I hit, not the cat.' }
\end{aligned}
$$

What's the deal with L perfect with /be/?

### 12.5 Experiential perfect

The last perfect form to be addressed in this chapter is the "experiential perfect". Unlike in English, where the present perfect can be used to indicate that someone has the experience of doing something before, a separate form must be used in Tommo So. This construction involves an auxiliary verb /tíy $\varepsilon /$, which is inflected for tense.

## MORE DATA

Possibly relocate

### 12.6 Progressive

The next major aspect in Tommo So is the progressive, which also doubles as an iterative (much like the habitual use of the imperfect). The base form of the progressive in any tense is a participle usually formed with the suffix /-gú/ though it also can be formed with /-nú/, particularly in the future. ${ }^{29}$ The progressive is the one inflection where both the underlying tone and vocalism of the verb stem are visible. The formulation of the progressive participle is schematized below:
a. Past/present progressive participle

Verb-gú
b. Future progressive participle

Verb-nú

Tense and other inflection is carried on an auxiliary verb, either /se/ 'have' or /wo/ 'be'. Plungian (1995) reported a semantic difference between the two auxiliary verbs, with /se/ being used iteratively and /wo/ as a progressive, but my consultants do not agree with this generalization, stating that the two forms may be used interchangeably.

The table below shows progressive participle formation for all verb types, exemplified with /-gú/, since /-nú/ behaves in exactly the same way:
(xx) a. Monosyllabic
gòó 'exit' gòó-gú 'exiting'

[^23]yóó 'enter’ yóó-gú 'entering'
b. Disyllabic

| ćbé | 'buy' | ह́bé-gú | 'buying' |
| :--- | :--- | :--- | :--- |
| jòbó | 'run' | jòbó-gú | 'running |
| jàà-ndá 'cook' | jàà-ndá-gú 'cooking' |  |  |

c. Trisyllabic

| kílદ́mó | 'play' | kílémó-gú 'playing' |
| :--- | :--- | :--- |
| gòróló | 'snore' | gว̀róló-gú |

Before getting into the different tenses of the progressive, a word is required about the phonetic realization of the participle. First, at the end of a clause, $\{\mathrm{H}\}$ verbs experience a good deal of declination across the verb. This is shown by the pitch track in (xxa). $\{\mathrm{LH}\}$ verbs will often come out sounding all level L, less affected by declination, because they tend to form phonological phrases with an object that, carrying a H tone, creates a domain for downdrift. This means that instead of making the full leap from L to H on the verb, the tones after the initial L will be at nearly the same level. This downdrift is shown in (xxb).

## PITCH TRACKS

The other phonetic points to note involve the suffix itself. First, before the $/ \mathrm{s} /$ of the auxiliary /se/ 'have', the /u/ of the suffix is sometimes voiceless. Second, the $/ \mathrm{g} /$ is sometimes lenited or lost in rapid speech, resulting in a suffix that sounds more like a plain /-ú/. Show spectrograms or link to recordings online?

### 12.6.1 Present

### 12.6.1.1 Affirmative

The affirmative present progressive is formed with either /s $\varepsilon /$ 'have' or /wo/ 'be' as the auxiliary. As we saw in section 12.XXX, /wo/ is inherently toneless, but the tonal analysis of /s $\varepsilon /$ is a bit more difficult. It often appears to have a falling tone on a short syllable, but this may be a phonetic effect due to the nature of /s/ to raise the pitch immediately following it, thus serving as a sort of consonantal H starting point for interpolation. I will pursue this latter analysis and write $/ \mathrm{s} \varepsilon /$ as toneless.

My consultants tell me that there is no difference in meaning between the use of /sz/ or /wo/ for the auxiliary. This can be confirmed by looking at the following example from a
text, where the first instance of the progressive takes $/ \mathrm{wo} /$ and the second $/ \mathrm{s} \varepsilon /$. The first instance is non-final, and as such, the auxiliary /wo/ is made into a participle with the suffix $/-\mathrm{gu} /$, meaning that the subject must be marked not by a suffix but by an independent pronoun. For more on the use of /-gú/ in linking clauses, see XXX.
( xx ) Yêm wó gàa yàa-ná $=\mathrm{g} \varepsilon$ jáá sírè-d $\varepsilon$ gàà 文 ${ }^{\mathrm{n}}$ like.that 3 sgPro say.Perf woman-HumSg $=$ Def meal cook-Impf say.Perf ash.L wó tégí-ráá-dè $=\mathrm{g} \varepsilon \quad$ núyó $=\mathrm{g} \varepsilon$ núyó-gú wó wó-gú wó 3sgPro drip-Tr.Perf-Impf.Rel = Def song = Def sing-Ppl 3sgPro be-Ppl 3sgPro kééní-yaa íi wómo $=g \varepsilon$ núyó-gú $\boldsymbol{s \varepsilon}$. listen-MP.Perf child 3 sgPoss $=$ Def sing-Ppl have '[The child] having said that, the woman said [she would] prepare the meal, and the
ashes she had put in the water were singing, she listened, and her child was singing.'
[Text 4]

Here, the timeframe of the narrative is past, but both progressives are in the present. Both the /wo/ progressive and /se/ progressive refer to the exact same event: the ashes of the woman's dead child singing as she put them in water to make soda ash.

In elicitation, consultants will offer both $/ \mathrm{s} \varepsilon /$ and $/ \mathrm{wo} /$ for auxiliaries in the progressive. For example:
a. Jángu jàngá-gú $s \varepsilon-m / w จ-m$. studies study-Ppl have-1sgS/be-1sgS 'I am studying'
b. Mí ánìgè nònú jáá fryé-gú $s \varepsilon / w o$.

1sgPro friend.HL here meal eat-Ppl have/be
'My friend is eating here (right now).'

The other use of the progressive form is in an iterative function, like the habitual, where the action indicated by the verb happens repeatedly. This is like the use of "be" in African American English like "I be swimming" to mean "I swim habitually". An elicited example of this expression is as follows:
(xx) Mí póó-ndí-y $\varepsilon$ = $\mathrm{g} \varepsilon$ jáá sáy-ni f́yé-gu se-m.

1 sgPro fat-Fact-MP $=$ Def meal much-Adv eat-Ppl have-1sgS
'The fact that I am getting fat [is because] I eat a lot.'

Here, it is not one single exorbitant meal that causes the weight gain, but rather an iterative, habitual over-eating. The iterative use can be seen in texts too, once again in a non-final participial form, itself iterated twice:
( xx ) Éè wó kày ǹdè ògó yóè kém Ánju $=n \varepsilon$
yes 3 sgPro Top person.L Hogon enter.Perf.Rel all Anji $=\mathrm{Obl}$
sù-súgù ǹjí-yó-gú bé wó-gú,
Red-go.down.PerfHL lie.down-MP-Ppl 3plPro be-Ppl
ǹjí-yó-gú bé wó-gù...
lie.down-MP-Ppl 3plPro be-Ppl
'Yes, as for him, every person who entered the Hogon came down to Anju, they [were] sleeping there, they [were] sleeping there...' [Text 2]

Again, the timeframe here is the past, but it was a repeated event that anyone who would be Hogon (chief) would go and stay in the town of Anji. This was not one single progressive event, but an iterative happening. For another example of the progressive used as an iterative, see ( xx ) in the next section on negatives. While examples like these exist, by far the most common use of the progressive is indeed as a progressive.

One final use of the progressive is as an immediate past. For instance, when one has just arrived someplace, one can say /Nìměm yèlé-gú se-m/ 'I am arriving just now’ to mean that one has just arrived. The line between an action in progress and one that has just finished is admittedly fine, and thus it is unsurprising that the progressive verb form can straddle this line a little.

### 12.6.2.2 Negative

The negative present progressive is formed by negating the auxiliary verb. The negative forms of $/ \mathrm{s} \varepsilon /$ and $/ \mathrm{wo} /$ are given below:

| (xx) | se 'have' | sè-lé | 'not have' |
| :--- | :--- | :--- | :--- |
| wo 'be' | òndú | 'not be' |  |

While 'have' takes a version of the ubiquitous negative suffix /-lV/, 'be' has a suppletive form. Of the two negative auxiliaries, /sè-l $\varepsilon /$ is the commoner. Nonetheless, for the progressive, they can be used interchangeably:
( xx ) Mí ánìgè nònú jáá fryé-gú sè-lé/òndú.
1sgPro friend.HL here meal eat-Ppl have-Neg/be.Neg 'My friend is not eating here.'

While in the affirmative, there is no reported difference between /sz/ and /wo/ as auxiliary in the iterative construction, a difference emerges in the negative. Only $/ \mathrm{s} \dot{\varepsilon}-1 \bar{\varepsilon} / \mathrm{can}$ be used for the negative iterative, conforming to Plungian's (1995) observation that $/ \mathrm{s} \varepsilon /$ is used in this capacity. The pertinent example is the following:
(xx) Wó $\varepsilon^{\text {ñ }}=\mathrm{n} \varepsilon \quad$ ḿmo $=\mathrm{n} \varepsilon \quad$ yèlé-gú sè-lé. *yèlé-gú òndú 3 sgPro marry.Perf.Rel $=\mathrm{Obl} 1$ sgPoss $=\mathrm{Obl}$ come-Ppl have-Neg 'Since she got married, she doesn't come to my house anymore.'

This is not a progressive usage, since it does not address what the woman in question is doing at the moment of speaking, but rather a habitual or iterative usage.

### 12.6.2 Past

### 12.6.2.1 Affirmative

In the past progressive, the auxiliary verbs /se/ or /wo/ are inflected for the past tense, forming $/ \mathrm{s} \varepsilon=\mathrm{be} /$ for the former and $/ \mathrm{be} /$ or reduplicated $/ \mathrm{be}-\mathrm{be} /$ for the latter. The past progressive is used to talk about an ongoing event in the process of being carried out in the past, which often serves as the background to some other event which interrupts it. For instance:
a. Jángu jàngá-gú $s \varepsilon=b e-m$.
studies study-Ppl have=be.Perf-1sgS
'I was studying.'
b. Jángu jàngá-gú (be-)be-m.
studies study-Ppl Red-be.Perf-1sgS
'I was studying.'

Unfortunately, this background action usage is typically in participial form, since this is a common way to conjoin clauses. Thus, instead of actually having the auxiliary verb
inflected for past, it is instead a participle and the past timeframe is indicated by the main verb. This can be seen in the following:

```
Jángu jàygá-gú mí wó-gú mí ánìgè yèlc̀.
studies study-Ppl 1sgPro be-Ppl 1sgPro friend come.PerfL
'My friend came while I was studying.'
```

In English, this is translated as the past progressive ('I was studying') but in Tommo So, it takes a participial form (/jángu jàngá-gú mí wó-gú/). For more on the use of participles in subordination, see XXX.

As expected, the past progressive can also be used as a past iterative. Like the affirmative present progressive, there is not a restriction against using the 'be' auxiliary for the iterative, though this may be because in the past, /be/ is the more common auxiliary anyway. The following example demonstrates this form:
 Hogon era.L $=$ Def $=$ Assoc umm Q.Fr person-HumPl taxes pay-Ppl bi- $\hat{z}^{n}$ ?
be.Perf-3plS
'In the time of the Hogons, umm... did people pay taxes?'

The verb form /ségé-gú bi- $\varepsilon^{n} /$ does not refer to one instance of past paying that was in progress, but rather a habitual or iterative paying on the part of the people.

### 12.6.2.2 Negative

## DATA ON PAST NEGATIVE

12.6.3 Future

### 12.6.3.1 Affirmative

The auxiliary options condense in the future progressive. Here, the future form of /wo/, /bíy $\grave{\text {-d }} \mathrm{d} /$, is the only option. /síy $\grave{\text { - }}$ - $\grave{\text { c }} /$ is ungrammatical. Like the past progressive, the future progressive denotes an action in progress in the future which is often mentioned with respect to some single event that will take place, as in:
(xx) Ííyé dìgè nàm yèlદ̀-w yó jángu jàngá-nú bíyè-dè-m.
today evening.L sun.L come.PerfL-2sgS if studies study-Ppl be-Impf-1sgS 'If you come this evening, I will be studying.'

Note here that the participial suffix has changed from /-gú/ to /-nú/. This is characteristic of the future progressive, though it is not strictly necessary. Likewise, in clauses subordinated through the use of a participial suffix, there is a tendency to use /-nú/ if the main verb is in the future and /-gú/ otherwise. However, even in the future cases, /-gú/ can also be used. In other words, the distribution of /-nú/ is more restricted than that of /-gú/, and it seems to be correlated with the future. This is briefly illustrated in the following passage from a text, where the same verb /kébé/ 'gather' is used first with the suffix /-nú/ because the action of gathering had yet to be completed, then with /-gú/ as the completion drew near:
(xx) $\quad$ ع́ $\varepsilon^{n}=\mathrm{g} \varepsilon$ kébé-nú yàà, wó kébé-gú wó kébé-gú sáy-ní ash $=$ Def gather-Ppl go.Perf 3sgPro gather-Ppl 3sgPro gather-Ppl a.lot-Adv gàà-ndì-yì. big-Fact-MP.PerfL
'She went to gather ash, and as she gathered and gathered, it [the pile of millet stalks] became very big.'

For more on these participial suffixes in subordination, see XXX.

More examples. Can /siygdz/ ever be used? Can /-gú/ be used? Future iterative?

### 12.6.3.2 Negative

Examples of negative future

### 12.7 Subject agreement

While the preceding sections dealt with aspect, here I turn to another area of inflection, namely subject agreement. As I have noted elsewhere, Tommo So obligatorily marks subject agreement via suffixes in main clauses on finite verbs. The suffixes are as follows:
(xx) Subject agreement suffixes

| 1 sg | -m | 1 pl | -y |
| :--- | :--- | :--- | :--- |
| 2 sg | -w | 2 pl | -y |

$$
3 \mathrm{sg} \quad--\quad 3 \mathrm{pl} \quad(\mathrm{~N})
$$

The first and second person suffixes are straightforward, and the 3 sg is unmarked. The 3 pl requires the most explanation. I have marked it simply as N for "nasal", since this is the commonality that holds between all 3 pl forms. However, there is no single segmentable suffix; the form depends on the aspect.

In the following subsections, I will deal first with the historical development of the subject suffixes (12.7.1), followed by a discussion of the 3 pl (12.7.2), followed by a discussion of the phonetic interactions between subject and aspect marking (12.7.3).

### 12.7.1 Historical development of subject marking

The first and second subject suffixes bear a clear resemblance to their independent pronoun counterparts. It is easy to imagine the following developmental tracks:

| $(\mathrm{xx})$ | a. | 1 sg | Verb-mi | $\rightarrow$ Verb-m |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | b. | 2 sg | Verb-u $\rightarrow$ Verb-w |  |  |
| c. | 1 pl | Verb-emme $\rightarrow$ Verb-e? | $\rightarrow$ Verb-y |  |  |
| d. | 2 pl | Verb-e $\rightarrow$ Verb-y |  |  |  |

The 1 pl is the least clear of the cases, but it is possible that it derives from some historical concatenation of the $2 \mathrm{pl} / e ́ /$ plus the $1 \mathrm{sg} / \mathrm{mí} /$ (é-mí), and that it is the common root of the 2 pl that gives rise to the identical subject marking in the 1 pl and 2 pl. this is, however, pure speculation.

## Comparative data. Talk to Kirill.

There is no discernible connection between the 3 pl independent pronoun /bé/ and the nasality imposed by the 3 pl suffix.

### 12.7.2 3 pl suffix marking

While other subject suffixes are either unmarked or clearly segmentable from aspect marking, the same is not true for the 3 pl . It tends to fuse with aspect marking, with the usual change being the addition of nasality. The following table summarizes the portmanteau aspect-3pl forms in Tommo So:

AN suffix $\quad 3 p l$ AN suffix

| Impf | -dè | -dìn |
| :--- | :--- | :--- |
| Neg.Impf | - lè | -nnè |
| Neg.Perf | $-l i ́$ | - nní |
| PerfL | $-E,-$-i | $-i-$ है $^{n}$ |

The two negative forms have parallel behavior. The sonorant is nasalized and geminated, and the subsequent vowel and tone remain the same. Examples of these forms include:
a. Nòś kày kó wàgàdù kém púlò-m yèlè-nní. this Top this.DD time.L all Fulani-HumPl come-Neg.Perf.3plS 'As for this, at that time, the Fulbe hadn't come.'
b. Ǹdè bèlú sé-lè $=\mathrm{mo}=\mathrm{\jmath} \quad$ súgó gòé-nnè. person.L animal have-Neg $=$ Poss $=$ Obj sug $\boldsymbol{\rho}$ dance-Neg.Perf.3plS 'They would not dance the sugo for those who did not have animals.'

The /-din/ affirmative imperfect ending is extremely common, and may be related to the infinitive suffix /-dìm/. See section XXX for discussion. An example of the 3pl affirmative imperfect is as follows:
(xx) Éè ságárá-m kém yáà-dìn.
yes youth-HumPl all go-Impf.3plS
'Yes, all the young men would go.' [Text 2]

In the case if the defocalized perfect (PerfL), there is more segmentability, with $/-\grave{\varepsilon}^{n} /$ being a clear 3 pl suffix on quasi-verbs (see below). However, the form is still unusual in that while many verbs take some sort of front mid vowel as their final vowel in the defocalized perfect, this is always changed to /i/ before the 3pl. For example, while the usual final vowel in the defocalized perfect for /bàrá/ 'help' is /e/ (/bàrè/), in the following example with the 3 pl , we can see that it becomes $\mathrm{i} /$ :
(xx) Kém wó = ̀̀ bàrì- $\varepsilon^{n}$.
all $3 \mathrm{sgPro}=$ Obj help.PerfL-3plS
'Everyone helped him.' [Text 2]

Many aspects require the use of auxiliary verbs, as we have already seen. The following table summarizes how auxiliary verbs are inflected for the 3 pl :

| (xx) |  | Base form |
| :--- | :--- | :--- |
|  | 'be' | wo |
|  | 'was' | be form |
|  | wo $-\grave{\varepsilon}^{n}$ |  |

Here again, front mid vowels become $/ \mathrm{i} /$ before the 3 pl suffix $/-\mathrm{\varepsilon}^{\mathrm{n}} /$. Back vowels are not affected. Additionally, there appears to be some variation with the auxiliary 'have', with some speakers pronouncing it as concatenated /se-غ ${ }^{\mathrm{n}} /$ and others applying the pre-3pl raising rule to form /si- $\varepsilon^{n} /$.

The negative auxiliaries follow a similar pattern, with a few peculiarities. The forms are summarized below:

| (xx) |  | Base form | 3 pl form |
| :---: | :---: | :---: | :---: |
|  | be.Neg | òndú | òndí- ${ }^{\text {n }}$ |
|  | be.Perf.Neg | be-li | be-nne |
|  | have.Neg | sè-lı́ | sฉ̀-nné |

The suppletive negative of 'be' /òndú/ has a straightforward 3pl form, simply suffixed with $/-\grave{\varepsilon}^{n} /$ (with the /u/ of /òndú/ changing to [i], which could either be a morphophonological effect of the 3 pl suffix or simply a phonetic effect of fronting). The negative of 'have' also follows the pattern of /-lV/ $\rightarrow /-\mathrm{nnV} /$. The past negative form of 'be' /be-li/ almost follows this pattern, but in the 3pl, the final vowel changes to [e] instead of $/ \mathrm{i}$ /, creating [be-nne]. The tone seems to be underspecified across this form.

### 12.7.3 Phonetic interaction between aspect and subject marking

Apart from the 3 pl, other subjects are marked by adding a segmentable suffix onto the aspect marking. Nonetheless, some phonetic changes may still take place when the subject suffix is added. I will summarize those changes here.

### 12.7.3.1 $1 \mathrm{sg} /-\mathrm{m} /$

The 1 sg suffix /-m/ often causes a preceding /i/ (ex. in the negative perfect suffix /lí/) to become [u] under the influence of the $/ \mathrm{m} /$ 's labialization. Thus, a negative perfect form like /kànà-lí-m/ 'I did not do' will often be pronounced [kànàlúm] in rapid speech. Other vowels are unaffected.
12.7.3.2 $2 \mathrm{sg} /-\mathrm{w} /$

Like $1 \mathrm{sg} /-\mathrm{m} /, 2 \mathrm{sg} /-\mathrm{w} /$ also causes a preceding /i/ to back to [u], but with greater frequency. Instead of /kànà-lí-w/ 'you did not do', the usual pronunciation is [kànàlúw]. In fact, this seems to represent a wider tendency to avoid front-to-back diphthongs, since the sequences $/ \mathrm{e}-\mathrm{w} /$ and $/ \varepsilon-\mathrm{w} /$ are also effected. That is, in the imperfect, the sequence $/-\mathrm{d} \grave{\mathrm{c}}-\mathrm{w} /$ will often be pronounced [dı̀w] and forms like /be-w/ 'you were' are often pronounced [bow]. The general rule of backing is as follows:

$$
\left(\begin{array}{lll}
(\mathrm{xx}) & \mathrm{V} \\
{[\text {-back }]}
\end{array} \quad \rightarrow \quad[+ \text { back }] / ـ^{-w}\right.
$$

Since the underlying front-to-back diphthong can be pronounced in careful speech, I deem this a phonetic effect, though it is possible that it is a phonological rule that only occurs in rapid or casual speech.
12.7.3.3 $\quad 1 \mathrm{pl}$ and $2 \mathrm{pl} /-\mathrm{y} /$

Just as $/-\mathrm{w} /$ had a backing effect, so does $/-\mathrm{y} /$ tend to have a fronting effect. This can be seen most clearly on the quasi-verb auxiliary /wo/. With the 1 pl or 2 pl suffix, this tends to be pronounced [wey]. This is the same phonetic effect seen with the diminutive suffix, discussed in section XXX.

### 12.8 Imperatives and hortatives

The last subject to touch upon is mood, namely the imperative and hortative moods. Forms that would be in the subjunctive mood in other languages tend to be nominalized forms in Tommo So. These forms will be addressed in XXX.
12.8.1 Imperative

### 12.8.1.1 Affirmative

The base form of the affirmative imperative is the unsuffixed stem with a $\{\mathrm{H}\}$ overlay. At times, this sounds like $\{\mathrm{HL}\}$, but I believe this to be an intonational effect related to its position at the end of a sentence. Alternatively, the H overlay may only apply to the first syllable of the stem, allowing interpolation to take over from there to the end of
the sentence. More data are required to differentiate between the two hypotheses. OR IS IT

## LEXICAL TONE??

The imperative base is used alone in the singular. Thus, we can schematize the affirmative singular imperative as follows:
(xx) Affirmative singular imperative

$$
\operatorname{Verb}\{H\}
$$

The following table gives the imperative form of all verb types:
(xx)
a. Monosyllabic

| gòó | 'exit' | góó | 'exit!' |
| :--- | :--- | :--- | :--- |
| yóó | 'enter' | yóó | 'enter!' |

b. Disyllabic

| ćbé | 'buy' | ébé | 'buy!' |
| :--- | :--- | :--- | :--- |
| jòbó | 'run' | jóbó | 'run!' |
| jààá-ndá'cook' | jáá-ndá | 'cook!' |  |

c. Trisyllabic

| kílémó | 'play' | kílémó 'play!' |
| :--- | :--- | :--- |
| gòróló | 'snore' | góróló 'snore!' |

To form the plural imperative, the suffix /-j̀/ is added; everything else remains the same. For instance, the plural imperative of /ébbé/ 'buy' is /ébé-j̀/ and of /gòróló/ 'snore' it is /góróló-j̀/.

Textual examples of the imperative include the following:
a. Kándá ògó yòe-lè = nè
wó wá ògó=gé ǹ $=$ è
Kanda Hogon enter.Neg.Hab-Neg = Obl 3sgPro Quot Hogon = Def person.L
yà $a^{a}=$ j̀ óbó gì.
other $=$ Obj give.Imper say.PerfL
'[He said] Kanda would not be chief, he said give the Hogon-ship to someone else.'
[Text 2]
b. Wó wá sǒm kó yéllı̀ $=$ gè jòbó yóó wà... 3sgPro Quot horse that.DD come.Impf.Rel = Def run.Imper enter.Imper Quot '[She said] a horse is coming, run [and] enter!'

In the second example, we see that two imperatives can be put side-by-side with no separate chaining form. But is the LH of the first related to the chain? Or are imperatives lexically toned?
12.8.1.2 Negative

There are two forms of the negative imperative. In the first, what I call the "simple negative imperative", the stem has a $\{\mathrm{L}\}$ overlay, and it is followed by the suffix /-gú/. As we can see, then, the participial form and the negative imperative form are segmentally identical, but it is the tone of the stem that distinguishes one from the other. The singular requires no separate suffixation, and so the schematization is as follows:

## (xx) Simple negative singular imperative

$$
\text { Verb }\{L\} \text {-gú }
$$

This form is exemplified below for all verb types:
a. Monosyllabic

| gòó | 'exit' | gòò-gú | 'don't exit!' |
| :--- | :--- | :--- | :--- |
| yóó | 'enter', | yòò-gú | 'don't enter!' |

b. Disyllabic

દ́bé 'buy' èbè-gú 'don't buy!'
jòbó 'run' jòbò-gú 'don’t run!'
jàà-ndá'cook' jàà-ndà-gú 'don't cook!'
c. Trisyllabic

| kíĺ́mó | 'play' | kìlèmò-gú 'don't play!' |
| :--- | :--- | :--- |
| gòróló | 'snore' | gว̀ròlò-gú |

As in the affirmative imperative, the negative plural imperative is formed by adding the suffix $/-\mathrm{j} /$, which has the effect of fronting the vowel in /-gú/ to [i]. For example:
( xx ) yòò-gú 'don’t enter (sg)!' yòò-gí-j̀ 'don't enter (pl)!'
kànà-gú 'don't do (sg)!' kànà-gí-j̀ 'don't do (pl)!'

After the [i], the palatal nature of the plural suffix is not very audible. The suffix amalgam sounds more like [-gîn].

The other negative imperative form uses the verb stem in the affirmative imperative form (no suffixation, $\{\mathrm{H}\}$ overlay) and follows this with a form /nàà-gú/. This may look like it should mean 'don't forget' (/náá/ 'forget'), thus lending an overall positive meaning to the preceding verb stem, but consultants tell me this is not the case, that the construction is interchangeable with the simple negative imperative. For instance:
a. Kìlèmó káná nàà-gú!
music do.Imper NAA-Neg.Imper
'Don't make music!'
b. Kìlèmó kànà-gú!
music make-Neg.Imper
'Don't make music!'

Confirm that these mean the same thing. The plural of this form is as expected: /-j$/$ is added at the end, making the negative imperative complex /nàà-gí-j̀/.

### 12.8.2 Hortative

The hortative refers to the form of the verb urging a group of people including the speaker to do or not do something. It is the equivalent of English "let's". In Tommo So, this form is related to the imperative in that it takes the imperative as its base then adds a suffix to convert it to the hortative.

### 12.8.2.1 Affirmative

The affirmative hortative adds the suffix /-mó/ to the affirmative singular imperative base (see ( xx )). This is schematized below:
(xx) Affirmative singular hortative

$$
\text { Verb }\{\mathrm{H}\} \text {-mó }
$$

The singular hortative refers to the speaker plus one other person-essentially, a first person dual form ('you (sg) and me'). The plural hortative refers to the speaker plus more than one other ('you (pl) and me'). Once again, the plural suffix /-j̀/ from the imperatives is used to this end:

The following examples illustrate the use of the affirmative hortative:
( xx ) a. Kìdè kó hákílé ǹdémbé $=\mathrm{m} \varepsilon$ yèl̀̀ wà, bé
thing.L that.DD mind LogProPl=Poss come.PerfLQuot 3plPro
dánnì-yì $=\mathrm{g} \varepsilon \quad$ yàà-ná óbó-mó wà.
sit-MP.Perf.Rel = Def woman-HumSg give-Hort Quot
'[They said] that thing (idea) came into their minds, [when] they sat down, let's
give
[him] a wife.' [Text 5]
b. Íbé yáá-mó-j̀!
market go-Hort-Pl
'Let's (all) go to the market!'

It is not clear in (xxa) why the hortative is in the singular, since the group that is supposedly speaking is made up of all the animals. It is possible that the group as a whole counts as only one member along with another main player in the story, Hare, thus making it in effect a dual (animals + Hare). This is just speculation.

A seemingly crystalized use of the hortative is in greetings. Consider the following:

(xx) A: | Déné-mó! |  |
| ---: | :--- |
|  | spend.day-Hort |
|  |  |
|  | 'Good evening!' |

B: Àwóò, ú dènáa.
indeed 2sgPro spend.day.Perf
'Indeed, have you made it through the day?'

A: Dènáa.
spend.day.Perf
'I have [spent/made it through the day].'

If the person initiating the greeting comes upon a group of people, the plural form /déné-mó- $\mathfrak{\mathrm { y }} /$ is used. This exchange is unusual in that the first person seems to be inviting the
others to pass the day, an activity which has already taken place, as the next two lines of the greeting show. The same form is used in the morning, where the verb in question in /yáá/ 'spend the night'. It is not clear how to best analyze this. For more on greetings, see Chapter 21.
12.8.2.2 $\quad$ Negative

The negative form of the hortative is homophonous with the negative imperfect inflected for 1 pl subject. For example:
( xx ) Tòmmò Sòó sòé-lè-y.
Tommo.L speech speak-Neg.Impf-1pl
'Let's not speak Tommo So.'

For more on how to conjugate the negative imperfect, see section 12.2.1.2.
Double-check that these are homophonous, especially w.r.t. length of /e/.

### 12.8.3 Optative

The last imperative-related mood to be discussed is the optative, which is mainly used in benedictions with god (/Ámbá/) as the subject. It essentially translates to "May...".

### 12.8.3.1 Affirmative

The optative looks almost identical to the singular imperative, except that instead of having a $\{\mathrm{H}\}$ overlay, the verb stem has lexical tone. This may well be the only form in which the verb stem can stand alone without any suffixation or changes to its vowels or tone. Thus, for the affirmative optative, we can summarize the form as simply: Verb.

The use of the optative is almost entirely restricted to benedictions and blessings, wherein the subject is /Ámbá/ 'god'. This is usually placed at the beginning of the benediction, the optative verb form at the end, as in:
a. Ámbá ì̀ nòlú=le é=ỳ émmé-mó.

God child.L birthing = Assoc 2 plPro = Obj be.able-Caus
'May God make you (pl.) able to have children.'
b. $\varepsilon \varepsilon^{n}=\mathrm{g} \varepsilon \quad$ Ámbá dàgá-ndá.
marriage $=$ Def God be.good-Fact
'May God make this marriage good.'

For more common blessings, see XXX.

### 12.8.3.2 Negative

Data on negative optatives
Data on optatives with other persons

FURTHER ISSUES: AA-DE forms. AA = SE?
You'd better not! form, pg. 210

Kǒm mègáá bé $s \varepsilon=$ gè wó $=$ ỳ.
Koum boss.around.Perf 3plPro have.Rel=Def 3sgPro=Cop
'They [the people of Kanda Nem] bothered [the people] from Saoura Koum.'

## Chapter 13 VP and predicate structure

This chapter deals with the content and organization of verb phrases (VPs) in Tommo So, including a discussion of quasi-verbs and stative verbs. The outline of the chapter is as follows: Section 13.1 continues the discussion of regular verbs from the last chapter, adressing valency, VP structure, lexicalized subject + verb combinations, and cognate nominals. In section 13.2, I turn my attention to so-called "quasi-verbs" (Heath 2008), subminimal "verblets" expressing meaning of 'be', 'be in', etc., as well as stative verbs. I discuss the inflection of these quasi-verbs and the use of the copula, as well as a small number of morphologically irregular verbs that do not qualify as quasi-verbs. Section 13.3 treats the existential particle /yé/, section 13.4 deals with adjectival and adverbial predicates, and finally section 13.5 addresses possessive predicates with 'have'.

### 13.1 Regular verbs and VP structure

### 13.1.1 Valency

I first touched upon valency in Chapter 11 in the discussion of verbal derivation. Here, I extend that discussion to all verbs, derived and underived. All of the usual valency types are possible in Tommo So: intransitive, transitive, ditransitive. Some cases are clear, especially intransitive verbs of motion, or transitive verbs like 'take' or 'pick up'. For many verbs, however, the distinction between transitive and intransitive is blurred by the presence of cognate object nominals that are often used with a particular verb in the absence of any other specified object. It is not clear how these should be treated grammatically, that is, whether the obligatory presence of a lexicalized cognate nominal indicates transitivity or not.

Intransitive verbs, which have only a subject and no objects, are typically verbs of stance or motion in Tommo So. The most common regular (i.e. non-stative) stance verbs are /dànní-yé/ ‘sit down’, /úngúló/ ‘stand up’, and /ỳjí-yó/ ‘lie down’. All three can be made transitive through the derivational morphology discussed in Chapter 11 (exchanging the MP for the transitive suffix, in the case of /dànní-yź/ and /j̀jjí-yó/, or adding a factitive in the
case of /úngúló/). Some common motion verbs include /yàá/ 'go', /gòó/ 'go out', /dว̀ó/ 'arrive', and /yèlદ́/ 'come'.

These motion verbs often appear to take a direct object when a specific destination is added, since they do not require any postpositions. For instance:

| (xx) | Ségu gòáa Màndé yàà Màndé gòáa Bàmàkó yèláa. |
| :--- | :--- | :--- |
| Segou leave.Perf | Mande go.Perf Mande leave.Perf Bamako come.Perf |
|  | '[We] left Segou, went to Mande, left Mande, and came to Bamako.' [Arrival | text]

However, I argue that these are simply unmarked adverbial PPs, rather than true objects. The reasoning behind this is that when replaced by pronouns, these locations take adverbial pronouns such as /nìmbáà/ 'there' rather than true object pronouns like /wó/ or /kó/. To indicate motion towards a person, an oblique construction is used:

$$
\begin{align*}
& \text { Ḿmo=nè y } \quad \text { र́ĺ́. }  \tag{xx}\\
& 1 \text { sgPoss }=\text { Obl come.Imper } \\
& \text { 'Come to me.' }
\end{align*}
$$

In addition to intransitive verbs of stance and motion, Tommo So has a large vocabulary of descriptive intransitive verbs that are used as adjectives would be in English, such as /í1ً́/ 'be/become ripe' or /dùmó/ 'be finished'. Due to their semantics, these verbs often appear in a more restricted set of tense/aspects than other verbs, most often occurring in the present perfect to describe things:
(xx) $\quad$ Tàgá $=\mathrm{g} \varepsilon$ púrúgí-yaa $=$ wo.
shoe $=$ Def become.dusty-MP.Perf $=$ be
'The shoe is dusty.'

Transitive verbs with a subject and one object include the usual suspects like verbs of hitting and cutting like /kédé/ 'cut' or /dùmbó/ 'punch', verbs of perception like /y $/$ / 'see', /yè-nd $\varepsilon$ / 'look at', or /égǵ/ 'hear', and verbs involving direct contact with an object, like /bìnjé/ 'pull' or /jènné/ 'pick up'. The object can either be bare or take the object clitic /=j̀/, depending on conditions of animacy and focus (see section XXX).

Some verbs can be either intransitive or transitive with no overt morphological change. These ambivalent verbs were discussed in section 11.XXX. Examples of these sorts of verbs include /jògó/ ‘break (something)' or 'be broken’ and /kúndó/ 'put (something, somewhere)' or 'be put (somewhere)'. Generally, if a stem can be used both transitively and
intransitively, this must be achieved through derivational suffixes of the sort discussed in Chapter 11.

True ditransitive verbs in Tommo So take two direct objects, both of which are either bare or take the object clitic. Examples include /óbó/ 'give' and /táárá/ 'show'. It is the fact that neither object takes a postposition that qualifies these verbs as being ditransitive, since regular transitive verbs can usually take an indirect object (adjunct) with the addition of a postposition. Compare the following, where (xxa) is a ditransitive sentence and (xxb) a transitive sentence with an indirect object:

b. Ǹdè bèlú sè-lè $=\mathrm{mo}=\mathrm{\jmath} \quad$ súgó gòé-nnè. person.L animal have-Neg $=$ Poss $=$ Obj sugo dance-Neg.Impf.3plS 'They would not dance the sugo for those who did not have animals.'

In the (xxa), neither of the two objects /ə̀gó/ ‘Hogon/chiefdom’ or /ǹdè yàgá/ 'other person’ take a postposition; the latter takes the object suffix because it is human. In (xxb), on the other hand, /gòs/ 'dance' is a transitive verb, and so only one object can be direct/unmarked, in this case a kind of dance /súgó/. The (would-be) benefactor of this dance, /ǹdè bèlú sè-lè/ 'a person who does not have animals', must therefore take the postposition $/ \mathrm{mo} /$ for it to be licensed in the sentence; it is still human, though, and thus must take the object marker / = j$/$.

The causative suffix /-mó/ also increases the valency of the verb by one position; the object it licenses is a direct object that is either bare or takes the object clitic but requires no postposition:
a. Pédu sémaa $=$ be.
sheep slaughter.Perf=be.Perf
'He slaughtered a sheep.' (Transitive)
b. Mí=ỳ pédu sémé-mó-gú se.
$1 \mathrm{sgS}=\mathrm{Obj}$ sheep slaughter-Caus-Ppl have
'He is making me slaughter a sheep.' (Ditransitive)

## More data on the order of constituents

Aside from the gray area of cognate nominals, valency in Tommo So is fairly straightforward and similar to western languages. Double-check the lexical entries marked $\mathrm{o}+$ intr and make sure they're all like the null PP forms.
13.1.2 Verb phrase structure

The basic verb phrase in Tommo So can be said to be made up of the following elements:
(xx) a. Temporal adverbs
b. (Subject)
c. Objects (direct and indirect)
d. Other adverbs
e. Verb

While not actively part of the VP, the subject is presented in this list since it linearly intervenes between a temporal adverb (modifying the verb, hence part of the VP) which tends to occur clause-initially and the rest of the VP.

In relative and other subordinate clauses, where the verb lacks subject inflection, we see the following order of elements:
(xx) a. Temporal adverbs
b. (Subject NP)
c. Objects (direct and indirect)
d. Other adverbs
e. Subject pronoun
f. Verb

In the absence of subject inflection on the verb, an immediately preverbal independent subject pronoun is necessary.

### 13.1.3 Fixed subject-verb combinations

Expressions of weather and seasons often contain fixed subject-verb combinations, such as the following examples. Where applicable, I have listed the non-idiomatic meaning of the verb on its own:
(xx)
Subject
Verb
Gloss
a. With àná 'rain'

| àná | mìyé | 'be raining' |
| :--- | :--- | :--- |
| àná | dìmé | 'thunder rumble' <br> (cf. 'tamp down') |
| àná | páárá | 'rain lightly' |
| ànà sólú | sóló | 'drizzle' |
| àná | úló | 'cloudy weather end (in October)' |
|  |  | (cf. 'go up, arise') |

b. With báá 'air, day (in compounds), season'
\(\left.$$
\begin{array}{ccl}\text { báá dò } & \begin{array}{l}\text { 'rainy season approach' } \\
\text { (cf. 'arrive') }\end{array} \\
\text { báá } & \text { ésé } & \begin{array}{l}\text { 'be early in the morning' } \\
\text { (cf. 'be clear') }\end{array} \\
\text { báá } & \text { gòó } & \begin{array}{l}\text { 'spend whole wet season' } \\
\text { (cf. 'go out') }\end{array}
$$ <br>
báá \& 'spend the night' <br>

(cf. yàá 'go'?)\end{array}\right\}\)| 'be twilight' (púdúrú dòó) |
| :--- |
| (cf. 'be thick') |

c. With nǎm 'sun'

| nǎm | bàná | 'be hot season' |
| :--- | :--- | :--- |
| (cf. 'be red') |  |  |
| nǎm | túmmó | '(day) break' |

Ask if there are other sun expressions

Other expressions of emotion or mental state also take idiomatic subjects, typically a body part. For example, most expressions of emotion ${ }^{30}$ involve the liver /kíndé/ as subject (xxa), and certain physical states are expressed with /gìré/ 'eyes' as the subject (xxb):
(xx)
a. With kíndé 'liver',

| kínd $\varepsilon ́$ | bàná | 'get angry' <br> (cf. 'be red') |
| :--- | :--- | :--- |
| kínd $\varepsilon$. | kédí-yé | 'be frustrated' |

[^24]|  |  |
| :--- | :--- |
| kíndé | (cf. kédé 'cut') <br> 'be devastated' <br> (cf. 'sear') |

b. With gìré 'eyes'

| gìré | bìmmílí-yé | 'be dizzy' <br> (cf. 'turn') |
| :--- | :--- | :--- |
| gìré | gòó | 'be free, have free time' <br> (cf. 'go out') |
| gìré | púlí-yó | 'start making good money' <br> (cf. 'fray, unravel') |
| gìré | wìgílí-yé | 'be dizzy' <br> (cf. wìgílé 'wave around') |

In these expressions with body parts, the logical subject is expressed as a possessor of the body part, as in:
(xx) Gìré wómo púlí-yaa = wo.
eye 3 sgPoss fray-MP.Perf $=$ be
'She started making good money.'

The one exception to this is the expression /gìré gòó/ 'have free time', where the logical subject is expressed as an object, despite /gòó/ being an intransitive verb:
(xx) Mí= ̀̀ gìré góò-dè.
$1 \mathrm{sgPro}=\mathrm{Obj}$ eye go.out-Impf
'I am free.'

### 13.1.4 Fixed object-verb combinations

Verbs may have two types of fixed objects: 1) cognate nominals and 2) non-cognate nominals. Since there are far fewer instances of non-cognate nominals as the fixed object, I will address these first. The next section, section 13.1.5, will be wholly devoted to cognate nominals.

There are some verbs that can only be used with a fixed object; they have no existence of their own outside this construction and typically cannot be said alone. An example of this type is:
(xx) díi ìdí-yé 'bathe' díi 'water'
ǹdí-yé/ has no meaning without its fixed object /díi/ 'water'. This is the most extreme example. Verbs that can be used either on their own or with one particular object will be given in ( xx ).

Other cases are like the fixed subject-verb combinations seen above. The verb has its own meaning, but when combined with certain fixed objects, it takes on an idiomatic lexicalized meaning. Like the subject-verb combinations, we see here temporal expressions, particularly with /àgá/ 'morning’ (xxa) and emotional expressions with /kíndé/ 'liver’ (xxb).

## (xx)

| Object | Verb | Gloss |
| :---: | :---: | :---: |
| a. With àgá 'morning' àgá | dàmbá | '(herder) get up earl (cf. 'push') |
| b. With kíndé 'liver' |  |  |
| kíndé | ćlé-ndí-yé-mó | 'make happy' <br> (cf. 'sweeten') |
| kíndé | kédé | 'frustrate' <br> (cf. 'cut') |
| kíndé | yàmí-lé | 'disappoint' <br> (cf. 'ruin') |
| c. With gìrè-ý 'sleep' gìrè-ý | jùngó | 'doze' <br> (cf. 'bob (head)') |

c. With gìrè-ý 'sleep, gìrè-ý jùngó (cf. 'bob (head)')

The last example is unusual in that the verb on its own is intransitive, and yet it appears to take an object in this idiomatic expression.

All of the fixed combinations we have seen so far have unusual meanings, diverging from the regular use of the verb. However, Tommo So has many object-verb combinations that are compositional and but that are restricted to that combination of object and verb; that is, the verb may be used on its own, but when it occurs with an object, there is always one object it is used with. Most of these involve the verb with its cognate nominal, but some are not cognate. The following list gives some common fixed object-verb combinations:
(xx)
a. kínu úmbó 'blow nose'
b. kúú éré 'braid (literally 'braid head')'
c. mìnné kíbé 'clear field’
d. nùmó ááyí-yé 'cross arms'
e. nóm níyé 'emit an odor'
f. sóngó sómó 'make fence of branches'
g. tálu káygí-ré '(hen) squawk while laying egg' tálu $=$ 'egg'

What all of these expressions have in common is that the verb is typically not used except with the noun given. These are like the first example, /díí ǹdí-y $\varepsilon /$, only not quite as strong, since most of these verbs here can at least be used alone (with the object implied). Not listed here are nouns that only exist with one given verb, of which there are many, because generally the verb used is a very general one like 'do' or 'put'. This is simply a question of vocabulary, and many languages have such combinations. Restrictive verbs are much less common.

### 13.1.5 Cognate nominals

A striking feature of the Tommo So verbal system is the heavy use of cognate nominals as the object of a verb. That is, one does not simply dance, one dances a dance, or one does not breathe, one breathes a breath, etc. This issue was first addressed in Chapter 6 on nominal derivation, though the exact direction of the derivation between noun and verb is not a trivial matter. I will make no stand on the matter here, simply reporting the shapes of cognate nominals with their verbs. I leave the analysis of this system for future work.

### 13.1.5.1 Phonological resemblance between noun and verb

Cognate nominals fall into two broad phonological categories: identical and (epenthetic) u-final. Identical nouns have the same segmental make-up as the verb, while ufinal nouns appear to have lost the last vowel of the verb stem, which is then often replaced with a tonally underspecified epenthetic [u]. In this subsection, I will address all patterns of correspondence found in the lexicon.

First, there are a handful of monosyllabic verb stems with segmentally identical cognate nouns. As is generally the case with identical cognate nouns, these are more likely to occur if the verb stem has only back mid vowels, but it is not uncommon with all midvowel stems. /a/ stems are the least likely to have identical cognate nouns, but we find instances of these too. Monosyllabic cognate nouns are summarized below, split up by the tone pattern of the noun:
(xx)
Noun
Verb
Gloss
a. $\{H\}$

| dóá | dò | 'pound (some pounding)' |
| :--- | :--- | :--- |
| góó | gò | 'dance (a dance)' |

b. $\{L H\}$
sò
sóó
'speak (speech)'

Notice that the verb's tone is always predictable, and hence it is the tone of the noun that must be lexically listed. Curiously, in this short list, it seems that the tone of the noun is always opposite that of the verb. We will see this tendency again in disyllabic stems. There is also one unusual case among monosyllabic verbs where the cognate nominal is tonally identical and identical in terms of its vowel, but the initial segment is voiced in the nominal. This pair is /dós ${ }^{n} \operatorname{t}^{\prime} \mathbf{s}^{n} /$ 'do some writing'. This is not a productive pattern, and no other instances are attested of a voicing mismatch between noun and verb.

Many disyllabic verb stems have segmentally identical cognate nominals, including the following:


| púyó | púyó | 'discolor due to moisture' |
| :--- | :--- | :--- |
| tómbó | tómbó | 'take a jump' |
| túyó | túyó | 'gather millet ears (on the side of the field)' |
| wóló | wòló | 'build a simple animal pen' |

b. $\{L H\}$

| bèré | bèré | 'get pregnant' |
| :--- | :--- | :--- |
| dùyó | dùyó | 'insult' |
| èlmé | élmé | 'tell story' |
| kògó | kógó | '(snake) shed its skin' |
| pàmbá | pámbá | 'compete (a competition)' |
| pìyé | píyé | 'cry (a cry)' |
| sìyé | síyé | 'ululate' |

Looking at this list, we see that like monosyllabic noun/verb pairs, the tendency is to have the noun and the verb take opposite tone. This results in more voiced stop-initial nouns having $\{\mathrm{H}\}$ tone, but curiously, about an even split for voiceless stop- and vowel-initial nouns. It is not clear whether this trend is significant, and if so, how it would be modeled in the grammar.

In at least one case, the cognate nominal of a disyllabic stem is reduplicated, resulting in a trisyllabic nominal. This case is /gá-gálá gàlá/ 'inherit (an inheritance)'. In another few cases, the verb stem carries derivational morphology, as in /kò̀ló kóĺlí-yá/ ‘scrape off hair from animal hide using a blade’, /j̀jó j̀jí-yó/ ‘lie down’, or /síĺ́ sílí-yé/ 'have an out-of-wedlock sexual relationship', among others. These could be said to be verbs derived from nouns through the use of derivational suffixes. See section XXX for more on denominal derivation.

The same is true for trisyllabic stems. Note that here we not only have variation between $\{\mathrm{H}\}$ and $\{\mathrm{LH}\}$, but within $\{\mathrm{LH}\}$, we have variation in where the tone break is located in the noun. It always occurs after the first syllable for the verb:
(xx) Noun Verb Gloss
a. $\{H\}$

| bógóló | bògóló | 'shout (a shout)' |
| :--- | :--- | :--- |
| kémínj $j$ é | kémínjé | 'cook colostrum (to make a cheese)' |
| tóyóló | tónóló | 'make a hubbub' |

b. $L H H$
(pòòbí-yó póóbí-yó 'whistle (a whistle)')

## c. $L L H$

| bògòló | bògóló | '(billy-goat in rut) bellow (a bellow)' |
| :--- | :--- | :--- |
| (òdùgíyé | ódúgíyé | 'cough (a cough)') |
| tògìró | tógíró | 'oversow' |

There is less of a tonal tendency with trisyllabic stems, especially once the complication of LLH tone patterns is taken into account.

Some cognate nominals do not fall into either class; that is, they are not segmentally identical with the verb, nor do they end in $/ \mathrm{u} /$. Typically, these fall into one of two classes: a) the noun is disharmonic, and harmony is repaired in the verb stem, and b) the noun has a long final vowel that is repaired in the verb. Examples of this kind include:

| a. bàré kálé | bàrá <br> kálí-yé | 'call a traditional meeting' 'come to an end' |
| :---: | :---: | :---: |
| b. járàà | jàrá | 'tell a riddle' |
| kòòdóó | kóódó | '(dog) howl (a howl)' |

In both situations, changes are made to the noun stem so that it conforms to licit verb stem structure.

By far the largest class of cognate nominals are $u$-nominals. In these nominals, the final vowel of the verb stem corresponds to an epenthetic toneless [ $u$ ], which may acquire tone by tone shift if the tone pattern is $\{\mathrm{LH}\}$ and the stem no more than two moras (see section XXX). There are a number of different sub-groups within the u-nominals. These are: 1) regular u-nominals with no vowel changes; 2 ) u-nominals with vowel changes; and 3 ) monosyllabic nominals formed with /-y/. Morphologically complex nominals and compounds nominals are discussed in sections 13.1.5.3 and 13.1.5.4, respectively.

I will first address regular u-nominals, which I deem those cognate nominals segmentally identical to the stem except for the final vowel. They may be either tonally identical or divergent. Note that there are many more derived nominals than there are cognate nominals. I address here only nouns that are often paired with a cognate verb stem.

Monosyllabic verb stems and their nominals are analytically the most difficult category. This is because in the cognate nominal, the second half of the long vowel is replaced with $/ \mathrm{w} /$, suggesting that there is some phonological reality to the $[u]$ of $u$ nominals beyond epenthesis. I will not analyze this system here. There are actually no cases of regular monosyllabic u-nominals, but we will see examples of them in the vowelchanging set in (xx).

Disyllabic u-nominals are the most prevalent, since disyllabic stems are the most prevalent. Once again, we see a trend that cognate nominals often reverse the tone of the verb stem, but it is not as robust as the segmentally identical cognate nouns:
(xx)
a. $\frac{\text { Noun }}{\{H\}}$

| mómu | mòmó |
| :--- | :--- |
| dáànu | dàáná |
| dámmu | dàmmá |
| dígu | dìjé |
| ém $(\mathrm{u})$ | émé |
| jángu | jàngá |
| mélu | mèlé |
| nínnu | nínné |
| sélu | sélé |

nearly

| sénu | séné |
| :--- | :--- |
| tálu | tálá |
| tínu | tíné |
| tóóru | tóóró |

b. $\{L H\}$

| yìmú | yímé |
| :--- | :--- |
| jàdú | jàdá |
| jègú | jègé |
| kàárú | káárá |
| kàrú | kárá |
| kòlú | kóló |
| pǒw(u) | páwá |
| sìdú | sídé |

## Gloss

'laugh (a laugh)'
'thicken'
'(milk) form a film'
'tie a knot'
'milk (a cow)'
'study'
'whisper'
'breathe (a breath)'
'extract a little liquid (from a
dry water jar)'
'pray (a prayer)'
'lay an egg'
'chop wood'
'give an instruction'
'die (a death)'
'do a calculation'
'(woman) dress up'
'clear throat'
'scarify'
'say something false'
'leave collateral'
'draw lines by hand'

In the case of /ém(u)/ 'milk' and / $\operatorname{pozw}(\mathrm{u}) /$ 'collateral', the [u] is in parentheses since it is not normally pronounced. As with the segmentally identical cognate nouns, we have one case where the cognate nominal is reduplicated. This is /kà-kàlú kálá/ 'tell a lie', possibly related by sound symbolism to /kòlú kóló/ 'say something false'. We also have a few cases wherein the verb stem but not the nominal stem carries the mediopassive suffix. These examples are summarized below:

| (xx) | àùrú | áúrí-yé | 'come to an agreement' |
| :--- | :--- | :--- | :--- |
|  | jáw | jàwí-yé | 'have a fight' |
|  | pònnú | pónní-yé | 'put on pants' |
|  | tímu | tímí-yé | 'bow and pray' |

We will see some cases in section 13.1.5.3 where the derivational suffix on the verb is actually present on the nominal as well.

We find only a small number of trisyllabic u-nominals. There are not many trisyllabic stems in the language, and it seems that most of them tend to have segmentally identical cognate nominals. Nonetheless, we do find the following examples:
(xx)
a. $\quad \begin{aligned} & \text { Noun } \\ & \{H\}\end{aligned}$
sógúru
wéwílu
b. LLH

Verb
sógóró
wèwílé
àdùbú
ádúbá
'think (a thought)'

The first example is interesting in that the verb, while it does undergo second syllable weakening, is identified as having an $/ \mathrm{o} /$ as the second vowel. The noun, on the other hand, takes $/ \mathbf{u} /$. Perhaps speakers harmonize the middle vowel with the final vowel, though if the final $[\mathrm{u}]$ on /sógúru/ is epenthetic, this would be unexpected. The other cases show a high vowel in second syllable position in both the noun and the verb.

About an equal number of u-nominals undergo a stem vowel change. This change always results in a [-ATR] mid vowel or /a/ becoming a [+ATR] mid vowel. Comparing /a/ and [-ATR] stems in the list of regular u-nominals above to those in the vowel changing list, we find about an even split: 11 do not undergo the vowel change, while 15 do. In the case of [+ATR] stems, we have no way of knowing whether the [+ATR] vowel in the noun is just a retention of the stem vowel or the result of vacuous vowel change. It seems that stems with an initial high vowel are immune to this change. In the following list, stems are grouped by underlying vowel and are listed in order of stem length:
(xx)

Noun
a. /a/
bòrú
wòlú
bàrá
wàlá

Gloss

$$
\begin{aligned}
& \text { 'make an increase' } \\
& \text { 'farm, cultivate' }
\end{aligned}
$$

sónju
yólu
bóóru
gómbílu
b. $/ \varepsilon /$
débu
jébu
sègú
c. $/ \mathrm{o} /$

| tów | tóó |
| :--- | :--- |
| dónu | dònó |
| jóbu | jòbó |
| jópu | jòń́ |
| tògú | tógó |

'(merchant) do business'
'take a stroll'
'make a request'
'divide into subgroups'

$$
\begin{aligned}
& \text { 'attack' } \\
& \text { 'utter a curse' } \\
& \text { 'pay tax' }
\end{aligned}
$$

'slash earth for planting'
'sell'
'run a race'
'perform a healing'
'cut abscess with blade to let out pus'

In the last two examples of /a/ stems, we see the first examples of derivational suffixes on the verb stem remaining present in the cognate noun. I will give further examples of this kind in the next subsection. The first example in (xxc) shows a case where a monosyllabic verb stem has the second half of its vowel replaced by /w/ (/tóó/ $\rightarrow$ [tów]). As I mentioned above, it is not clear what the status of this /w/ should be.

A small number of monosyllabic cognate nominals are formed with $/ \mathrm{y} /$ rather than $/ \mathrm{w} /$. Note that there are more general nouns derived with $/ \mathrm{y} /$ in the lexicon than pure cognate nominals. For instance, /bóy/ 'name' is derived from /bòó/ 'call', but the phrase /bóy bòó/ is not used to mean something like 'call'. The noun/verb pairs below are used this way:
(xx)
Noun
Verb
Gloss
a. $\{H\}$
jóy ${ }^{\text {n }}$
jò ${ }^{\text {n }}$
b. $\{L H\}$

| nǒy | nóó | 'sew' |
| :--- | :--- | :--- |
| tǒy | tóón | 'do some writing' |

Note that /tóśn/ 'write' has two cognate nominals, /dóón/ and /tǒy ${ }^{\mathrm{n} / \text {. The former can also be }}$ used as a noun for 'paper', while the latter refers to the act of writing specifically.

### 13.1.5.3 Morphologically complex cognate nominals

The cognate nominals given in the last section are basically monomorphemic, unless one analyzes [ u$]$ as a nominalizer. The only morphologically complex examples involved a transfer of the verb's derivational morphology onto the cognate noun. Other examples of this process include the following:

| (xx) | a. | áyú-lu ání-lé | 'intervene' | (reversive?) |
| :--- | :--- | :--- | :--- | :--- |
|  | b. | sèlù-mú sélé-mó- | 'ask a question' | (causative?) |
|  | c. | yòìrú yóí-ró | 'do spot sowing' | (transitive?) |

There is a pattern to these verbs, namely that the derivational suffix on the verb seems lexicalized, lacking semantic compositionality. It is no surprise, then, that these are the verbs whose suffixes appear in the cognate nominal.

In other cases, the cognate nominal is morphologically complex while the verb stem is not. The attested examples divide into four categories: 1) the cognate nominal carries a deverbal derivational suffix /-lé/ or /-yé/ (see section XXX); 2) the cognate nominal is diminutive, carrying the $/-y$ ý/ suffix (see section XXX); 3) the cognate nominal undergoes the unusual X-ma-X reduplication pattern (see section XXX); or 4) the cognate nominal carries the frozen prefix $/ \mathrm{a}(\mathrm{N})$-/ (see section XXX). Examples of each type are provided in (xxa), (b), (c), and (d) below:
(xx) a. Deverbal derivational suffix

| nìgí-yé | nígé | 'count' |
| :--- | :--- | :--- |
| gónjíl-lé | gànjá | '(bird) scratch' |
| nóbí-lé | nábá | 'carve' |

b. Diminutive suffix

| dàyà-ý | dàyá | 'spot sow in moist areas' |
| :--- | :--- | :--- |
| tùmmò-ý | túmmó | 'make a mound' |

c. $X$-ma- $X$ reduplication
bégu-mà-bégu bègé 'have the hiccups'
d. Frozen /a(N)-/ prefix

$$
\text { àn-tólu } \quad \text { táálá } \quad \text { 'go on collective hunt' }
$$

Both the deverbal nominalizers and the diminutive suffix impose their own tone patterns on the noun stem. /-lé/ imposes all $\{\mathrm{H}\}$, /-yé/ imposes $\{\mathrm{LH}\}$, and /-ý/ imposes $\{\mathrm{L}\}$. Notice also that both of the examples with /-lé/ show the vowel change phenomenon discussed above, as does the form /àn-tólu/ from /táálá/.

### 13.1.5.4 Compound and modified cognate nominals

A final source of complex cognates comes from compound cognate nominals and cognate nominals that are modified by adjectives in lexicalized chunks. The majority of compound cognate nominals are canonical compounds, but at least one is an example of a pseudo-genitive compound; regardless of form, all are right-headed. All cognate nominal forms are represented (segmentally identical, disharmonic nominal stems, regular unominals, vowel changing u-nominals, etc.). They are grouped together by type below. The pseudo-genitive compound is marked with an asterisk (*):
a. Segmentally identical cognate nominals
àyà sòs/sǒy sós 'utter spells'
mouth.L speech

| nàm-dènù bíŕ́ <br> day.labor.L work | bìré | 'do day labor' |
| :--- | :--- | :--- |
| nìnnù $\quad$ góróló <br> breath.L snore | gòróĺ́ | 'snore' |

*yúú òmò ómó 'cook millet porridge'
millet porridge.L
b. Disharmonic nominal stems

| tàbà kámbé | kámbá |
| :--- | :--- |
| ? ?cook ground millet between two hot |  |
|  |  |

c. Regular u-nominals

| àgà wègú <br> morning.L half.day wègé | 'spend entire morning' |
| :--- | :--- | :--- |

dìgè gíru gìré 'take animals to pasture in the evening' evening.L herding
ìyè sínju sínjé 'sob'
tear.L sobbing
mòòsì kàrú kárá 'cut a long scarification on the
cheekbone'
Mossi.L scarification
nùmò kólu kóló 'snap fingers'
hand.L snapping
yànà yélu yèlé 'have a dream'
night.L dreaming
yìmù póó-ndu póó-ndó 'give death condolences'
death.L greetings
c. Vowel-changing $u$-nominals
[ànà màà] tów tóś 'do anticipatory planting after an early
rain'
[rain.L dry.L] sowing
nàm-dènù wòlú wàlá 'do day labor farming'
day.labor.L farming

There is one unusual compound case, /àyà-mà-kà-kàá káá/ 'yawn', that involves reduplication of the head noun (/kà-kàá/) and the lexicalized linking particle /-mà-/ between the head and /áná/ 'mouth'.
ànù tà̀ìlé tání-lé 'take a step'

In addition to compounds, the cognate nominal may also be modified by an adjective. This indicates that it does not form an inseparable chunk with the verb stem; it can be accessed as a regular noun. Examples include:
(xx) a. kà-kàlù gém kálá

Red-lie.L black lie 'tell an outright lie'
b. sòò bónú-ndu sóś speech.L hide-Fact.Nom speak 'speak secret words'
c. bìrè pàdíyé bìré work.L bad work 'do bad work'

While the first two have an idiomatic flavor to them, the last example in (xxc) is clearly compositional.

### 13.1.5.5 Grammatical status of the cognate nominal

The preceding subsections have given a near-exhaustive list of cognate nominal/verb pairs. But how does the cognate nominal function in Tommo So? Generally, if the verb can take a more concrete noun as an object, then the cognate nominal is a default. For example, we have seen in ( xx ) that the verb /gòs// 'dance' can take a concrete object, like the kind of dance the /súgó/. If a specific dance type like this is not used, then the cognate nominal /góś/ takes its place; the verb will almost never stand on its own.

## Can a verb ever occur with both a cognate nominal and another object?

**FINISH THIS SUBSECTION

### 13.2 Copula, quasi-verbs and statives

This section deals with those elements that can occupy the V slot without being regular inflectable verbs. I will first treat the copula in section 13.2.1, dealing only with its combination with nouns; I address adjectival predicates in section XXX. I then turn to the various existential and locative quasi-verbs in section 13.2.2. In section 13.2.3, I deal with defective stative verbs that either follow different inflectional rules than regular verbs or that do not have a full inflectional paradigm; hence, they are defective.

### 13.2.1 Copula clitics

Tommo So has special copula clitics only for present tense. If one wishes to predicate a noun or adjective in a different tense, existential quasi-verbs must be used. See section 11.2.2.

### 13.2.1.1 Affirmative copula

The most common form of the copula is the 3sg, which takes the form $/=\grave{n} /$, identical to the object marker. It is added at the end of the DP after the determiner and plural marking but before any clause-final particles like quotative /wa/ or emphatic /de/. It is a low-toned palatal nasal in the dialect of Tédié, but in other dialects such as Sarédina (my own field notes) or Ningari (Plungian 1995), it is a uvular nasal/=ỳ/. C-final stems obligatorily carry an epenthetic [ $u$ ] before the copula, which is fronted to [i] due to the effects of the palatal.
(xx)
a. Sèmmèlè tàná $=$ le émmé $=$ le náá $=g \varepsilon \quad$ túmó $=$ ỳ, Semmele Taya $=$ Assoc 1plPro $=$ Assoc mother $=$ Def one $=$ Cop báá $=\mathrm{g} \varepsilon \quad \mathrm{d} \varepsilon \mathrm{y}^{\mathrm{y}}=\mathrm{j}$.
father $=$ Def different $=$ Cop
'Semmele Taya and us, the mother is the same, the father is different.'
[Text 2]
b. Wó kày ògò kòmbó= j̀.

3sgPro Top Hogon war = Cop
'That, that was the war of the Hogons.'
[Text 2]
c. Gèmí=ỳ.
agama.lizard = Cop
'It's an agama lizard.'

The same form the copula can even be used for persons other than the 3 sg in the presence of an overt pronoun, as in:
(xx)
a. Mí jàngù jángí-né=ỳ.

1sgPro studies study-HumSg $=$ Cop
'I am a student.'
b. Ú mí ánìgè = j̀.

2 sgPro 1 sgPro friend.HL $=\mathrm{Cop}$
'You are my friend.'
c. Ànà $-\mathrm{m} \quad$ nò $=$ mbé púl̀̀ $-\mathrm{m}=\mathrm{mbe}=\mathrm{y}$.
man- HumPl this $=\mathrm{Pl} \quad$ Fulani- $\mathrm{HumPl}=\mathrm{Pl}=\mathrm{Cop}$
'Those men are Fulani.'

The identity of the subject is identified by the independent pronoun, which allows the basic copula to be used. In the absence of the pronoun, the phrase would take on the neutral 3sg reading. For instance, /Mí ánìgè $=\mathrm{j} /$ would mean ' $\mathrm{S} / \mathrm{he}$ is my friend'.

Alternatively, the copula can be conjugated specifically for other persons, which I summarize in the following table:
(xx)

$$
\begin{array}{lll}
1 \mathrm{sg}=\grave{\mathrm{m}} & 1 \mathrm{pl} & =\mathrm{y} \\
2 \mathrm{sg}=\grave{\mathrm{w}} & 2 \mathrm{pl} & =\grave{y} \\
3 \mathrm{sg}=\grave{\mathrm{y}} & 3 \mathrm{pl} & =\grave{\mathrm{y}}
\end{array}
$$

There is no difference between the animate and inanimate copula, nor is there a difference between the singular and plural third person copula: both are $/=\mathrm{j} /$. They are distinguished by the fact that the 3 pl will typically follow the plural clitic. The first and second person clitics are segmentally identical to the verbal subject agreement suffixes, but as the copula, they are L-toned:
(xx)
a. Ú gèmí = ̀̀
$2 \mathrm{sg} \operatorname{Pro}$ agama. $\mathrm{lizard}=2 \mathrm{sgCop}$
'You are an agama lizard.'
b. Émmé kém nònú jàygù jángí-m = mbe-y.

1 plPro all here studies.L study.Nom-HumPl $=\mathrm{Pl}-1 \mathrm{plS}$
'We are all students here.'
c. Bé Kòígé sàà ùlùm $=m b e=$ ỳ.

3plPro Koige sister.L children. $\mathrm{L}=\mathrm{Pl}=\mathrm{Cop}$
'They are Koige's matrilinear children.' [Origin text]

In simple expressions like 'It's me!' or 'It's you!', the 3 sg (basic) clitic is added to the relevant pronoun, yielding $/ \mathrm{mí}=\mathrm{j} /$ or $/ \mathfrak{u}=\mathrm{j} /$, respectively. In texts, this formation with the 3 sg pronoun is extremely common. It is often used to sum up a situation in a matter of
fact way. This construction gives an air of "and that's how it was" to whatever precedes it. This air may be related to focus, though how exactly is not clear. For example:

```
a. Wó yàà néé, Tó-tóyó \(=\mathrm{mo}\) tígé \(=\mathrm{g} \varepsilon \quad\) wó \(=\) ǹ. 3 sgPro Top now Tongo-Tongo \(=\) Poss surname \(=\) Def 3 sgPro \(=\) Cop 'That now, that is Tongo-Tongo [village]'s last name.' [Text 3]
```

b. Émmé $=\mathrm{j}$ gà $\mathfrak{m} \mathrm{m} \varepsilon$ $=\mathrm{g} \varepsilon$ díyé gòrò bánu $=\mathrm{g} \varepsilon$ émmé
$1 \mathrm{plPro}=$ Obj a.lot love.Rel $=$ Def for hat.L red $=$ Def 1 plPro
b b́lè $=\mathrm{g} \varepsilon \quad$ wó $=\mathrm{n}$.
find.Perf.Rel $=$ Def $3 \mathrm{sg} \operatorname{Pro}=\mathrm{Cop}$
'It was because he [our father] loved us very much that we got the red hat.'

As these examples indicate, there is no special form the copula takes when added to an inanimate pronoun or demonstrative; Tommo So does not encode animate/inanimate distinctions, aside from the very limited human marking. For instance, 'Here!' or 'That's it!' is simply $/$ nò $=\mathfrak{j} /$, whether the thing being referred to is animate or inanimate.

For the use of the copula in questions, see section XXX.

### 13.2.1.2 Negative copula

The negative equivalent of $/=\mathrm{h} / \mathrm{is} /=1 \varepsilon /$. On nouns, this clitic is L-toned and has no effect on the tone of the preceding word. On adjectives, however, the tone is variable. It can take the same tone pattern as after nouns, or it can be H-toned and impose an all L overlay on the preceding adjective. Because of this tonal variation, I analyze the negation on adjectives as being a suffix, capable of interacting tonally with the stem, whereas the negative copula on nouns is a tonally independent clitic. See section XXX for a discussion of adjectival negation. Adjectival predicates will be addressed in this chapter in section 13.3.1.

This negative clitic is conjugated for subject agreement in the same way as the affirmative clitic, except that the third person subjects are null:

$$
\begin{array}{lll}
1 \mathrm{sg}=1 \varepsilon-\mathrm{m} & 1 \mathrm{pl} & =1 \varepsilon-\mathrm{y}  \tag{xx}\\
2 \mathrm{sg}=1 \varepsilon-\mathrm{w} & 2 \mathrm{pl} & =1 \varepsilon-\mathrm{y} \\
3 \mathrm{sg}=1 \varepsilon & 3 \mathrm{pl} & =1 \varepsilon
\end{array}
$$

Once again, the 3 sg and 3 pl have the same form (null) and they are differentiated in context by the fact that the 3 pl follows the plural clitic:

$$
\begin{equation*}
\mathrm{g} \varepsilon \mathrm{c}_{\mathrm{m}}=1 \varepsilon \quad \text { vs. } \quad \mathrm{g} \check{\mathrm{c} m}=\mathrm{mbe}=1 \varepsilon \tag{xx}
\end{equation*}
$$

'He is not an agama lizard' 'They are not agama lizards.'

The following are examples of the negative clitic after nouns and pronouns:
( xx ) a. Dògò-nó = le-m.
Dogon-HumSg $=$ Neg.Cop-1sgS
'I am not Dogon.'
b. Émmé dògǒ- $\mathrm{m}=\mathrm{mbe}=1 \varepsilon-\mathrm{y}$.

1plPro Dogon-HumPl=Pl=Neg.Cop-1plS
'We are not Dogons.'
c. $\mathrm{N}_{\mathrm{y}} \mathrm{o}^{=}=1 \varepsilon$.
this $=$ Neg.Cop
'It's not this.'
13.2.2 Existential and locative quasi-verbs and particles

Tommo So has a complex set of existential and locative quasi-verbs, of the subminimal form CV. Unlike in Jamsay (Heath 2008), these quasi-verbs are not sensitive to animacy. Rather, they tend to encode pragmatic information such as certainty. The main existential and locative quasi-verbs are as follows, all given in the affirmative present:
a. wo 'be, be in'
b. yo 'be, be in' (certain)
c. ko 'be, be in' (present, can attest to it)
d. to 'be in(side)'

I will address each in turn.

### 13.2.2.1 /wo/

The first quasi-verb, /wo/, is the most general. We have already seen it as an auxiliary verb in the present perfect and in the progressive (see Chapter 12). It can be existential ("there is"), a locative quasi-verb ("be (somewhere)") or simply a copula-like quasi-verb used with adverbs and adjectives. For more on this last use, see section XXX.

In its existential use, the subject and a locative phrase must be present; they can come in either order before the quasi-verb (S-PP-V or PP-S-V). For example:
a. Nònú $=$ le $\quad$ Dúmásá $=l e=n \varepsilon \quad$ bàndí= $=$ mbe jóó-ni $=$ wo- $\varepsilon^{n}$. here $=$ Assoc Douentza $=$ Assoc $=\mathrm{Obl}$ bandit $=\mathrm{Pl}$ many-Adv $=$ be- 3 plS 'There are a lot of bandits between here and Douentza.'
b. Bèlú $=\mathrm{mbe}$ bándáy-kálá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ jóó-ni $=w 0-\varepsilon^{\mathrm{n}}$. animal $=\mathrm{Pl} \quad$ courtyard $=\mathrm{Def}=\mathrm{Obl}$ many $-\mathrm{Adv}=\mathrm{be}-3 \mathrm{plS}$ 'There are a lot of animals in the courtyard.'

This use is indistinguishable from a simple locative quasi-verb, which can be used to express any locative arrangement except 'inside' (expressed by /to/ 'be in'). In this capacity, /wo/ must follow either the locative or oblique postposition or a locative adverb, as in:
(xx)
a. Î́ ǹ ném $=\mathrm{m} v$ yàbáá = wo ma wa.
child LogPro $=$ Poss where $=$ be or? Quot
‘[She asked] where is my child?' [Text 5]
b. Òlù pédu gìné ònnù $=n \varepsilon=$ wo .
bush.L sheep house back. $\mathrm{L}=\mathrm{Obl}=$ be
'A deer is behind the house.'

The postpositions involved do not have to be locative. The quasi-verb can be used as essentially a copula following any postposition, such as these examples with the associative marker /le/:
(xx)

'[The] woman, she was (is) with her child and the child of her co-wife.' [Text 5]
b. kìdé kém yàá-m=lè $\quad$ wò- $\varepsilon^{\mathrm{n}}$, kìdé kém líí-m $=$ lè ${ }^{31}$
thing all woman- $\mathrm{HumPl}=$ Assoc be-3plS thing all children- $\mathrm{HumPl}=\mathrm{Assoc}$ wò̀ $\varepsilon^{\mathrm{n}}$.

[^25]be-3plS
'...they [the animals] were all with wives, they were all with children.' [Text 6]

We say the negative version of /wo/, a suppletive form /òndú/, in the last chapter on inflection. Both/wo/ and /òndú/ inflect normally for subject agreement, with both taking the suffix /-غे $/$ for the 3 pl , as in:
( xx ) Òlù pédu $=$ mbe nònú òndí- $\varepsilon^{\mathrm{n}}$.
bush.L sheep $=$ Pl here be.Neg-3plS
'There are no deer here.'

The final vowel of /òndú/ becomes [i] before the 3 pl suffix.
In the past, the form of $/ \mathrm{wo} /$ is $/ \mathrm{be} /$, which is sometimes reduplicated as $/ \mathrm{be}-\mathrm{be} /$. Speakers alternate as to whether the 3 pl form of $/ \mathrm{be} /$ is $\left[b i-\varepsilon^{n}\right]$ or [be- $\left.\varepsilon^{n}\right]$. It seems that as a copular quasi-verb, $\left[\right.$ be- $\left.-\varepsilon^{n}\right]$ is the preferred form, but as an auxiliary, $\left[b i-\varepsilon^{n}\right]$ is preferred, as suggested by these two consecutive entries from elicitation:
(xx)

b. Ú = ̀̀ $\quad$ kéraa $=b i-\varepsilon^{n}$ ?
$2 \mathrm{sgPro}=$ Obj bite $=$ be.Perf-3plS
'Did they bite you?'

A larger corpus of data will be needed to resolve this issue. Look into this with speakers. The past negative is either reduplicated or unreduplicated /(be-)be-le/, as in:
a. Bǎy $=\mathrm{g} \varepsilon$, mómbu $=\mathrm{g} \varepsilon$ bày $=\mathrm{g} \varepsilon$ jj̀mó be-be-le.
day $=$ Def meeting $=$ Def day.L $=$ Def hare Red-be.Perf-Neg
'[That] day, the day of the meeting, Hare wasn't there.' [Text 6]
b. Jùgù gálè $=g \varepsilon=$ le bé Àmèríku $=$ báà be-nne.
week.L pass.Perf.Rel $=$ Def $=$ Assoc 3 plPro America $=$ Loc be.Perf-Neg.3plS 'They were not in America last week.'

As the last example shows, the 3 pl negative past of /ws/ is /be-nne/. Double-check tone. In the future, /wo/ becomes the regularly inflected verb /bìyé/, resulting in forms like:
a. Yògó Dúmásá = báà bíyè-dè-m.
tomorrow Douentza = Loc be-Impf-1sgS
‘Tomorrow I will be in Douentza.'
b. Yògó Dúmásá = báà bìyé(é?)-lè.
tomorrow Douentza $=$ Loc be-Neg.Impf 'Tomorrow s/he will not be in Douentza.'

### 13.2.2.2 /k̂̂/

This quasi-verb appears to be a cognate of the inanimate quasi-verb in Jamsay (Heath 2008), but in Tommo So, it can be used with both animates and inanimates. /ks/ has the same range of uses as /wo/, but the restriction is that the speaker must be present in the situation he or she is describing. Standing in America, one could not use /ko/ to say that someone is in Mali, but if someone is in a house, one can say that another person is in the house using /ko/. For instance: LOOK AT TONE OF KO
a. Íb $\varepsilon=n \varepsilon$ èlèkèlè tìrú kô. market $=\mathrm{Obl}$ peanut. L pile be
'There are piles of peanuts at the market.'
b. Òlù pédu $=\mathrm{g} \varepsilon$ nònú kô.
bush.L sheep $=$ Def here be
'The deer is here.'

In (xxa), the speaker must be at the market to make the statement using /k̂/. In (xxb), by using the proximal deictic adverb 'here', the only correct quasi-verb is /k $\hat{\jmath} /$.

In the negative, the distinction betwee /wo/ and /kô/ is collapsed, and the same form /òndú/ is used. Compare (xxb) to the following:
( xx ) Òlù pédu $=\mathrm{ge}$ nònú òndú.
bus.L sheep $=$ Def here be.Neg
'The sheep isn't here.'

It appears that certainty and co-location are moot points when the subject in question is not there.

How does kô conjugate? What is its tone? Explore more in depth the semantics of it. Can you use a different quasi-verb with 'here'?

### 13.2.2.3 /yô/

The meanings (existential, locative, copular) of /yô/ are once again the same as that of /wo/ or $/ \mathrm{k} \hat{\jmath} /$, but the pragmatic situation differs. Consultants report to me that one must be sure of the statement to use $/ \mathrm{y} \hat{\mathrm{o}} /$. For example, one can make the statement in (xxa) above using /ŷ̀/ even when not at the market so long as one is sure that there are peanut piles there (they are always there, someone has been to the market and reported that they are, etc.). Since $/ \mathrm{k} \hat{\jmath} /$ is used for nearby locations, /ŷ̂/ in contrast takes on a more distant (but equally certain) meaning. For instance:
(xx) a. Òlù pédu nìmbáà yô.
bush.L sheep over.there be
'The deer is over there (and I'm sure of it).'
b. What would it mean with wo? How about embedded "I don't know if..."

## MORE DATA

Est-ce que émm $\varepsilon=$ báà kó yós̀?
Q.Fr 1 plPoss = Loc that.DD be
'Did that exist where we are?'

V: Émm $\varepsilon=$ 'báà yé $=$ bè. Pà-pádì- ${ }^{n}$.
1 plPoss $=$ Loc Exist $=$ be.Perf Red-leave.Perf.HL-3plS
'It was where we are. They abandoned [it].'
/ŷ̂/ can also be used idiomatically to ask if someone is alive. For example, /yô ma?/ can mean 'is he alive?' literally 'is he [there]?'.
13.2.2.4 /too/ Figure out the vowel length

The last locative quasi-verb diverges from the others in that it depends not on where the speaker is or how sure he or she is of the statement, but rather on the location of the subject. /too/ refers specifically to something being inside of something else, whether that be physically or metaphorically. Notice that its vowel is generally long. In the affirmative, /too/ is usually propped up by the existential (proclitic?) particle /yé=/, which will be treated in depth in section XXX. For example:
a. Néé kày Sèmmèlè tàná yé=too émmé yé=too-y. now Top Scmmele Taya Exist=be.in 1plPro Exist=be.in-1plS 'Now, there is Semmele Taya and us [in that group].' [Text 3]
b. úndu $=\mathrm{n} \varepsilon$ nàmà tóò $=\mathrm{mbe}=1 \varepsilon$ dóm bíľ̀-dè ma wa. forest $=\mathrm{Obl}$ meat.L be.in. $\mathrm{Rel}=\mathrm{Pl}=\mathrm{NegCop}$ seat be.possible-Impf or? Quot '[I] ask if [you] the animals who are not in the forest can sit [in that].' [Text 6]

In (xxa), /too/ is used figuratively to refer to two villages (Semmele Tana and Tongo-Tongo, here, 'us') being part of a mutual lineage; both are "in" that lineage, and hence /too/ can be used. In (xxb), /too/ is in a relative clause (where it gets its tone) 'animals (meat) that are in the forest'. Here /too/ is used literally as a locative.

The other locative verbs collapse to /òndú/ in the negative, but not /too/. /too/ inflects for the negative by adding the suffix $/-1 \bar{\varepsilon} /$, which overwrites the stem with $\{\mathrm{L}\}$. For instance:
(xx) Néé sàw... Sò̀̀ dámmá ${ }^{32}$ tòò-lé koy.
now Saw Soo Damma be.in-Neg Emph
'Now, Saw... So๐ Damma is not a part of that!'

This continues the discussion of who is and is not in the lineage of the village of TongoTongo.

Also unlike the other locative quasi-verbs, which collapse to /be/ in the past, /too/ inflects for the past by adding /be/ to its stem, yielding:
(xx) a. Bènjù-ámbíc̀m. Néé Bènjù-ámbíèm wààrù ògó tóò $=\mathrm{be}=\mathrm{le}$ kém,

Benju Ambiem now Benju Ambiem time.L Hogon be.in=be.Perf=Assoc all

[^26]'Benju Ambiem. Now, during the time when Benju Ambiem was Hogon...'
b. Elicited example of $/ \mathrm{too}=\mathrm{be} /$.

This fact suggests that on the scale of verbality, /too/ is a bit higher than the other locative quasi-verbs, perhaps putting it closer to a stative. Further evidence that/too/ is more verbal than the others is that it (but not the others?) can be inflected as an agentive noun, albeit irregularly:
(xx)

```
gìrè tóó-n\varepsiloń
    front.L be.in-HumSg.H
    'winner'
```

Usually, the final vowel of a stem becomes [i] before the agentive suffix, but not with /too/. Even though it is more verb-like, it is still not a regular verb.

### 13.2.3 Statives and other defective verbs

### 13.2.3.1 Stative verbs

Regular inflection was addressed in depth in the last chapter, and most verbs follow the rules laid out there. There is a small class of stative verbs, however, that follow their own inflectional rules. The two most common of these are /dáà/ 'be seated' (possibly related to /dànní-yé/ 'sit down') and /ínè/ 'be standing' (related to /íné-ndé/ 'stop, stand (sthg) up').

These two stative verbs follow the same pattern. In the present affirmative, the stem takes an initial L-toned (C)V reduplicant and it itself takes a $\{\mathrm{HL}\}$ overlay. Subject suffixes are added directly with no auxiliary verbs. This form is schematized as follows:
(xx) Affirmative present stative

$$
\mathrm{CV}(\operatorname{Red}: L)-\operatorname{Verb}\{\mathrm{HL}\}
$$

When the subject suffix adds a coda, a long stem vowel will shorten to avoid a superheavy syllable. Present paradigms for both /dáà/ and /ínè/ are given below:
(xx) a. Affirmative present of dáà

| 1 sg | dà-dâ-m | 1 pl | dà-dâ-y |
| :--- | :--- | :--- | :--- |
| 2 sg | dà-dâ-w | 2 pl | dà-dâ-y |

3sg dà-dáà 3 pl dà-dâ- $\varepsilon^{n}$
b. Affirmative present of íy $\grave{\varepsilon}$

| 1 sg | ì-'ígè-m | 1 pl | ì-'íṅè-y |
| :---: | :---: | :---: | :---: |
| 2sg | ì-'ígè-w | 2pl | ì- 'ínè-y |
| 3sg | ì-'íng̀ | 3pl | ì-íjè- r $^{\text {n }}$ |

daba 'lying down'?

These stative verbs are used in the present to describe the current state of something. For instance:
(xx) a. Jùgù gálè $=g \varepsilon=l e$ mí báá mòbìlù $=g \varepsilon$
sòlùmó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$
week.L pass.Perf.Rel $=$ Def $=$ Assoc 1sgPro father. H car $=$ Def
sand $=\operatorname{Def}=\mathrm{Obl}$
dèbáa $=$ be. $\quad$ Né $\varepsilon \quad$ móbílu $=g \varepsilon$ ì-' 'ínè.
be.bogged.down.Perf=be.Perf now car=Def Red-stand
'Last week, my father's car got stuck in the sand. Now (though) it's out [Lit. it's standing].'
b. Example of sitting
'Stand' also has an alternative form in the present that makes idiomatic use of the discourse definite /kó/. (IS THIS RELATED TO KOTO?). For instance:
(xx)

$$
\begin{aligned}
& \text { Mí kó íň̀-m. } \\
& \text { 1sgPro DD } \quad \text { stand-1sgS } \\
& \text { 'I am standing.' }
\end{aligned}
$$

## WHAT IS THE SEMANTIC DIFFERENCE?

The negative takes a harmonic version of the /-IV/ suffix seen in regular negative inflection, and the whole form takes $\{\mathrm{H}\}$ tone. For instance:
(xx) a. dáá-lá 's/he is not sitting'
b. íné-lé 's/he is not standing'

In the first, the negative suffix is /-lá/ and in the second, /-lé/, both in harmony with the final vowel of the stem. In the 3pl, the suffix becomes /-nn $\varepsilon /$ on both, with the second half of /dáà/ becoming [ $\varepsilon]$ before this suffix:
(xx) a. dáé-nné 'they are not sitting'
b. í $\mathfrak{\varepsilon}$-nné 'they are not standing'

There is a dearth of past sattive data, but the attested example suggests the use of /be/ after the stative stem. This example is:
( xx ) Kònó dáà bàà ${ }^{33}$ Dènènè dáá $=n \varepsilon$ wó-gú Dènènè dáá ìyày, there.DD seated be.Perf Deyene Daa = Obl be-Ppl Deyєne Daa girl.L yàà-nà jè.
woman-HumSg.L marry.PerfL
'[Having] settled there, being in Deyene Daa, he married a girl, a woman from Deyene Daa.'

This is only instance I have seen where what is presumably /be/ forms a perfect chain form, so the example is inconclusive, but the context suggests this interpretation.

Texts show that the stative stems can form participles with the suffix /-gú/. Here, the tone is no longer $\{\mathrm{HL}\}$ but instead $\{\mathrm{L}\}$, just as a regular monosyllabic $\{\mathrm{LH}\}$ verb stem would be before the participial suffix. It is possible that the $\{\mathrm{HL}\}$ form seenin the present is grammatical as well, since this is the same tone pattern seen in the reduplicated (focused) perfective, which takes more or less the same form (see section XXX). A participial example is as follows:
Néq́... yàà-ná sè-lé $\Rightarrow$ yém dàà-gú... wó-gú né gìn $\varepsilon=\mathrm{g} \varepsilon$
now... woman-HumSg have-Neg like.that sit-Ppl be-Ppl now house = Def
wó údò= gè.
3sgPro build.Perf.Rel = Def
'Now, he had no wife... being settled (seated) like that, being there now, he built a house.'

Here, 'sitting' is being used figuratively to mean 'settled'.

[^27]MORE DATA

### 13.2.3.2 Morphologically regular 'become' and 'remain'

The verbs for 'become' and 'remain' in Tommo So are morphologically regular, but I address them here both due to their semantic similarity with quasi-verbs and due to the lexical connection between 'remain' and the future imperfect of /wo/ 'be'.

First, the verb /bìĺg/ 'become' is morphologically regular, following the same rules of inflection laid out in the last chapter. The object of the verb (what the subject becomes) follows normal rules of objects; it is unmarked, unless it is focused or human, in which case it takes the object marker / = $\mathrm{j} /$. THEN WHY IS YAANA UNMARKED? Consider the following short passage highlighting the use of 'become':
a. Àmàdú yàà bé-w íiyé? Yàa-ná biláa=wo.

Amadou see.Perf be.Perf-2sgS today woman-HumSg become.Perf=be 'Did you see Amadou today? He turned into a woman.'
b. Ííyé dìgè nàm hákìl̀ káná. Kó dògò ú $=l \varepsilon \quad$ yàa-ná today evening.L sun.L care do.Imper DD but $2 \mathrm{sgPro}=$ also womanHumSg bílè-dè-w.
become-Impf-2sgS
'Watch out tonight, otherwise you will also become a woman.'
c. Wó ánìgè? Wó $=\mathrm{g} \varepsilon$ yàa-ná bìlè-lí.

3sgPro friend.HL $3 \mathrm{sgPro}=$ Def woman-HumSg become-Neg.Perf 'His friend? As for him, he didn't turn into a woman.'

These three lines show there different inflections (present perfect, future imperfect, and negative perfect), all regular.

This verb involves a change of state. On the opposite end is /bìyé/ 'remain', which involves a consistency of being. We have already seen this verb as the future form of /wo/ (see examples (xx), (xx), etc.). The fact that this is its own verb stem and not just an inflection of /wo/ comes from the fact that it can take derivational suffixes (as in /bìyé-mó/ 'make someone remain'), which most theories of morphology would rule out if /bìy $\varepsilon$ / were an inflected form. More importantly, it can itself be inflected for tenses and aspects other than the future imperfect.

## DATA ON BIYE

### 13.2.3.3 Irregular verbs

There are two more verbs that are highly irregular in Tommo So. These are /m̀z $\varepsilon /$ 'like, love' (and interrelated stem /námá/ 'want') and /ií// 'know'. Both behave half like adjectival predicates. I will discuss each in turn below. For more on the use of these verbs with complement clauses, see XXX.

First, /mbé/. In the present, this verbal stem behaves morphologically as a suffixed adjective, taking the adverbial suffix $/-\mathrm{go} /$ and predicating with the quasi-verb /wo/. For example:

$$
\begin{align*}
& \text { Ú }=\grave{\mathrm{n}} \quad \text { m̀bé-go }=\text { wo-m. }  \tag{xx}\\
& 2 \mathrm{sgPro}=\text { Obj like-Adv }=\text { be- } 1 \mathrm{sgS} \\
& \text { 'I love/like you.' }
\end{align*}
$$

The negative present also follows the pattern of adjective, taking the negative copula (instead of the suffix) $/ \mathrm{l} /$. Thus, the equivalent of ( xx ) is $/ \mathrm{U}=\mathrm{j}$ ǹ m̀ $\varepsilon$ = $=1 \varepsilon-\mathrm{m}$./ 'I don't love/like you.' Part of the irregularity of this verb is that in the affirmative, the same stem $/ \mathrm{m} b \varepsilon ́ /$ can also be used to mean 'want', but in the negative, either $/ \mathrm{m} b \varepsilon ́=1 \varepsilon /$ or $/$ nàmà-l $1 \varepsilon /$ (this time with the suffix) can be used to mean 'don't want'. The affirmative equivalent /námá-go/ is vanishingly rare.

Double check past and future forms.
Double check forms on the bottom of page 138 (green notebook).

The verb 'know' is even more irregular. Its stem form appears to be either /íi/ or /íg/, though with the irregularity across the paradigm, it would be difficult to decide upon a single base. Like /m̀bé/ 'like', 'know' is generally suffixed with /-go/, and in the present tense, this /g/ is geminated, exactly as we see in [óggwo] 'it's hot' from underlying /ógu$\mathrm{go}=\mathrm{wo} /$. It is this fact that suggests that the stem has a $/ \mathrm{g} /$ in its underlying. Examples of 'know' in the present tense include:
man-HumSg.L this $=$ Obj know-Adv $=$ be-1sgS
'I know this man.'
b. Ú $\quad$ íg-go $=$ wo $\quad$ Séydu $=m b e=$ j̀ $\quad$ ánìgè $=m b e=$ j̀. 2 sgPro know-Adv $=$ be Seydou $=\mathrm{Pl}=\mathrm{Obj} 2$ sgPro friend. $\mathrm{HL}=\mathrm{Pl}=\mathrm{Obj}$ 'You know that Seydou and the others are your friends.'

This stem /g/ seems to disappear in the past tense, with the stem becoming simply/íi/.
(xx) Bàmàkó íí-go = be-m.

Bamako know.Perf-Adv=be.Perf-1sgS
'I used to know Bamako.'

We find further irregularity in the negative. In the present tense, the base for all negative is /ínnè/, which looks as though it contained the suffix $/-1 \varepsilon /$ at one point in its history before it assimilated. What is causing the nasality is unclear, given the affirmative forms.
a. $\quad \cup \quad=\grave{\jmath} \quad$ ínnè-m.
$2 \mathrm{sgPro}=\mathrm{Obj}$ know.Neg-1sgS
'I don't know you.'
b. Àná-m=mbe jàà síré ínnè-èn. man-HumPl=Pl meal.L cook.H know.Neg-3plS 'Men don't know how to cook.'

## How about the past negative?

### 13.3 Existential particle /yé/

A peculiarity of the Dogon languages is the existence of a preverbal particle (possibly a proclitic) /yé/ that I will call the "existential particle", following Heath (2008). It is used especially before quasi-verbs like /s $\varepsilon$ / 'have' and /tóo// 'be in' when there is no focused constituent in the clause-it typically absent in wh-questions and in negation. Heath (2008) states that the existential particle is placed on verbs that are not defocalized. Recall that verbs are defocalized when there is another focused element in the clause. Thus, in the absence of such a focused element, the existential particle may function as taking default focus.

The existential particle is most often seen with /s $\varepsilon$ / and /too/, as the following examples show:
(xx)
a. Ígé yé= sè-m.
husband Exist = have.L-1sgS
'I have a husband.'
b. Tòndòó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ gámmá yé $=$ tòò.
water.jar $=\mathrm{Def}=\mathrm{Obl}$ cat $\quad$ Exist $=$ be.in.L
'There is a cat in the water jar.'

These examples also demonstrate the $\{\mathrm{L}\}$ tone overlay put on verbs following the existential particle. Compare this with the question, Tòndòó $=g \varepsilon=n \varepsilon$ jijé $=$ j̀ tòò? 'What is in the canari?' Here, there is no existential marker, and the subject of 'be in' takes an object marker, emphasizing the focus of the wh-word.

The existential marker is also absent in negative clauses. For example, contrast (xxa) with (xxb) below, two consecutive sentences from a text comparing the lineage of different villages:
a. Néé kày Sèmmèlè tàyá yé $=$ tòò émmé yé $=$ tòò -y .
now Top Semmele Taya Exist=be.in.L 1plPro Exist=be.in.L-1plS
'Now, there is Semmele Taya and us.'
b. Néé sàw... Sò̀̀ dámmá tòò-lé kòy.
now Saw Soo Damma be.in-Neg Emph
'Now, Saw... So七 Damma is not a part of that!'

In this example, the lack of the existential particle on the negation could be seen to tie in with focus on the village name Soo Damma. But even in cases where there does not appear to be contrastive focus, the negative does not take the existential particle. Is this tied in with focus? Is it usual to not have the existential marker, or actually ungrammatical? Look into it. For more on the quasi-verb 'have', see section 13.5.

The existential particle is also conspicuously absent when there is an adverb (or a numeral with the adverbial /-go/ suffix) present. For example:
a. Mí báá nìǹ̀ mí fíyè-mì $=\mathrm{g} \varepsilon$ ísu kàlé sè-lè-go

1sgPro father.H sauce.L 1sgPro eat-Caus.Perf.Rel = Def fish limit have-NegAdv tóò be.
be.in be.Perf
'The sauce my father made me eat had too many fish in it.'
b．Nùmó néé－go $s \varepsilon-m$ ． arm two－Adv have－1sgS ＇I have two arms．＇

Is it ungrammatical to put the existential particle or does it change the meaning？
The particle is also typically not used in object relative clauses，though we do see it used in subject relatives．Compare（xxa）and（xxb）：
（xx）a．The moto that man has used to belong to my father．
b．Súgó．．．ǹdè nàá yé $=$ sè．．．eee．．．hálè nàá，nàá yé $=$ sè， sug刀 person．L cow Exist＝have．L uh even cow cow Exist＝have．L غ̀nと́ yé＝sè．
goat Exist＝have．L
＇The sug．．．．［it was for］people who have cows．．．uh．．．even cows，who have cows， who have goats．＇

While we may think that in subject relatives the existential is obligatory，other examples show that this is not the case：
（xx）Né $\varepsilon$ súgó $=\mathrm{g} \varepsilon$ né $\varepsilon . \ldots$ yìmú kém $=\mathrm{n} \varepsilon$ kánà－dìn $\quad \mathrm{ma} \Rightarrow^{34} \ldots$ ma ǹdè now $\operatorname{sug} \boldsymbol{o}=$ Def now $\quad$ death all $=$ Obl do．Hab－Hab．3plS or？or？person．L bèlú $\quad \mathrm{s} \varepsilon \varepsilon^{=} \mathrm{m} っ=\mathrm{j}$ ．
animal have $=$ Poss $=\mathrm{Obj}$
＇Now，the sugo dance，would they do it for any death or．．．or was it［just］for people
who had animals？

Here，／ǹdè bèlú sé／＇people who have animals＇is also a subject relative，but no existential particle is required．

Occasionally，we see the existential particle with one of the existential quasi－verbs， but usually not in the present．Consider the following exchange：

[^28](xx) MM: Est-ce que ém $=$ mé $=$ báà kó yós̀?
Q.Fr $\quad 1 \mathrm{plObl}=$ Poss $=$ Loc that. DD be 'Does (did) that exist where we are?'
\[

$$
\begin{array}{ll}
\text { V: Émm } \varepsilon=\text { báà } \quad \text { yé }=\text { bè. } \quad \text { Pà-pádì̀èn. } \\
& \text { lplPoss = Loc Exist }=\text { be.Perf.L } \\
& \text { Red-leave.Perf.HL-3plS } \\
& \text { 'It was (used to be) where we are. They abandoned [it].' }
\end{array}
$$
\]

In V's response uses a past tense quasi-verb in response to a question using a present tense verb. After this initial verb, the verb 'leave' in the next clause is overtly focused. It seems possible in the first clause 'It used to be here' that the quasi-verb is actually focused itself. Perhaps, then, the existential marker can also be used as a focus marker on verbs that do not have an overtly focused form. Can focused verbs take the existential marker?

In Tommo So, the existential particle can be used before regular verbs as well. We see this in texts, with examples like:
$(\mathrm{xx})$ Wó- wó... wárá nàà-m $=\mathrm{g} \varepsilon \quad$ yànnáá gòì- $\mathrm{e}^{n}$

3sgPro 3sgPro spear master-HumPl.L = Def make.rounds.Perf leave.PerfL-3plS if
màlbá nàà-m yé = yòò-dìn.
gun master-HumPl.L Exist $=$ enter-Impf.3plS.L
'When he-, he... the spear masters had made their rounds and left, [then] the gun masters would enter.'

In consultants' explanations of the existential particle with verbs, it often appears to be used in sentences that could be the response to a question of what happened. For instance:
(xx) a. Context: You are in the house, and your child comes in crying, and you ask, "What
happened?"
$M i ́=\grave{\jmath} \quad$ yé $=$ bènd $\grave{\text { g }}$.
$1 \mathrm{sg} \operatorname{Pro}=$ Obj Exist $=$ hit. $\cdot$ PerfL
'He hit me.'
b. Context: Someone leaves a meal for you, then asks later if you've eaten it.

Jáá $=\mathrm{g} \varepsilon \quad$ yé $=$ j̀̀yè-m.
meal $=$ Def Exist $=$ eat.PerfL-1sgS
'I ate the meal.'
c. Context: Someone asks you where your motorcycle is.

$$
\begin{aligned}
& \text { Pègéĺ } \varepsilon=\mathrm{g} \varepsilon \quad \text { dùù }=\mathrm{n} \varepsilon \quad \text { yé }=\text { pàdè-m. } \\
& \text { mountain }=\text { Def bottom.L=Obl Exist }=\text { leave.PerfL-1sgS } \\
& \text { 'I left it at the bottom of the mountain.' }
\end{aligned}
$$

In examples (xxa) and (xxc), the sentence including the existential particle is in response to a wh-question, but it is the whole sentence rather than any individual constituent within it that answers the question. In (xxb), on the other hand, the sentence is in response to a yesno question, a kind of question in Tommo So that can actually include the existential particle in it. More work is needed to tease out the precise range of uses and contexts of the existential particle.

Síi úwo
yé = dògò ǹdè yàgá $\varepsilon$ ع́n ${ }^{n}$ hànà-lí.
caste 2 sgPoss Exist $=$ but person.L other marry be.normal-Neg.Perf 'It's not appropriate to marry outside of your caste.'

### 13.4 Adjectival and adverbial predicates

Chapters 5 and 10 briefly addressed adjectival and adverbial predication. I expand on the discussion here, presenting the various forms predication can take.

### 13.4.1 Adjectival predicates

### 13.4.1.1 Regular predicates

Adjectives in Tommo So belong to two classes, which I call suffixed and unsuffixed. Both classes derive their names from their behavior in predication. Suffixed adjectives, when predicated, typically take the suffix /-go/, ostensibly an adverbial suffix, which is then
followed by the quasi-verb/wo/. All tense/aspect inflection, along with subject agreement, is realized on the quasi-verb. For example:
(xx)
a. Pàlá-go = wo-m.
tall-Adv = be-1sgS
'I'm tall.'
b. Pàlá-go òndú-m ~ pàlà-lé-m.
tall-Adv be.Neg-1sgS tall-Neg-1sgS
'I am not tall.'

Another option in the present is to use the copula clitic $/=\overline{\mathrm{n}} /$ to predicate a suffixed adjective, in which case it is not actually suffixed. For the third persons, this is the form of the clitic used; otherwise, the different subject inflections of the copula given in (xx). For instance:
$(\mathrm{xx}) \quad$ a. Gémi $=$ ỳ.
black $=$ Cop
'It's black.'
b. Díy $=\mathrm{m}$.
$\operatorname{big}=1 \mathrm{sgCop}$
'I'm big.'
c. Máá $=w$.
dry $=2 \mathrm{sgCop}$
'You're dry.'

Note that these two predication options, copula and quasi-verb, are only available in the present. In the past, only the suffixed option is available, namely because there is no past version of the copula. The only past equivalent of (xxa) is /gém-go = be/ 'it was black'.

As a negative predicate, the usual form involves the suffix taking a $\{\mathrm{L}\}$ overlay and the negative ending /lź/ being H-toned. I argue that in this case, the negative is a suffix, which allows it to interact tonally with the stem. There is some tonal variation in negative predicates, though, and at times, the bare adjective retains its tone and instead seems to take the negative copular clitic characteristic of nouns. As a clitic, the negative cannot affect the tone of the stem. We thus see the following variation:
(xx)
pàlà-lé-m $\sim \quad$ pàlá $=l \varepsilon-m$
tall-Neg-1sgS tall = Neg.Cop-1sgS
'I am not tall.'

In the 3 pl, the suffix is instead /ènné/, which in this case... How does this interact with the final vowel of the stem?

Unsuffixed adjectives are so-called because they do not take the adverbial suffix /go/ when used predicatively. The quasi-verb/wo/ is added directly after the stem, and like the suffixed adjectives, it is this quasi-verb that is inflected. Is it possible use the copula? For example:
(xx) Síyó $=\mathrm{g} \varepsilon$ tùgǒm = wo.
bucket $=$ Def heavy $=$ be
'The bucket is heavy.'

The negative inflection is irregular, however, since instead of using the negative of the quasi-verb /òndú/ the negative of 'have' /sè- $\varepsilon$ / is used instead. Thus, the opposite of $/$ tùgǒm = wo/ is /tùgǒm sè-lદ́/.

The adjectives remain unsuffixed in the past, with /be/ added to the bare adjective, as in:

$$
\begin{align*}
& \text { Jáá= ge } \varepsilon \text { ह̀lèlú= be. }  \tag{xx}\\
& \text { meal = Def delicious = be.Perf }
\end{align*}
$$

'The meal was delicious.'

What about the negative past?

### 13.4.1.2 Defocalized predicates

Adjectival predicates change when (typically) the subject is focused. Rather than taking either the copula or a quasi-verb in the V position, the defocalized adjectival predicate consists of nothing but a bare, HL-tone adjective (cf. L-toned in Jamsay (Heath 2008:432). For example:
(xx) Nè̀... émmé dágù bé gáà, yz̀-w lè...
now 1plPro small.HL 3plPro big.HL see.PerfL-2plS Q
'Now... we're small, they're big, you see.'

The lack of subject agreement on the adjectives is reminiscent of subject focus in verbs (see section XXX), but with adjectives, the subject (pronoun) is not marked with the focus marker.

### 13.4.2 Adverbial predication

Given the presence of the adverbial suffix on suffixed adjectives, it comes as no surprise that adverbial predication proceeds in the same manner. After the adverbial suffix (/-ni/ or /-go/), the quasi-verb/wo/ is added and inflected as necessary.

Examples of adverbial predication. Check past tense, negation, etc.

### 13.5 Possessive predicates

The last kind of predicate to discuss is the possessive predicate. This may consist of the quasi-verb /se/ 'have', a very like /jènné/ 'pick up, hold', or the copula after the possessive particle /mo/.
13.5.1 Quasi-verb/se/ 'have'

We have already been introduced to the quasi-verb 'have' as an auxiliary for the progressive in Chapter 12. I consider it to be a quasi-verb in that it is of the subminimal shape CV, has no inherent tone, and does not follow the usual rules of inflection. For instance, to form the past, the clitic /be/ is simply added to the end with no change to the stem /se/. In the future, 'have' takes on a form parallel to the future form of /wo/ 'be' (/bíyèdè/), /síyè-d $\grave{/} /$ 'will have'. In the negative, 'have' takes the suffix $/-1 \varepsilon /$ and the tone of the complex /s $\varepsilon-1 \varepsilon /$ varies between all L /sè-lè/ (or is this toneless?) and LH /s $\varepsilon$ - $1 \varepsilon$ / $/$.

As noted in section 13.3, in the affirmative (in the absence of an adverb or a focused element), 'have' is typically propped up by the existential particle /yé/:
(xx) Nàá yé=sè-m.
cow Exist=have.L-1sgS
'I have a cow.'

In the negative, this is not necessary.
(xx)
Gìné $=\mathrm{g} \varepsilon$ wó údò $=\mathrm{g} \varepsilon$,
bílu $=\mathrm{g} \varepsilon \quad \mathrm{s}$ - $-1 \varepsilon ́$
house $=$ Def 3sgPro build.Perf.Rel $=$ Def ladder $=$ Def have-Neg
dèmbé-dìm $=\mathrm{g} \varepsilon=\mathrm{m} \supset \quad$ bílu $\quad \mathrm{s}$-̀lé.
build.roof-Inf $=$ Def $=$ Poss ladder have-Neg
'He built the house, [but] it did not have a ladder, it did not have a ladder to
build the roof.'

In this quote, the timeframe of the narrative is past, but form of the verb 'have' is present; this is common in narrative (see section XXX).

Get examples of past and future possessives.

Even though in possessive constructions a difference is made between alienable and inalienable possession (see section XXX), this difference is largely irrelevant to possessive predicates. Nonetheless, we do find some differences. For instance, with kinship terms, an acceptable way of expressing possession is for the possessed noun, marked with a possessor to act as the subject of an existential verb like /yo/. This form is not available for alienably possessed nouns. Wait, is this true if /yàa-ná/ takes $/ \mathrm{mmo} /$ instead of $/ \mathrm{mi} /$ ? Is that the problem?

| (xx) Mí ígé yóv. |  |
| :--- | :--- |
|  | 1 sgPro husband.H be |
|  | 'I have a husband.' |

13.5.2 'Have' constructions with $/ \mathrm{mo} /$ and the copula

We have seen the possessive clitic $/ \mathrm{mo}$ / in section XXX in constructions meaning 'for'. This construction can also be interpreted as 'belongs to', as in:
(xx)
a. Mòtó $=\mathrm{g} \varepsilon \quad \mathrm{m} m \mathrm{~m}=\mathrm{n}$.
moto $=$ Def 1sPoss $=\mathrm{Obj}$
'The motorcycle belongs to me.'
b. Gìné $=\mathrm{g} \varepsilon$ mí délé $=\mathrm{m} 0=\mathrm{y}$.
house $=$ Def 1sgPro older.brother $=$ Poss $=$ Obj
'The house belongs to my brother.'

These expressions could also be translated as 'The motorcycle is mine' and 'The house is my older brother's', respectively.

## Chapter 14 <br> Comparatives

This chapter addresses all manners of comparing objects. It begins in section 14.1 with a discussion of asymmetrical comparatives, using the comparative function word /díý́/ 'than'. It also addresses a construction with the verb /gàlá/ meaning 'surpass'. In section 14.2, I turn to symmetrical comparisons. Canonically, these are formed with the adverbial suffix combination /-go-nu/, though expressions with /kégi/ 'equal' and /dòó/ 'attain' are also discussed. Finally, section 14.3 addresses an "a fortiori" construction using/sákò/, which roughly translates to the English 'much less a X'.

### 14.1 Asymmetrical comparatives

### 14.1.1 Predicate adjective with /díyé/ 'than' CHECK TONE OF DIYE

Adjectival comparatives are formed by putting the postposition /díyé/ after the comparandum, followed by the bare adjective. This is an unusual predicate construction. As addressed in section XXX , when stating that ' X is adjective', the adjective must typically either take /-go/ plus a quasi-verb or the copula / = j/; here, the stem is bare in the 3sg and takes normal subject marking for other persons:
a. Pédu $=\mathrm{g} \varepsilon \quad$ èné= $\mathrm{g} \varepsilon$ díyé èsú.
sheep $=$ Def goat $=$ Def than pretty
'The sheep is prettier than the goat.'
b. ...àyá ḿmo dìyè gàá...
mouth 1sgPoss than big
'[It's] bigger than my mouth.' (Expression to excuse oneself when talking disrespectfully about elders, from [Text 3].)
c. Mí ú díyé gàbú-m

1sgPro 2 sgPro than tall-1sgS
'I am taller than you.'
d. Bé mí díyé póó- $\varepsilon^{n}$.

3plPro 1sgPro than fat-3plS
'They are fatter than me.'

## DO THOSE PRONOUNS NEED TO BE THERE?

The tone of /diyz/ typically spreads from the syllable preceding it; thus, after pronouns, it is always H , but after a definite marker, it may vary with the tone of the definite. It is not clear what, if any, relation this /diyz/ has to the causal or purposive postposition described in Chapter 8. It could also be related to the adjective /díy $\varepsilon$ / 'big', which bears a semantic relation to the notion of 'more than'.

In the negative, the adjective takes the negative suffix /-lर́/, followed by the subject agreement suffixes, typical of negative adjectival predicates:
(xx)
a. Ú díé pòò-lé-m.

2 sgS than fat-Neg-1sgS
'I am not fatter than you.'
b. Sóm díyé ògì-lé.
horse than fast-Neg
'She is not faster than a horse.'

In the past, the form of the adjectival predicate is also the same as any non-comparative adjectival predicate: the past auxiliary /be/ is used in place of the present/wo/ after the adjectival suffix /-go/; this suffix is used even on typically unsuffixed adjectives (those adjectives that do not take /-go/ in the present), since generally comparatives refer to some specific entity rather than speaking generally:
Q - is the -go necessary? why would this be? what would it mean outside of comparison?
a. Wàgàdù gààléy émmé $=\mathrm{be}=\mathrm{le}$ ú díyé póó-gó $=$ be- -m . time.L small $1 \mathrm{plPro}=$ be.Perf=Assoc 2 sgPro than fat-Adv=be.Perf-1sgS 'When we were little, I was fatter than you.'
b. Màngóró $=\mathrm{g} \varepsilon$ sáá $=\mathrm{g} \varepsilon \quad$ díy $\varepsilon$ èlèlú $-\mathrm{go}=\mathrm{be}$.
mango $=$ Def wild.grape $=$ Def than sweet-Adv $=$ be.Perf
'The mango was more delicious than the wild grapes.'

In the past negative, the suffix /-go/ is added after the negative suffix, followed by the auxiliary:

Ú díyé pòò-lé-go = be-m.
2 sgPro than fat-Neg-Adv=be.Perf-1sgS
'I was not fatter than you.'

When using the comparative as a modifier rather than a predicate, the comparandum is placed initially as before followed by /díýr/, but what follows depends on the sentence. If the comparandum is a pronoun, then what follows is a noun modified by the comparative adjective in a normal noun + adjective combination:
( xx ) Ú díyé ànìgè síyé m̀bè-m.
2 sg Pro than friend.L good want-1sgS
'I need a better friend than you.'

This construction is also used if the nouns on either side of /díy $\varepsilon$ / are distinct, as in:
(xx) He saw an animal bigger than an elephant.

If, on the other hand, the noun is already mentioned in the comparandum, as /yàà jíbu/ 'skirt' is below, then only the adjective follows /díy $\varepsilon$ / as a headless NP:
a. Yàà jìbù mí=ỳ ú óbì $=\mathrm{g} \varepsilon$ dìyè
woman skirt.L 1 sgPro $=$ Obj 2 sgPro give.Perf.Rel $=$ Def than
èsú mí= ̀̀ óbáá wò.
pretty 1 sgPro $=$ Obj give. Perf be
'He gave me a prettier skirt than the one you gave me.'
b. Jàà ú sírè $=\mathrm{g} \varepsilon$ dìyè síyé fryaaa $=$ be-m.
meal.L 2sgPro prepare.Perf.Rel = Def than good eat.Perf=be.Perf-1sgS
'I ate a better meal than the one you prepared.'

It is also possible to use a headless relative as the comparandum and place the noun with the adjective, as in $\dot{U}$ sírè $=g \varepsilon$ dìyè jàà síy $\tilde{j}$ j́yaa $=b e-m$. The crucial thing is not to repeat the same noun on either side, since XXX.
14.1.2 Verbal predicate with /díyé/ 'than'

With a verbal predicate, /díý́/ can also be used, but the adverb /sígé/ or /sígé-go/ 'more, better' can also be added after it. As with the adjectival predicates above, /díy $\varepsilon$ / comes immediately after the comparandum, and typically /sígé/ follows immediately thereafter:

```
a. Ú díyé (sígé) jáá fíyè-dè-m.
2 sgPro than more meal eat.Hab-Hab-1sgS 'I eat more than you.'
```

b. Mí báá mí=ỳ wó béndè dìyè sígé-go

1 sgPro father.H 1sgPro = Obj 3sgPro hit.Perf.Rel than more-Adv
mí náì-nè bèndáa $=$ wo.
1sgPro sibling-HumSg.HL hit.Perf=be
'My father hit my brother more than he hit me.'

This 'more than' adverb is the same one used in numerals, as in ' 11 ' (lit. one more than ten). See section XXX.

In one instance, the comparandum is postposed after the verb, perhaps as a sort of heavy NP shift:
( xx ) òmó ḿmo gàá $\varepsilon$ ह́bè- d è, mí ánìgè $=\mathrm{mo}$ dìy . present 1sgPoss a.lot buy-Impf 1sgPro friend.HL=Poss than 'He buys more presents for me than for my friend.'

Here too, though, the postposed clause is grammatical clause-initially: Mí ánìgè =mo dìyè ذ̀mś ñ́mo gàá $\varepsilon$ ह́è-dè.
14.1.3 'Be better than' /íré/

A specific adjective /íré/ 'better' can be used in general comparisons like the following:


If there is a more concrete sense to 'good', such as good food, then /síy $\varepsilon$ / is used instead, this time with the copula $/=\overline{\mathrm{n}} /$ if it is positive and $/-1 \varepsilon /$ if it is negative:

## Does this have to do with generality?

xx . a. ènè nàmá nàà nàmá díé síé= ǹ.
goat.L meat cow.L meat.L than good=Cop
'Goat meat is better than beef.'

baobab.L sauce $3 \mathrm{sgObl}=$ Poss Hawa $=$ Poss $=$ Def than good-Neg
'Her toh is not better than Hawa's.'

Can you use IRE in these contexts or is it ungrammatical? Why?
14.1.4 'Surpass'/gàlá/

A construction with the verb /gàlá/ 'go past' is used to express the notion that someone or something has moved from a position of equality with something else to a position of superiority. In this case, the comparandum (the one or the thing surpassed) is marked with object case and there is no /díy $\varepsilon /$. The quality in which one has surpassed another is a noun or nominalized verb marked with the oblique postposition $/ \mathrm{n} \varepsilon /$. When the quality is an adjective, the nominalized form of the adjective is derived via reduplication (see section XXX):
a. Ì-ìjènd $\varepsilon=n \varepsilon \quad$ mí $=$ ỳ $\quad$ gàláa $=$ wò.

Red-height $=$ Obl $1 \mathrm{sgPro}=$ Obj surpass. $\cdot \mathrm{Perf}=$ be
'She has surpassed me in height.'
b. Úlùm $=\mathrm{g} \varepsilon \quad$ sà-sǎw $=\mathrm{n} \varepsilon \quad$ émmé $=\mathrm{j} \quad$ gàláa $=$ wò $-\varepsilon^{\mathrm{n}}$. children $=$ Def Red-intelligence $=\mathrm{Obl} 1 \mathrm{plPro}=\mathrm{Obj}$ surpass. $\mathrm{Perf}=\mathrm{be}-3 \mathrm{plS}$ 'The children have surpassed us in intelligence.'
c. Ú náì-nè màngòrò kébé $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ gàláa $=\mathrm{wo}-\mathrm{m}$.

2 sg Pro brother-HumSg.HL mango.L pick.Nom $=\mathrm{Def}=\mathrm{Obl}$ surpass. $\mathrm{Perf}=$ be1sgS
'I have surpassed your brother in picking mangoes (i.e. I am better at it/pick more).'

### 14.1.5 Superlatives

In a superlative, there is no comparandum, only the subject, hence there is no need for /diyz/. Instead, the adjective /gàá/ 'big' is used as an adverb meaning 'the most'. The following adjectival or verbal predicate takes no subject agreement, and if it is adjectival, it has an all L overlay; both of these strategies are reminiscent of focalization, particularly of the $\{\mathrm{HL}\}$ bare adjective construction introduced in section XXX. MAKE SURE THESE AREN'T THE SAME. Since there is no subject agreement, independent pronouns are necessary to indicate the subject:
xx. a. Mí gàá pòò.

1sgPro most fat.L
'I am the fattest.'
b. Wó gàá 'sémbé sè.

3sgPro most force have
'He is the strongest.'
c. Màngòrò nǒ gàá èlèlù.
mango this most sweet.L
'This mango is the sweetest.'
d. Mí gàá sí́-gò núyò-dè.

1sgPro most good-Adv sing.Hab-Hab
'I sing the best.'

It is also possible to leave out the /gàá/ and simply have the subject and predicate:

| (xx) $\quad$ Mí dàgù. |  |
| :--- | :--- |
|  | $1 \operatorname{sgPro}$ |
|  | small.L |
|  | 'I'm the smallest.' |

In this use, it is identical to when the subject is focused, discussed in section XXX. The same phrase in ( xx ) also means 'It is me who is small'. What happens if it is the adjectival predicate that's focused?

## (xx) I'm the smallest, not the biggest.

To denote the superlative member of a larger group, the oblique particle is used after the group (often with quantifier $/ \mathrm{k} \varepsilon ́ m /$ 'all'), as in Yàá- $m=g \varepsilon$ kém $=$ ne wó gàá pòò 'She is the fattest of all the women'.

When the superlative is a modifier rather than a predicate, a simple noun + adjective construction is used, but with a definite marker after the adjective:
a. Mòòmiò pàdíý́ $=g \varepsilon$ yàà $=$ bé-m.
scorpion bad=Def see.Perf=be.Perf-1sgS
'I saw the ugliest scorpion.'
b. Dámmá kém $=\mathrm{n} \varepsilon$ àn-nà póó $=\mathrm{g} \varepsilon=\mathrm{j}$ éa $\mathrm{a}^{\mathrm{n}}-\mathrm{d} \varepsilon$.
village $\mathrm{all}=\mathrm{Obl}$ man-HumSg. L fat $=\mathrm{Def}=$ Obj marry.Perf-Hab
'She married the fattest man in the village.'

The definite indicates that it is not just any noun of a given quality, but the noun, hence the most or superlative. I assume that in discourse, it would be clear whether there is some specific entity denoted by the definite (i.e. some old information in the conversation), or if it instead refers to the superlative.

### 14.2 Symmetrical comparisons

14.2.1 Predicate adjective with /-go-nu/ 'like'

In a symmetrical comparison where one thing is equal to another in terms of some quality, the clitic $/=$ gonu/ (or [= geni]) 'like' is added to the comparandum. This appears to be at least historically derived from the concatenation of the two adverbial suffixes $/-\mathrm{go} /$ and /-ni/, with harmony between the two (either /-go/ harmonizing to [-ge] or /-ni/ harmonizing to $[-n u]$ ). We know that it is a clitic since it is added after the definite, if present, with the definite being a clitic. The predicate adjective in these constructions takes normal predicate morphology; that is, it takes the adjectival suffix /-go/ along with a quasi-verb auxiliary (/wo/ if present, /be/ if past). This quasi-verb is then inflected for subject agreement.
a. Ìyǎy $=\mathrm{g} \varepsilon$ àn-nà-ý $=\mathrm{g} \varepsilon=$ gonu $\quad$ gàbú $-\mathrm{go}=\mathrm{w}$.
girl $=$ Def man-HumSg-Dim $=$ Def $=$ Like tall-Adv $=$ be 'The girl is as tall as the boy.'
b. Wó náá = gonu èsú-go = wo.

3 sgPro mother. $\mathrm{H}=$ Like pretty-Adv $=$ be 'She is as pretty as her mother.'
c. Mí báá=gonu mònjù-lé-m.

1 sgPro father. $\mathrm{H}=$ Like ugly-Neg-1sgS
'I am not as ugly as my father.'

Note that this is exactly the same construction as the similarity construction in section XXX, except that in this case, the noun that takes the suffixes is definite. This is reminiscent of English, where "She is as tall as a man" is considered a simile, but "She is as tall as the man" is a comparison.

## CHECK TONE, could this be a noun?

### 14.2.2 'Be equal to’ $k$ ḱgu/ MAKE SURE THIS IS RIGHT

The predicate /kégu/ 'be equal to' can also be used in symmetrical comparisons when some quality, typically a dimension, is exactly equal to another. It follows a noun, often a deadjectival noun of the sort seen in section 14.1.4. I have only seen it inflected with the copula $/=\grave{\mathrm{j}} /$, or the $3 \mathrm{plS} /-\grave{\varepsilon}^{\mathrm{n}} /$, both of which change the front the final epenthetic vowel to [u]; it does not seem to inflect for other persons:
a. $\quad$ Mí=le ú=le $\quad$ kégi $=$ ỳ.
$1 \mathrm{sgPro}=$ Assoc $2 \mathrm{sg} \operatorname{Pro}=$ Assoc equal $=\mathrm{Cop}$
'I am as tall as you.' (Lit. you and me are equal)
b. Kı̀ró $=g \varepsilon=$ mbe pà-pàlá kégi- $\varepsilon^{n}$.
calabash $=$ Def $=\mathrm{Pl}$ Red-length equal-3plS
'The calabashes are the same length.'
c. Wà-wànnú $=$ le pà-pàlá $=$ le kém kégi-èn.

Red-width $=$ Assoc Red-length $=$ Assoc all equal-3plS
'It is as long as it is wide.' (Lit. the length and width are the same)

As the above examples indicate, the objects being compared can either be conjoined with the associative /le/ or the noun can simply be plural, if both objects are of the same type.

### 14.2.3 'Attain’/dòó/

The transition from equivalence to superiority was expressed by /gàlá/. Here, the opposite transition, from either inferiority or superiority to equivalence is expressed by /d̀̀ $\mathbf{/}$ 'arrive', or in this case, 'attain'.
a. Wó náá èsù-દ̀sù $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ dòáa $=\mathrm{w} 0$.

3sgPro mother.H Red-beauty. $\mathrm{L}=\mathrm{Def}=\mathrm{Obl}$ arrive. $\mathrm{Perf}=$ be
'She has attained her mother's beauty.'
b. Bày yààná ma íí úwo ìjèndé úwo dóò-dè. day.L when or? child 2 sgPoss height 2 sgPoss arrive-Impf 'Someday your son will reach your height.'
c. Tàráá $=\mathrm{g} \varepsilon$ ìnèndé wómっ yàrá $=\mathrm{j}$ dòò-lí. hyena $=$ Def size $\quad 3$ sgPoss lion $=$ Obj arrive-Neg.Perf 'Hyenas, they don't reach the same size as lions.'

Note the three different strategies for the object of /dòs/: In (xxa), the object is a possessed nominal quality marked by the oblique postposition. In (xxb), the object is again a possessed nominal quality, but after the possessive pronoun, the oblique postposition is optional. In (xxc), the quality (size) is the subject of /dò'/ and the comparandum 'the lion' is the object marked with the object clitic. This could be seen as a headless possessive, with a null version of 'size' possessed by 'lion'.

## 14.3 'A fortiori' /sákò/

The Fulfulde loanword /sákò/ is used to link two clauses in an 'a fortiori' or 'much less' construction (in the local French, "...ne parlons pas de $X^{\prime}$ '). It is prosodically grouped with the second clause, that is to say, the stronger of the two conclusions. The second clause is a set phrase that translates to 'It is not talk of X ' $/ \mathrm{X}=\mathrm{m} \boldsymbol{\mathrm { m }}$ s̀̀ $=1 \varepsilon /$ : Does the tone reassign in SOOLE?
( xx ) a. Pédu ébé-dìm kè̀̀lé sè-lé-m, sákò nàá $=\mathrm{m} \supset$ sòó $=1 \varepsilon$. sheep buy-Inf money have-Neg-1sgS a.fortiori cow $=$ Poss speech $=$ Neg.Cop 'I don't even have enough money to buy a sheep, much less a cow.'
b. Mòbílu ḿmo ébu bèé-lè-m, sákò úwo car 1sgPoss buy.Nom can-Neg.Impf-1sgS a.fortiori 2sgPoss sòs $=1 \varepsilon$.
speech $=$ Neg.Cop
'I can't buy a car for myself, much less for you.'

When the a fortiori conclusion is another verb, its nominalized form appears as the possessor of /ss̀̀/ 'speech':
a. òděy yàé bèé-lè-m, sákò góó sòó= $=1 \varepsilon$.
walk go.Nom can-Neg.Impf-1sgS a.fortiori dance speech.L=Neg.Cop 'I can't even walk, so a fortiori I can't dance.'
b. Úngúlu bèé-lè-m, sákò wòlú wàlá-dìm sòó $=1 \varepsilon$. get.up.Nom can-Neg.Impf-1sgS a.fortiori farming farm-Inf speech.L $=$ Neg.Cop
'I can't even get up, much less farm.'

If there is an overt noun in the a fortiori conclusion, like /nàá/ 'cow' in (xxa) above, then a regular possessive construction without the postposition can be used, just as it is for the verbs here. However, the opposite is not true-the deverbal nouns cannot take the possessive particle $/ \mathrm{mo} /$ in this construction. We also see in the two examples above that the verb may use any nominalization strategy; the cognate noun is used in (xxa) and the infinitive in (xxb), but the opposite is also grammatical. Check what kinds of nominalized forms can go here.

## Chapter 15

## Focalization and interrogation

This chapter centers around focus, be that in the form of overt focus marking in statements, in section 15.1, or interrogatives, in section 15.2. Section 15.1 covers all focused elements, including subjects, objects, adjuncts, and verbs, while section 15.2 covers yes/no questions, wh-questions, and embedded questions with 'whether'.

### 15.1 Focus

Focus in Tommo So can be achieved in a few different ways: The focalized element can be marked with a focus marker $/=\grave{\mathrm{j}} /$, the same enclitic as the copula and object marker; the use of the unsuffixed perfective can indicate the presence of a focalized element earlier in the clause; the lack of subject agreement on the verb can indicate subject focus; the focalized element can be fronted to clause-initial position, sometimes followed by a resumptive pronoun later in the clause; non-focalized adverbial or postpositional phrases can be moved to a post-verbal position, leaving the focalized constituent closer to the verb. I will cover each of these strategies in detail in the sections that follow.

Regardless of the form the focalized element takes, the fact that there is a focalized constituent is made clear by the form of the verb, if it is perfective: in focalized clauses, it is typically the unsuffixed L-toned perfective, possibly followed by the past clitic / = be/; the /$\mathrm{aa} /$ perfective is rarely used when focus is present. If the verb is imperfective, it is identical to imperfective verbs in unfocalized clauses, but it is intonationally deemphasized, resulting in an overall lower pitch with a more compressed pitch range for the $\{\mathrm{HL}\}$ or $\{\mathrm{LHL}\}$ melodic overlays.

The existential particular /yé=/ that often comes before defective verbs like/too/ 'be in' and /ss/ 'have' is absent in the presence of a focalized constituent. For instance:
a. Mí báá mòtó se.

1sgPro father.H moto have
'It's my father who has a moto.'
-but-

Mí báá mòtó yé=sè.
1sgPro father.H moto Exist = have.L
'My father has a motorcycle.'
b. Màlbá=ỳ too.
gun $=O b j$ be.in
'There is a gun [in the water jar].'
-but-

> Tòndòó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ màlbá yé $=$ tòò.
> water. $. \mathrm{jar}=\mathrm{Def}=$ Obl gun Exist $=$ be.in. L
> 'There is a gun in the water jar.'

In the focused version of (xxb), the subject takes a focus marker, which helps the focus interpretation, but in the pair of sentences in (xxa), the only difference is the presence or absence of the existential particle.

Another common way of showing focus, especially in response to questions, is to omit everything but the focalized element and the verb. This way it is clear what information is important. For instance, in response to the question
( xx ) Ú náá $=$ j̀ àn-nà nǒ $=$ ỳ áá òbì?
2 sgPro mother. $\mathrm{H}=\mathrm{Obj}$ man-HumSg.L this $=$ Obj who give.PerfL 'Who gave your mother to this man?'
it is not possible to put /mí náá =j̀/ in the response. Instead, the response could be Míninjjú ( $w o ́=\grave{n}$ ) òbì 'my uncle gave [her] (to him)'. The recipient is optional. In this sentence, can the $\mathrm{wo}=\mathrm{n}$ be interpreted as the direct object as well?
15.1.1 Subject focus

Subject focus is probably the clearest case of focalization, since subject agreement suffixes are conspicuously missing from the verb. Of course, if the subject is 3 sg and the verb is not in the affirmative perfective, focused and unfocused clauses will only be
distinguished by context and possibly intonation (deemphasizing the verb). A marked word order, such as moving the subject to the immediately pre-verbal position, is also possible.

Plungian (1995) writes that focalized subject pronouns take the object marker/copula, as in:

Mí=ỳ yàz.
1 sgPro $=$ Obj go.PerfL
'It's me who went.'

While this form has been confirmed by one of my consultants, two others reject it, saying that the pronoun could then only be interpreted as an object. Instead, the bare pronoun should be used, immediately adjacent to the verb:
(xx)
a. Émmé núyò-dè.

1plPro sing-Impf
'It's we who will sing.'
b. Úlùm $=\mathrm{g} \varepsilon$, tás $=\mathrm{g} \varepsilon$ bé mógò-dè.
children $=$ Def plate $=$ Def 3plPro wash-Impf
'The children, it's they who wash the plates.'

Despite the lack of focus marking on these pronouns with regular verbs, it is possible with stative quasi-verbs like 'be in' as shown in (xxb) above. COULD THIS BE AN UNACCUSATIVE THING?

In (xxb), the nonpronominal subject is placed like a topic at the beginning of the sentence with a resumptive pronoun immediately before the verb to mark focus. However, this resumptive pronoun is only necessary when using such a cleft construction. It is not necessary in plain subject focus sentences; the cleft is just another strategy to emphasize the subject:
a. Yàá $-\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{mbe} \quad \mathrm{mí}=\mathrm{j} \quad$ sèmè-mì.
woman-HumPl $=$ Def $=\mathrm{Pl} 1 \mathrm{sgPro}=\mathrm{Obj}$ slaughter-Caus.PerfL
'It's the women who made me slaughter (a sheep).'
b. Mí náá nàmá tèmé-lè.

1sgPro mother.H meat eat-Neg.Impf 'It's my mother who doesn't eat meat.'

The sentence in (xxb) with a 3sg subject is ambiguous as to whether or not it is focalized. Interestingly, when the subject is focalized, a nonpronominal object will often take the object marker, even though it is not the focalized constituent.
(xx)
a. Ìsé $=\mathrm{g} \varepsilon \quad$ èn $\varepsilon=\mathrm{g} \varepsilon=\mathrm{\jmath} \quad$ dà $\varepsilon$. (or: $\grave{\mathrm{n}} \mathrm{\varepsilon} \varepsilon=\mathrm{g} \varepsilon=\mathrm{h} \grave{\mathrm{h}}$ ìsé $=\mathrm{g} \varepsilon$ dà $\grave{\varepsilon}$ )
$\operatorname{dog}=\operatorname{Def}$ goat $=\operatorname{Def}=$ Obj kill.PerfL
'It's the dog that killed the goat.'
b. Yìirè $\quad \mathrm{g}$ ǵm 1 í $=\mathrm{g} \varepsilon=\mathrm{\jmath} \quad$ kèrè. (or: íí $=\mathrm{g} \varepsilon=\mathrm{\jmath}$ ỳìrè gém kèrè)
snake. $L$ black child $=\mathrm{Def}=\mathrm{Obj}$ bite. PerfL
'It was the cobra that bit the child.'

This object marking is not necessary in the absence of focus, so it is clear that speakers are able to disambiguate thematic roles even without an object marker. It may simply be the case that just as the unsuffixed perfective is used whenever there is any focalized constituent in the clause, the object marker is also used on the object of a clause containing any focalized constituent. More textual examples are needed of this phenomenon to determine the precise use of the object marker.

Specific cleft constructions involving a headless relative are also attested. All three of following are possible responses to the question "Who here doesn't pray?":

## a. Mí náá sèné-lè $=\mathrm{g} \varepsilon$.

1 sgPro mother.H pray-Neg.Impf.Rel $=$ Def
'[It's] my mother who doesn't pray.' (Lit. my mother is [the one] who doesn't pray.)
b. Sèné-lè $=\mathrm{g} \varepsilon$ mí náá $=\mathrm{j}$.
pray-Neg.Impf.Rel $=$ Def 1 sgPro mother. $\mathrm{H}=\mathrm{Cop}$
(Lit. [the one] who doesn't pray is my mother.)
c. Mí náá sèné-lè.

1sgPro mother.H pray-Neg.Impf
(Lit. my mother doesn't pray.)

When the headless relate is in clause-final position, as in (xxa), no copula is used. Contrast this with (xxb), where the copula must be used after 'my mother'. Finally, (xxc) shows a basic sentence that context distinguishes as having subject focus.

Subject focus can take yet another form when the subject is pronominal. In this case, there is subject agreement on the verb, but an independent pronoun is also used for emphasis. For instance:

> Wó Dúmásá yàé-lè, mí, Dúmásá yáà-dè-m.
> 3sgPro Douentza go-Neg.Impf, 1 sgPro Douentza go-Impf-1sgS 'She's not going to Douentza, I'm going to Douentza.'

It is this double marking that puts focus on the subject.
15.1.2 Object focus

In the last section, we saw that objects in focalized clauses must take the object marker. However, even in non-focalized clauses, pronominal objects must always take the object marker as well, making it hard to distinguish focalized from unfocalized objects except from the context or the verb form. In non-focalized clauses, if the object is nonpronominal (and non-human), object marking is optional. Consider the following sentences with focus:

$$
\begin{array}{lll}
\mathrm{xx} . \mathrm{a} . & \text { Ìsé }=\mathrm{g} \varepsilon=\mathrm{j} & \text { bènd } \varepsilon \grave{=}=\text { be-m, } \\
& \text { Dog }=\operatorname{Def}=\text { Obj } \text { hit.PerfL }=\text { be.Perf- } 1 \mathrm{sgS} & \text { cat }=\operatorname{Def}=\mathrm{Neg} . \text { Cop } \\
& \text { 'It's the dog I hit, not the cat.' }
\end{array}
$$

b. Nòó = j̀ tée-ni $́ b$ bé m̀ mè̀-m.
this $=$ Obj exactly buy.NF want.PerfL-1sgS
'It's this exactly that I wanted to buy.'

If 'dog' or 'this' were not focused above, they would not have to take the object marker. On the other hand, in a sentence $M i ́=j \grave{j} j \varepsilon$ - $d \grave{\varepsilon}$, the reading is ambiguous between 'it's $\underline{\text { me }}$ he will marry' (focalized) and 'he will marry me' (unfocalized); only context would distinguish them, since the pronoun /mí/ obligatorily takes an object marker.

When the focused object is coordinated, the focus marker comes at the end of the coordinated phrase after the second associative postposition rather than after each element:

$$
\begin{align*}
& \text { Kı̀ró }=\mathrm{g} \varepsilon=\mathrm{le} \quad \text { tòndòó }=\mathrm{g} \varepsilon=\mathrm{le}=\mathrm{j}  \tag{xx}\\
& \text { calabash }=\text { Def }=\text { Assoc } \text { water. } \mathrm{jar}=\mathrm{Def}=\text { Assoc }=\text { Obj } \\
& \text { 'Heakè. } . \text { PerfL } \\
& \text { 'He broke the calabash and the water jar.' }
\end{align*}
$$

In focalized ditransitive constructions, both of the objects take the object marker. The object marker on the recipient is obligatory since this recipient is human; it says nothing about focus. The object marker on the direct object, however, is an indication of focus, since it would generally be absent in a non-focused clause:
a. Mí ánìgè = ̀̀ jíbu=ỳ ò $\quad$ bì-m.

1 sgPro friend. $\mathrm{HL}=\mathrm{Obj}$ wrap.skirt $=\mathrm{Obj}$ give.PerfL-1sgS
'I gave my friend a wrap skirt.'
b. Mí náá=j̀ téé-ni àn-nà nǒ=ỳ òbì.

1sgPro mother $=$ Obj exactly man-HumSg this = Obj give.PerfL 'He gave this man my mother.'

Note that the word order of the objects is variable, and only context disambiguates them. Also note that the adverb /tée-ni/ 'exactly' can be placed after the focused element, especially when the object is human and would already have been marked with the object marker even without focus. This may help emphasize the focus reading.

According to one consultant, it sounds unnatural to put an object marker on a definite inanimate object-either only the definite marker or the object marker can be used, but not together:

$$
\begin{align*}
& \text { Mòtó }=\mathrm{g} \varepsilon / \text { mòtó }=\grave{\mathrm{h}} / * \text { mòtó }=\mathrm{g} \varepsilon=\text { ỳ } \ldots \quad \text { bòdì. }  \tag{xx}\\
& \text { moto }=\operatorname{Def} / \text { moto }=\mathrm{Obj} / \text { moto }=\operatorname{Def}=\mathrm{Obj} \text { put.aside.PerfL } \\
& \text { 'He left the moto } . . \text { ' }
\end{align*}
$$

For him, animate objects (human or animal) can take both together. Nonetheless, this may be a speaker-by-speaker preference, since in texts, we do see the definite and the focus marker co-occurring, as in the following two sentences, wherein the different hats stand for the different chiefdoms:

$$
\begin{align*}
& \text { Nè̀̀...Dèŋ } ̀ \text { né bèlè-m }=\mathrm{g} \varepsilon \quad \text { bé gòrò } \mathrm{g} \text { g }=\mathrm{g} \varepsilon=\mathrm{\jmath}  \tag{xx}\\
& \text { now Deyene one.from-HumPl.L=Def 3plPro hat.L black }=\mathrm{Def}=\mathrm{Obj} \\
& \text { jènnì̀- } \varepsilon^{n} \text {. } \\
& \text { pick.up.PerfL-3plS } \\
& \text { 'Now, the people from Deŋєne... they picked up the black hat.' } \\
& \text { Émmé gòrò bánú }=\mathrm{g} \varepsilon=\mathrm{j} \text { jènnè̀-y. } \\
& 1 \text { plPro hat.L red }=\text { Def }=\text { Obj pick.up.PerfL-1plS }
\end{align*}
$$

'We picked up the red hat.'

It will take the analysis of a large corpus of texts to fully determine the role of object marking in focus and the factors that interact with it.
15.1.3 PP or adverbial focus

In the coordinated example above, we saw the focus/object marker following the associative postposition. A dative PP can also take the focalization object marker:
(xx) Yìbù nǒ úwo=ỳ è èbè-m
skirt.L this 2 sgPoss $=$ Obj buy.PerfL-1sgS
'It's for you that I bought this skirt.'

Locative PPs, on the other hand, cannot take $/=\grave{\mathrm{n}} /$. When a locative PP is focalized, it is typically immediately preverbal with no extra marking-either the verb or simply the context would indicate focalization:
(xx)
a. Búudù $=\mathrm{g} \varepsilon$ tòndòó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ bànà-ndì.
money $=$ Def water.jar $=$ Def $=$ Obl hide-Fact.PerfL
'It's in the water jar that he hid the money.'
b. Mòtó $=\mathrm{g} \varepsilon$ pègéĺ́ $=\mathrm{g} \varepsilon \quad$ dùù $=\mathrm{g} \varepsilon=\mathrm{baa} \quad$ pàdè.
moto $=$ Def mountain $=$ Def bottom. $L=$ Def $=$ Loc leave.PerfL
'He left the moto at the bottom of the hill.'
c. Òlú= báà bírè-dè-m.
field $=$ Loc work-Impf-1sgS
'It's in the field that I will work.'
(xxb) is exactly the same form as an object focus sentence 'he left the moto at the bottom of the hill'. Without context, it is impossible to tell which constituent is focalized. Is the lack of cognate nominal telling in ( xxc )?

Instrumental PPs do not take any special marking, despite the fact that they take the associative postposition, which we already know can be followed by the object marker when used in coordination. They typically occur in preverbal position when focused (xxa), but other word orders are also possible. The word order in which the instrumental comes
before the verb is also true in interrogative ('with what') constructions (see section 15.2). In unfocalized sentences like (xxb), this preverbal position is usually filled by the direct object:
a. Mòòmíyó $=\mathrm{g} \varepsilon(=\mathrm{j}) \quad$ tàgá $=\mathrm{le} \quad$ dà̀̀. (or: tàgá $=$ le mòòmíyó $=\mathrm{g} \varepsilon=$ j̀ dàè $)$ scorpion $=\mathrm{Def}=\mathrm{Obj}$ shoe $=$ Instr kill.PerfL
'He killed the scorpion with a shoe.'
(xx)
b. Séydu mí=ỳ tàgá $=$ le mòòmíyó dàà-mó-gú se.

Seydou 1sgPro $=$ Obj shoe $=$ Instr scorpion kill-Caus-Ppl have
'Seydou is making me kill the scorpion with a shoe.'
15.1.4 Verb focus

Verb focus is clearly audible, since it is indicated by reduplication, at least for positive verbs. For instance:

$$
\begin{array}{ll}
\text { a. } & \text { Pédu }=\mathrm{g} \varepsilon=\mathrm{mbe}  \tag{xx}\\
\text { sheep } \mathrm{\varepsilon}-\mathrm{s} \varepsilon ́ m e ̀-m i ̀-\varepsilon \\
\text { n }
\end{array}
$$

b. ...ǹdè-m wó $=\mathrm{g} \varepsilon=\mathrm{mbe}$ p $\varepsilon$ cè kém áwéé dò-dónò-dìn.
person-HumPl be.Rel $=\operatorname{Def}=\mathrm{Pl}$ half all catch.NF Red-sell-Impf.3plS '...they would catch half of the people who were there and sell them.'
[Dogon history]

The reduplicated form is also used to emphasize that you have done something for no particular reason if someone asks you why. For instance, in response to 'Why did you leave the moto?', one could reply Pà-pádè-m 'I left it (and that's that)'. Notice that while the defocalized perfect verb form takes $\{\mathrm{L}\}$ overlay, the focused perfect takes $\{\mathrm{HL}\}$ with an initial L reduplicant. The imperfect also takes $\{\mathrm{HL}\}$, but it is not clear whether this ought to be treated as a distinct tonal overlay from the usual $\{\mathrm{HL}\}$ in the imperfect.

In response to questions with two verbal choices (i.e. 'are you going or are you staying?' or 'are you going or are you not going?'), reduplication of an affirmative verb is optional. One could respond either Yà-yáà-dè-m or simply Yáà-dè-m 'I'm going'. The negative can never be reduplicated (*yà-yàé-lè-m 'I'm not going'); context must distinguish a focused negative verb from a non-focused one. The semantically stative but morphologically verb 'stay' was also rejected in a reduplicated form (* bì-bíyè-dè-m 'I'm staying'). What other verbs are restricted?

This reduplication is only possible when it is the verb itself that is focalized. If the whole VP is focused, then there is no special marking. For instance, in response to 'What did you do with the moto?', we see:

$$
\begin{aligned}
& \text { Pègélé }=\mathrm{g} \varepsilon \text { dùù }=\mathrm{n} \varepsilon \quad \text { pàdè. (*pà-pádè }) \\
& \text { hill }=\text { Def bottom.L=Obl leave.PerfL } \\
& \text { 'He left }[\mathrm{it}] \text { at the bottom of the hill.' }
\end{aligned}
$$

In fact, this focused VP contains a defocalized verb. It thus appears that even if a constituent containing the verb but not limited to it is focused, then this counts as the verb itself being defocalized, and the bare perfect can be used.

### 15.2 Interrogatives

Interrogation is by nature similar to focus, since it calls the listener's attention to a particular element in a clause. Unlike in the focalized clauses above, though, there is always some unknown element in interrogation. This section will cover both polar yes-no questions and wh-questions, along with embedded interrogatives.

### 15.2.1 Polar (yes/no) interrogatives

In polar interrogatives, only the truth value of a clause is being questioned. In Tommo So, these questions are most often formed by a simple rising (question) intonation at the end of the clause, indicated in the following examples by $\Uparrow$. If the clause ends in a vowel, the rising intonation also has a tendency to lengthen this vowel:
(xx)
a. Ú f́jì-yò-dè-w介

2sgS lie.down-Impf-2sgS
'Are you going to bed?'
b. Ííyé [dìgè nǎm] yéllè̂
today evening.L sun come.Impf
'Will he come this evening?'

PITCH TRACKS showing how the intonation interacts with tone.
Another strategy is to place a question particle $/ \mathrm{ma} /$ at the end of a sentence, which literally means 'or'. This is a logical particle to use, since a yes/no question essential asks if
the statement is true or is it not true. With the question particle, rising intonation is optional, since the particular already indicates that the utterance is a question. As before, I gloss $/ \mathrm{ma}$ / as 'or?' indicating its double status as a conjunction and question marker:
a. $\quad$ f́jì-yò-dè-w $=\mathrm{ma}(\Uparrow)$
lie.down-MP-Impf-2sgS = or?
'Are you going to bed?'
b. Ííyé [dig̀̀̀ nǎm] yéllı̀=ma. today evening.L sun come. $\mathrm{Impf}=$ or? 'Will he come this evening?'

The tone of the question particle $/ \mathrm{ma} /$ is also typically underspecified, and its placement at the end of a phrase results in it usually taking $L$ tone, unless rising question intonation is used. There is at least one divergent case, however, where the question particle is part of a quote and is thus followed by the quotative particle $/ \mathrm{wa} /$. In this case, the question particle takes H tone. One hypothesis is that the rising intonation of questions is controlled by an intonational H tone, but when the question is embedded and the whole statement should not be interpreted as such, this intonational tone docks on the question particle. Since question intonation is optional with the question particle, it comes as no surprise then that some other cases of the question particle followed by the quotative particle do not show this H tone. Contrast the following:
a. Hòn wa jòmó kó=nє dàgáa=wo má wa.
Huh Quot hare that. $\mathrm{DD}=\mathrm{Obl}$ be.good.Perf= be or?
'Huh, Hare asked, "Is that good?""
b. $\grave{A}=m b e ́ \quad$ ségu $=\mathrm{ma} \quad$ wa.
who $=$ Pl be.more $=$ or? Quot
'[They asked] who are more numerous?'
[Text 2]

In (xxa), there appears to be a phase boundary after 'be', since /wo/ interpolates to L before the F0 rises again on the question particle $/ \mathrm{ma} /$, here H-toned [má]. In (xxb), the interpolation is straight down from /ség/. I have not indicated that the question particle is a clitic in (xxa) because of its tone assignment.

Often the second logical possibility in a 'this or that' question is omitted after the particle $/ \mathrm{ma}$ /, but when two options are explicitly indicated, the question particle is placed
between the two. It is grouped prosodically with the first, and optionally has a lengthened vowel:
 who goes? ${ }^{\prime}$
b. Dúmásá yáà-dè-w $=\mathrm{ma} \Rightarrow$, nònú bíyè-dè-w.

Douentza go-Impf-2sgS =or? here be-Impf-2sgS
'Are you going to Douentza, or are you going to stay here?'

The fact that the question particle groups prosodically with the first element suggests that it is probably an enclitic. It is possible that in the case (xxa) above where the question particle takes H tone it no longer functions as an enclitic but perhaps forms a clitic group with the following quotative particle.
15.2.2 'Who?'
'Who' is expressed by /ǎ/, which, like the demonstratives /ny̌/ and /ň̌/, has an underlying rising tone but not enough surface moras to host it. Thus, on its own, it generally has a H tone or an amputated rise (beginning higher than true rise would to end up on the H tone). If it is followed by a toneless enclitic like the plural, the two tones can be realized: /à = mbé/ 'who all'. In speech, it is often lengthened slightly, though except in cases of emphasis (see xxa below), it is not as long as a true long vowel.

In subject position, /ǎ/ can either be in a focalized position before the verb (xxa) or in situ (xxb):
woman-HumSg $=$ Def whether $3 \mathrm{sgPro}=$ Obj horse come-Impf.Rel $=$ Def
jòbó yóó àá gì $=\mathrm{ma} \Rightarrow \quad$ wa.
run.Imper enter.Imper who say.PerfL = or? Quot
'The woman asked who said that a horse is coming, run and enter [the stalks].'
[Co-wife text]
b. Ǎ ú=j̀ bèndè.
who $2 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj}$ hit.PerfL
'Who hit you?'

As indicated in (xxa), the question particle $/ \mathrm{ma}$ / may be combined with wh-word.
As an object, /ă/ obligatorily takes the object marker:
$x x$. Ú nínjú ǎ=ỳ àn-nà nǒ=ỳ òbì.
2sgPro uncle.H who=Obj man-HumSg.L this=Obj give.PerfL
'Who did your uncle give to this man?'

If fully articulated, this would create a rare bell-shaped tone, but more often, the rise portion of it is shortened or the initial L deleted altogether.

If the person asking expects more than one person to be indicated in the response, a plural form /à = mbé/ 'who all' can be used. Again, if it is an object, it requires the object marker:
(xx)
a. Ú à =mbé = ̀̀ yè-w.

2 sgPro who $=\mathrm{Pl}=\mathrm{Obj}$ see.PerfL-2sgS
'Who all did you see?'
b. $\grave{\mathrm{A}}=\mathrm{mbé} \quad \mathrm{~g}$ óó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ y$̀ l \grave{\varepsilon}$.
who $=\mathrm{Pl} \quad$ dance $=\mathrm{Def}=\mathrm{Obl}$ come. PerfL
'Who all came to the dance?'

Note in (xxb) that although the interrogative subject is morphologically plural, it takes singular agreement on the verb. This is most likely due to the fact that as the subject is an interrogative, it is inherently focused, and hence the verb takes no subject agreement.

An expanded form of 'who' is also possible in the form of a compound with 'person': /ǹdè ǎ/ (lit. 'who person'):

$$
\begin{array}{lll}
\text { a. } & \text { Ǹdè ǎ } \quad \text { yéllè }=\mathrm{ma} \quad \text { ínnè-m. }  \tag{xx}\\
\text { person.L who come. } \mathrm{Impf}=\text { or? } & \text { not.know-1 } \mathrm{sgS} \\
& \text { 'I don't know who will come.' }
\end{array}
$$

This construction shows /ă/ behaving like the demonstratives; it may be used alone as an interrogative pronoun, or it may be used as a modifier, inducing tone lowering. Even the independent pronoun we could analyze as a headless modifier.

As a predicate, /ǎ/ simply takes the copula / = $\grave{\mathrm{j}}$ /, regardless of the person of the subject:
a. Àn-nà nǒ ǎ=ỳ. man-HumSg.L this who = Cop
'Who is this man?'
b. Ú $\quad$ ă $=$ ǹ.

2 sgPro who = Cop
'Who are you?'

Like any pronoun, /ǎ/ can be used as the object of postpositions with no change in the phonology:
a. Jáá $=g \varepsilon \quad \check{\mathrm{a}}=\mathrm{m} \jmath=\grave{\mathrm{n}} \quad$ sìrè.
meal $=$ Def who $=$ Poss $=$ Obj cook.PerfL
Who did she cook the meal for?'
b. Í́í=ge ǎ díyé pìyè.
child $=$ Def who for cry.PerfL
'Because of whom did the child cry?'

The same word can also be translated as 'which' when referring to humans. Thus, rather than specific /yàgú/ 'which' (see section 15.2.8), /ǎ/ modifies the noun, causing tone lowering:

girl $=$ Def man-HumSg.L who $=$ Obj marry-Impf
'Which man will the girl marry?'
15.2.3 'What?', 'why?'
'What' is expressed by /ýj $\dot{\varepsilon} /$ in Tommo-So, with an initial syllabic nasal. Its behavior is largely parallel to that of /ǎ/ 'who'. As a subject, it take no extra marking:
(xx) jújé íí= $g \varepsilon=$ ỳ kèrè.
what child $=$ Def $=$ Obj bit.PerfL
'What bit the child?'

Unlike 'who', 'what' does not require an object marker when it is an object, though it may optionally take one. Remember that/ă/ 'who' requires one since it is specifically a human interrogative pronoun (see section XXX for rules about the use of the object marker).
(xx)

today evening.L sun.L what $=\mathrm{Obj}$ eat.PerfL- $2 \mathrm{sgS}=\mathrm{or}$ ?
'What did you eat this evening?'
b. J́jé gì-w $\Uparrow$.
what say.PerfL-2sgS
'What did you say?'

In (xxa), there is an object marker, but in (xxb) there is not. In both cases, the opposite is also grammatical. Impressionistically, it seems more common to use the object marker, most likely due to the focus placed on the object by the use of the interrogative.

If the expected response is plural, the question word may also take the plural enclitic, lending the meaning 'what all'. Again, object marking is optional:
( xx$) \quad$ Íí$=\mathrm{g} \varepsilon \quad$ ر́j $\dot{\varepsilon}=\mathrm{mbe}=\mathrm{j} \quad$ jògè.
child $=$ Def what $=\mathrm{Pl}=$ Obj break.PerfL
'What all did the child break?'

Alternatively, this pluralized interrogative may be repeated as well, which emphasizes the expectation that several objects will be in the response:
 funeral inside. $\mathrm{L}=\mathrm{Obl}$ now uh thing. L what $=\mathrm{Pl}$ what $=\mathrm{Pl}$ be.right.Perf-Impf 'Now, in funerals, what sorts of things were normally done?' [Text 4]

As a predicate, /ńjé/ takes the copula. The subject precedes it:

> Nǒ jjé = j̀.
this what = Cop
'What is this?'

Like /ǎ/, / $\mathfrak{j} j \dot{\varepsilon} /$ can also be the object of postpositions. For instance, with the instrumental, we get the meaning 'with what':

Àn-ná $=g \varepsilon \quad$ yàrá $=g \varepsilon=$ ǹ $\quad$ j́j $\dot{\varepsilon}=l e \quad$ dà $\varepsilon$ man-HumSg $=$ Def lion $=$ Def $=$ Obj what $=$ Instr kill.Perf 'What did the man kill the lion with?'

With the purposive postposition /diyz/, we derive the interrogative 'why', or more literally, 'for what':

| (xx) f́jé díyé píyè-dè-w介. |  |
| :--- | :--- |
| what for cry-Impf-2sgS |  |
|  | 'Why are you crying?' |

In this same position, a consultant offered the alternative /ýjé gáá/ as the same meaning. The most likely origin of this /gáá/ is the perfective of /gè/ 'say', though this would typically take $L$ tone. If this were the origin, it would give the expression a literal translation like 'saying what'. We have seen 'say' used in other non-literal expressions, like /yém wó gàà/ 'having done that' (literally 'her/him having said like that'), so it would not be surprising if the verb idiomatically extended to cases like this as well. It is not clear, however, that there is any synchronic connection. Semantic differences?

In texts, we sometimes see cases where a speaker rhetorically poses the question 'Why?', and then proceeds to answer it himself. In this case, there is no purposive morpheme; rather, /f́jjé/ simply takes the copula, resulting in an expression like '[It] is what?':
(xx) ńj $\varepsilon=\overline{\mathrm{n}}=\mathrm{ma}$, yállà nǎm wâ $\Rightarrow$ ííyé nìmém wó túmáá gòìlè̀ what $=\mathrm{Cop}=$ or? wonder sun Quot today now 3 sgPro only go.outNom.L
wó gòò-dè nó, ǹdémbé yè-dè nó,
3sgPro go.out-Impf.L this LogProPl see-Impf.L this
'Why is that, [well], if now today the sun alone, this going out of his, what it is we
see... [Text 6]
'What' can also be used as a modifier, much like the English usage in expressions like 'what thing', or 'what time'. We have already seen one such case of this where the modifier is post-nominal like an adjective in (xx) above. In another construction, /ýjé/ acts as the possessor of the modified noun and imposes a L tone on it:
f́j $\mathfrak{c ́} \quad$ bìrè $=\mathrm{j} \quad$ bírè- d 文-w?
what work.L=Obj work-Impf-2sgS
'What are you working on?'

This latter expression appears to be more productive.
For the use of /njj $\dot{\varepsilon} /$ in time interrogatives, see section 15.2.5.

### 15.2.4 'Where?'

There are two expressions that translate to 'where' in Tommo So: /yàbáá/ and $/ y a ̀ g u ́=n \varepsilon /$. The latter uses the general interrogative /yàgú/, roughly 'which', with the oblique postposition. The former is probably related to the locative postposition /báà/, possibly derived from /yàgú = báà/. Thus, just as the oblique and locative postpositions can be used interchangeably, the two locative interrogatives can as well:
a. Ú sáá yàbáá (or yàgú $=n \varepsilon$ ) $=$ wo.

2 sgPro sister. H where which $=\mathrm{Obl}=$ is
'Where is your sister?'
b. Àn-ná $=\mathrm{g} \varepsilon$ mòtó $=\mathrm{g} \varepsilon$ yàbáá (or yàgú $=\mathrm{n} \varepsilon$ ) pàdè. man-HumSg $=$ Def moto $=$ Def where which $=$ Obl leave.PerfL 'Where did the man leave the motorcycle?'

Only in limited cases can /yàbáá/ be used with the copula instead of the existential locative /wo/. The case in question is when a speaker has no idea where a given location is; that is, 'where' is then treated as the predicate, with the unknown location as the subject, rather than as a locative adverbial. Thus, if a speaker heard someone mention 'Los Angeles' but did not have any clue where it was, not even that it was in the United States, the speaker could ask /Los Angeles yàbáá = $\mathfrak{\mathrm { n }} /$ 'Where is Los Angeles?'. If, however, the speaker has heard of the place and has a general idea of its location (on the Bandiagara escarpment, for instance, but not sure where), then the speaker would revert to /yàbáá=wo/ 'Where is it located?'. We could think of the difference as the former being more like "What is this place called 'Los Angeles'?" and the latter as being "Where is Los Angeles located?"

Impressionistically, /yàbáá/ appears to be more common, being offered first in the majority of cases. It is the form used in the lone instance of adverbial 'where' in my texts:
(xx) Î́ ì ném $=\mathrm{mo}$ yàbáá $=\mathrm{wo}=\mathrm{ma}$ wa.
child LogPro $=$ Poss where $=$ be $=$ or? Quot
'[She asked] where is my child?'
[Text 5]

Are there any semantic differences between/yabaa/ and /yagu/? Can any of the other existential quasi-verbs be used in questions? Can you respond to a question with /wo/ using a different quasi-verb?
15.2.5 'When?', 'what time?'

As mentioned above, /̧́jj́z/ 'what' can be used as the possessor of /wágádu/ 'time' to create the temporal interrogative /ýj́z wàgàdù/ 'when'. This is typically used with the associative postposition /le/, which, as described in section XXX, can mark temporal expressions. The examples below demonstrate that the same expression can be used for both past and future timeframes:

| a. ńjjé wàgàdù $=1 \mathrm{l}$ | púlò-m= le | dògǒ-m $=$ le |
| :---: | :---: | :---: |
| what time.L=Assoc | Fulbe-HumPl = Assoc | Dogon-HumPl = Assoc |
| jàwì-yì- $\mathrm{\varepsilon}^{\mathrm{n}}$. |  |  |
| fight-MP.PerfL-3plS |  |  |
| 'When did the Fulbe and | nd the Dogons fight?' |  |

b. ภ́jé $\varepsilon$ wàgàdù $=\mathrm{le} \quad$ jáá $=\mathrm{g} \varepsilon \quad$ yéllı̀. what time. $L=$ Assoc meal $=$ Def come.Impf 'When will the meal get here (i.e. be ready)?'

The opposite word order is also possible, that is, /wàgàdù ńjj́/ as a compound rather $_{\text {a }}$ than as a possessive construction. This is expected based on what we saw with / $\mathrm{y} j \dot{\varepsilon} /$ in section 15.2.3, namely that it can function either as a possessor or as a modifier.

Wàgàdù f́j $\mathrm{j}^{\prime}=\mathrm{le}$ íbé yáà-dè-w. time.L what $=$ Assoc market go-Impf-2sgS 'What time are you going to the market?'

There seems to be no semantic difference between the possessive construction and the compound construction. However, it does seem to vary by speaker; one of my consultants would consistently offer / ̌́jí wàgàdù/, while another would consistently offer /wàgàdù f́jj́́/.
15.2.6 'How?'

The basic interrogative word for 'how' is the adverb /yàngéni/ which appears to contain the similarity postposition /géni/ discussed in sections XXX and XXX coupled with the stem /yǎy/ 'how'. However, the fact that the tone of heavy /yǎy/ reassigns points to either an analysis in which /géni/ in this case is a suffix (or sequence of suffixes) or that /géni/ is in fact a separate stem that compounds with the stem /yǎy/. Ask speakers what they think. For now, I will not take a stand as to its morphological composition but will simply write it as /yàngéni/. This adverb may be used directly before the verb in question:
a. ògó nc̀ $\varepsilon$ ǹdé sàdè yó nc̀ $\varepsilon$ yà ygéni áwà-dìn?

Hogon now person miss.PerfL if now how catch-Impf.3plS
'[In the] Hogon-dom, now, if a person missed [a payment], how would they
catch
[him]?’
b. Yállà 1 í $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ né́ yàngénu kànì.
wonder child $=\mathrm{Def}=\mathrm{Obl}$ now how do.PerL 'What happened to the child?'
[Text 5]

Alternatively, the adverb can be used before a sort of contentless /káná/ 'do’, which is then chained with the main verb in question. This filler verb is completely optional:
a. Yàngéni kánaa gìnè kàndá úwo ùdò-w.
how do.Perf house.L new 2sgPoss build.PerfL-2sgS
'How did you build your new house?'
b. Yàngéni kánee dàlá $=$ ge yégèrè-dè-y.
how do.NF roof $=$ Def repair-Impf-1plS
'How are we going to repair the roof?'

These examples could all be translated something like, 'What did you do to build your new house?' or 'What will we do to repair the roof?'. Notice that 'do' in (xxa) is perfect, since the whole clause is perfect, whereas it is imperfect in (xxb) because the action has yet to take place. For more on verb chaining, see Chapter 17.

The stem /yǎy/ can also be used on its own. This is common in the set expression Bóy úwo yăy gì-èn 'what is your name' (Lit. how did they say your name). This /yǎy/ can also be used with contentless /káná/:
(xx) yǎy kánaa bàrì- $\varepsilon^{\mathrm{n}}$, yàé táá wà, yàéé táá $=\mathrm{g} \varepsilon$
how do.Perf help.PerfL-3pIS go.NF shoot.Imper Quot go.NF
shoot.Imper $=$ Def
yàà...
go.Perf
'[they told them] how they helped [them], [how the man from Bandiagara said] g make war, [and that they, his men] went to make war...' [History text]

This seems to be most common before /gè/ 'say', and its direct application to other verbs (without /káná/ as a buffer) seems limited.
/yàngéni káná/ may be nominalized to form a modifier /yàngènì kànú/ 'what kind'.
For instance:
(xx) Mòtò yàngènì kànú $\varepsilon$ bbè-dè mà ínnè-m.
moto.L how.L do.Nom buy-Impf or? know.Neg-1sgS
'I don't know what kind of motorcycle he will buy.'
15.2.7 'How much', 'how many'

The basic stem for 'how much' or 'how many' is /àngé/. Used as a predicate, it simply takes the copula:
a. Ú náá-ùlùm àggé = j̀.

2sgPro siblings.HL how.many = Cop
'How many siblings do you have?' (Lit. how many are your siblings)
b. Àngé=ỳ.
how.much = Cop
'How much is [it]?'

It can also take the adverbial suffix /-go/ often seen on numerals. Like numerals, /àngé-go/ has no effect on the tone of the preceding word:

$$
\begin{array}{lllll}
\text { a. Ú báá ú=j̀ } \quad \text { kúbó àngé-go } \quad \text { béndè-dè. } \\
\text { 2sgPro father.H } & \text { 2sgPro }=\text { Obj time how.many-Adv hit-Impf } \\
\text { 'How many times will your father hit you?' }
\end{array}
$$

b. Yàà-ná $=g \varepsilon$ jíbu àngé-go dôn-dè. woman-HumSg = Def wrap.skirt how.many-Adv sell-Impf
'How many wrap skirts will the woman sell?'

Instead of /-go/, /àygé/ can be followed by the adverb /bè é-nì/, which translates roughly to 'about' or 'worth'. Consultants tell me it translates to French ça vaut 'it equals, it is worth':
a. Súgóró àngé béé-nì èbè.
sugar how.much worth-Adv buy.PerfL
'How much sugar did she buy?'
b. Pédu ḿmo $=$ mbe àngé béé-nì yìmì- $\varepsilon^{n}$, ànà
sheep 1 sgPoss $=$ Pl how.many worth-Adv die.PerfL-3plS rain.L
ól $\mathrm{u}=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$.
wet $=\mathrm{Def}=\mathrm{Obl}$
'How many of my sheep died in the flood?'

In short, /bèz-nì/ just seems to emphasize the numeric quantity that precedes it (be that a specified numeral or an interrogative).

Like numerals, the interrogative /àngé/ can be used distributively by reduplicating it. That is, when asking how much it is for each of several objects, one could ask /àngé àngé =ỳ/ local French ' $c$ 'est combien combien?'.

Speakers are inconsistent on how to form the ordinal interrogative 'how many-th?' Recall that to form ordinal numerals, the suffix /-yém/ was added to the numeral, which then took all L tone (see section XXX). This pattern is possible with /àygé/ as well, forming, /àngì-yém/, with the final /e/ becoming [i]. Another possibility offered by a different speaker was /àngémí/, as in the following:

Ì̀ à $\mathfrak{y} g e ́ m i ́=g \varepsilon \quad$ Bàmàkó yà̀.
child.L how.manyth $=$ Def Bamako go.PerfL
'Which son (the how many-th son) went to Bamako?'

Note that ordinals control tone lowering on the preceding noun.
15.2.8 'Which?'
'Which' is expressed by the word /yàgú/, which can be considered either an adjective or a noun. It can be used to modify other nouns, creating the expression 'which X', by being placed immediately after the noun it modifies, on which it induces tone lowering. This is the pattern of both noun + adjective combinations and compound nouns, so it is
difficult to say whether /yàgú/ should be treated as an adjective or a noun. I leave the analysis of the grammatical category to further investigation.

Recall that/yàgú/ is used with the oblique postposition to mean 'where'. It can be used on its own, without the postposition, as a possessor:
( xx ) Bé yàgú sàà ùlùm, bé Kóígé sàà ùlùm? 3plPro which sister.L children.L 3plPro Koige sister.L children.L 'They [are] matrilinear children of which [place], they [are] matrilinear children of

$$
\text { Koige? } \quad \text { [Origin text] }
$$

Here, /yàgú/ refers to 'which [place]', with the modified noun left unspecified. This is the only textual example of /yàgú/ that I have. It seems that /ýj$\dot{\varepsilon} /$ 'what' is more common in Tommo So, even as a modifier.

The following are elicited examples of /yàgú/ as a modifier:
( xx ) a . Màngòrò yàgú fryéé m̀bé-w.
mango.L which eat.NF want-2sgS
'Which mango do you want to eat?'
b. Nàà yàgú náláá-dè.
cow.L which give.birth.Perf-Impf 'Which cow gave birth?'
c. Òdù yàgú dímbì-yè-dè-y, Téén yàá-dìm. road.L which follow-MP-Impf-1plS Tédié go-Inf 'Which road will we take to go to Tédié?'

With copula? With plural marker?
15.2.9 Embedded interrogatives

The preceding sections dealt with interrogatives in main clauses. Here, I will discuss interrogatives embedded under verbs such as 'know'.

The embedded interrogative clauses look exactly like main clauses, except that they obligatorily end in the question particle $/ \mathrm{ma} /$. They may be polar interrogatives, in which case there is no question word and the /-aa/ perfective can be used, or interrogatives with
wh-words as discussed above, in which case perfective verbs are typically the unsuffixed defocalized form. Consider the following examples:
a. 'if' - Polar interrogative

Bàmàkó $=\mathrm{n} \varepsilon \quad$ síyé-go $\quad$ yèláa $=\mathrm{w} 0-\mathrm{\varepsilon}^{\mathrm{n}}=\mathrm{ma} \quad$ ínnè.
Bamako = Obl good-Adv come.Perf=be-3plS = or? know.Neg
'He doesn't know if they got to Bamako all right.'
b. 'what'

what $=$ Obl eat-Impf-1plS = or? know.Neg-1sgS
'I don't know what we are going to eat.'
c. 'who'

Ǹd $\grave{\text { à }} \quad$ ǎ yéllè $=\mathrm{ma} \quad$ ínnè-m.
person.L who come.Impf = or? know.Neg-1sgS
'I don't know who will come.'
d. 'when'
j́jé $\quad$ wàgàdù $=l e \quad$ mí $\quad$ ánìgè $=m b e \quad$ yéllìn $=m a \quad$ ínnè-m.
what time. $\mathrm{L}=$ Assoc 1 sgPro friend. $\mathrm{HL}=\mathrm{Pl}$ come.Impf.3plS = or? know.Neg-
'I don't know when my friends are coming.'
e. 'how'

how do.Perf money = Def find.PerfL-3plS = or? know.Neg-1sgS
'I don't know how they earned the money.'
f. 'how many'

Mí nínjú nàá àngé-gó dònè=ma ínnè-m.
1sgPro uncle cow how.many-Adv sell.PerfL = or? know.Neg-1sgS
'I don't know how many cows my uncle sold.'
g. 'what kind'

Mòtò yàngènì kànú $\varepsilon$ b́bè- $\mathrm{d} \varepsilon=\mathrm{ma}$ ínnè-m.
moto.L how.L do.Nom buy-Impf=or? know.Neg-1sgS
'I don't know what kind of motorcycle he will buy.' (repeated from xx)
h. 'why'

ر́j $\varepsilon$ díyé íí $=\mathrm{g} \varepsilon \quad$ èkól $=\mathrm{g} \varepsilon \quad$ pàdè $=$ mà $\quad$ ínnè-m. what for child = Def school = Def leave.PerfL = or? know.Neg-1sgS 'I don't know why the child left school.'
i. where

In addition to true embedded interrogatives, a relative construction is also possible, in which case the object of /innè/ is no longer the full proposition, but rather the head of the relative clause, be that overt (xxa) or null (xxb). For instance:
a. Yàá-m $=\mathrm{g} \varepsilon$ gàndà góó bé gòó-dè ínnè-m.
woman-HumPl = Def place.L dance 3plPro dance-Impf.Rel know.Neg-1sgS 'I don't know (the place) where the women will dance'
b. Émmé f́yé-dè ínnè-m.

1plPro eat-Impf.Rel know.Neg-1sgS
'I don't know [what it is that] we will eat.'

For non-interrogative complements of 'know', see Chapter 19.
/ínnè/ 'not know' is not the only verb that can take embedded interrogatives. Among others, 'forget' is also possible:
(xx) Kèz̀ $\varepsilon$ = $\mathrm{g} \varepsilon \quad \mathrm{mí}=\grave{\mathrm{n}} \quad$ óbaa $=\mathrm{be}=\mathrm{ma} \quad$ nà $\mathrm{c}-\mathrm{m}$. money $=$ Def $1 \mathrm{sgPro}=$ Obj give.Perf $=$ be.Perf $=$ or? forget.PerfL-1sgS 'I forget whether he gave me the money.'

## Chapter 16 Relativization and clause nominalization

This chapter covers all aspects of relative clauses in Tommo So. The relative clause is a very common construction, being used as the default means of nominalizing clauses. (Or we could say using nominalized clauses as modifiers is the main way of forming relative clauses.) They are also interesting in that they are head-internal, with tone marking on the internal head, which shows that tone marking in Tommo So does not need to be clauseperipheral. In section 16.1, I will outline the basic characteristics of a Tommo So relative clause. Section 16.2 introduces the tonal marking on relative heads. In 16.3, I turn to a discussion of the verbal participle, including relative clauses based on adjectival predicates and relative clauses with chained participles. In section 16.4, I discuss headless relative clauses before turning to heads of different categories: section 16.5 treats subject relatives, section 16.6 object relatives, and section 16.7 relative clauses with possessive heads (both with the possessor as head and the possessed as head), and section 16.8 PP relative clauses. Finally, section 16.9 briefly addresses a few cases of recursive relative clauses.

### 16.1 Overview of relative clauses

Relative clauses in Tommo So, like in other Dogon languages, are head-internal. That is, the head of the relative remains in situ and is not obligatorily extracted or fronted. Of course, in many cases it happens that the head noun is clause-initial anyway, as is generally the case in subject relatives, but this is not indication of syntactic movement. Fronting on the head noun is also possible, perhaps under the influence of French, but it is by no means obligatory.

The head of the relative is marked with an all $\{\mathrm{L}\}$ tone overlay, identical to the overlay imposed by adjectives. It would seem that this is not accidental, but rather could reflect an underlying structural unity between relative clauses and adjectives as two different manifestations of a modifier position. If the head of the relative contains a possessor, the possessor plus possessed noun form a tonosyntactic island and do not undergo
tone lowering-the normal possessive tone melodies are preserved. On the other hand, if only the possessor is the head, as in phrases like 'the man whose child died', the head is lowered and the possessed noun has its normal lexical tone; there is optionally a resumptive possessive pronoun on the possessed noun. See section 16.7 for further discussion.

Adjectives and (most of the time) numerals remain adjacent to the head noun, but determiners, the plural clitic, and other quantifiers come after the relative participle. The tone of adjectives and numerals modifying the head noun fall under the $\{\mathrm{L}\}$ tone overlay. A demonstrative pronoun following the relative participle will reduce the tone of the participle to all L; other non-head constituents in the relative clause are not affected.

The relative participle is very similar to the verb forms found in focalized sentences (where the verb is defocalized). If in perfect aspect, it can only take the unsuffixed perfective, and it never takes the subject agreement suffixes; pronominal agreement is obligatorily marked with an independent pronoun, which typically is placed immediately before the final verbal element. The tonal melodies of the relative participle differ from those in main clauses (focalized or non-focalized). These will be discussed in section 16.2.

There are many textual examples of headless relative clauses. These can often be interpreted as having an implied head like 'person', 'thing', 'time', 'fact', or 'manner' that is understandable from context and need not be explicitly stated. Unlike in Jamsay (Heath 2008), Tommo So has no nominal agreement in relative clauses (and limited nominal agreement elsewhere), so there is no way to test the existence of a covert head in these cases.

### 16.2 Tone marking on the head NP in a relative clause

An unpossessed head of a relative clause, regardless of its grammatical role (subject, object, etc.), is marked by an all L tone overlay, which appears to be controlled by the relative participle. This can be understood as the same leftward tone lowering imposed by adjectives and demonstratives, though the fact that the head noun may be separated from the participle by one or more non-head constituents indicates that this tone lowering is a structural, not linear, effect. The following list summarizes the tonal effects of the relative participle on an unpossessed head noun. If a word is italicized, it means that it was already subject to tonal changes based on regular NP-internal processes discussed in Chapter XXX:
(xx) a. Noun.L
b. Noun.L Adjective.L
c. Noun.L Numeral.L
d. Noun.L Adjective.L Numeral.L

The general rule is that everything in the internal head is lowered. When there is a noun + adjective construction as the head of the relative, the noun would already have been lowered because it is followed by an adjective. In this case, it is not clear which element (adjective or participle) is responsible for the tone lowering. However, the fact that in a noun + numeral construction, which would have all lexical tone independently, both the noun and the numeral are lowered indicates that the tone lowering effect can extend leftward beyond the final word of the head.

The following examples illustrate the tonal changes seen in the head of the relative:

## (xx) Main clause <br> a. jàndúlu <br> ‘donkey’ <br> b. jàndùlù pílu 'white donkey'

c. jàndúlu tààndú-go 'three donkeys’
d. jàndùlù pílu tààndú-go 'three white donkeys'

## Relative head

$$
\begin{aligned}
& \text { jàndùlù mí bénd } \varepsilon=\mathrm{g} \varepsilon \\
& \text { 'the donkey I hit' }
\end{aligned}
$$

jàndùlù pìlù mí béndè $=\mathrm{g} \varepsilon$ 'the white donkey I hit'
jàndùlù tààndù-gò mí bénd $\varepsilon$ $=g \varepsilon=m b e$ 'the three donkeys that I hit'
jàndùlù pìlù tààndù-gò mí bénd $\varepsilon$ $=g \varepsilon=$ mbe 'the three white donkeys I hit'

Possessed NPs as head of the relative clause have different tonal patterns. When it is the possessed noun that is head of the relative clause, the possessor is impervious to tone lowering and always retains its lexical tone; the possessor and possessed noun form a tonosyntactic island. Similarly, the possessed noun will retain the same tonal melody imposed by possessor rather than necessarily taking the $\{\mathrm{L}\}$ tone of the relative clause. A pronominal alienable possessor follows the possessed noun and does not interact tonally in main clauses. In the head of a relative clause, the pronominal possessor still retains its lexical tone ( H on the pronoun and underspecified on the possessive particle portion), but the preceding possessed noun is lowered. The following list summarizes the tonal patterns seen on possessed relative heads. Once again, italicization indicates that the noun was already subject to a tonal change that has not been altered by the relative:
(xx) a. Possessor Noun.L
b. Pronoun Noun. H
c. Noun.L OblPro = Poss
d. Possessor Noun.L Adjective. L
e. Possessor Noun.L Numeral.L

It is in (d) and (e) that we can see a tonal difference. Consider first (xxd). In a main clause, if the possession is alienable, then the tonal pattern would be the same as in the relative clause-the adjective would undergo the tone lowering of the possessor. However, if the possession were inalienable, the adjective would be tonally free. This contrast is neutralized in relative clauses, since if the possessor cannot control the adjective, the relative clause can. The same is true for (xxe). I will provide examples and more discussion in section 16.6.

### 16.3 Relative participle

I call the verb in a relative clause a relative participle since it shows only a subset of features of regular verbs. Specifically, it has a more restricted set of aspects and it fails to show subject agreement. This may indicate a more nominal or adjectival status for the relative participle, especially considering that it is generally followed by the head noun's definite marker. Even those aspects that the participle does have in common with verbs in main clauses sometimes differ in tone pattern.

### 16.3.1 Subject marking in relative clauses

Since the participle cannot take subject agreement suffixes, pronominal subjects are obligatorily marked with an independent pronoun that often immediately precedes the main verb in the relative clause. For example:
a. Kòmbó yáà-dìn yò nè̀̀, ògò-nó ǹdè wó ḿb $\varepsilon$ =j̀
war go-Impf.3sgS if now, Hogon-HumSg person.L 3sgPro like.Rel = Obj
túyò-d $\varepsilon=m a \quad$ ǹdě-m $=g \varepsilon \quad$ kém yáà-d $\varepsilon$.
send. $\mathrm{Hab}-\mathrm{Hab}=$ or? person- $\mathrm{HumPl}=$ Def all go-Impf
'Now, if they [would] go to war, would the Hogon send [only] the people he
liked or would everyone go?'
b. Ǹdè ú yé-d $\varepsilon=g \varepsilon \quad$ kém jì-jímè-dìn. person.L 2 sgPro see-Impf.Rel $=$ Def all Red-be.sick-Impf.3pl 'Every one of the people you see is sick.'

I emphasize that the pronoun comes immediately before the main verb of the relative clause since in relative clauses with progressive verbs as the relative participle, we see that the independent pronoun can either precede the progressive participle (marked with /-gú/) or it can intervene between this participle and the auxiliary verb. These two positions are shown in the following:
( xx ) Àn-nà sòó (mí) sóó-gú (mí) sé $=\mathrm{g} \varepsilon$ dámmá àmìrì=j̀. man-HumSg.L speech ( 1 sgPro ) speak $-\mathrm{Ppl}(1 \mathrm{sgPro})$ have $=$ Def village
chief.L $=$ Cop
'The man to whom I am speaking is the village chief.'

The position before the auxiliary is preferred, though both are accepted. This example also shows that the pronoun can intervene between a cognate nominal and a verb. Neither this position nor the one between a participle and an auxiliary are available to subjects in main clauses. In fact, these positions are not even open to non-pronominal subjects in relative clauses. This suggests that there may be a requirement for independent pronouns to procliticize to the main verb in the relative clause, which in the case of a progressive is the auxiliary.

In a subject relative clause, a resumptive pronoun is typically omitted on the verb:
(xx)
a. ògò kùyò yòó- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ Bènjì-yúú $\mathrm{g} \varepsilon$ bì c n .

Hogon.L first.L enter-Impf.Rel = Def Benjiyuu say be.Perf-3plS
‘The person Hogon to enter they called Benjiyuu.' [Text XXX]
b. Bèn-dàmàlá únd̀̀ $=\mathrm{g} \varepsilon$ ǹdè bàlá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ nèy-yé $=\mathrm{g} \varepsilon$

Bendama ash.HL = Def person.L sweep.up.-Impf.Rel = Def 2-Ord = Def émmé bálà bè.
1 plPro sweep.up.Imp be.Perf
'The second person who swept up the ashes of Bendamala was us.' [Text XXX]

However, if the subject is not the head of the relative clause (the head is either the object, an adjunct, or null), a resumptive pronoun is generally placed immediately before the relative participle. However, this too is optional, as (xxb) shows:
( xx ) a. àn-sáárá wó yélè $=\mathrm{g} \varepsilon \quad$ gòrò bánu $=\mathrm{g} \varepsilon$ ǹdèmó $=\mathrm{g} \varepsilon$
white.person 3sgPro come.Perf.Rel=Def hat.L red=Def LogPro $=$ Def dògò yàgá òndú gì.
but other be.Neg say.PerfL
'[The time when] the white people came, they said "there is no red hat but us". ${ }^{35}$

$$
\begin{aligned}
& \text { b. Bènjù-àànó bàlè. Bènjù-àànó bálè }=\text { ge } \quad \text { gàláa } \\
& \text { Benju Aano sweep.up.PerfL Benju Aano sweep.up.Perf.Rel = Def pass.Perf } \\
& \text { 'Benju Aano swept [them] up. [That which] Benju Aano swept up passed...' } \\
& {[\text { Text XXX] }}
\end{aligned}
$$

Even in the absence of a non-pronominal subject, it appears that marking a 3sg subject with /wó/ is also optional in relative clauses; the lack of an independent pronoun is enough to indicate that the subject is 3 sg. This is particularly true where context makes the subject clear, as in the following headless relative clause, preceded by a main clause with the subject overtly stated:
Káá... émmé báá $=\mathrm{g} \varepsilon$ émmé $=\mathrm{j}$ gàá m̀̀b̀. but 1 plPro father. $\mathrm{H}=$ Def 1 plPro $=$ Obj a.lot love.Perf 'But... our father loved us very much.'

$$
\begin{aligned}
& \text { Néć... émmé }=\mathfrak{\mathrm { n }} \text { gàá m̀b } \varepsilon \text { }=\mathrm{g} \varepsilon \quad \text { díyé gòrò bánu }=\mathrm{g} \varepsilon \text { émmé } \\
& \text { now } 1 \text { plPro }=O b j \text { a.lot love.Rel }=\text { Def for hat.L red }=\text { Def } 1 \text { plPro } \\
& \mathrm{b} \varepsilon \text { lı̀ }=\mathrm{g} \varepsilon \quad \text { wó }=\grave{\mathrm{n}} . \\
& \text { find.Perf.Rel }=\text { Def } 3 \mathrm{sg} \text { Pro }=\text { Cop } \\
& \text { 'Now... because of [the fact that he] loved us very much, it was [such the case }
\end{aligned}
$$ that]

$$
\text { we got the red hat.' } \quad[\text { Text XXX] }
$$

The first sentence introduces the subject /émmé báá/ 'our father'. Then, in the next sentence, the subject of the first headless relative clause (with the covert head being something like 'the fact') is also implied to be 'our father', or 'he', but there is no subject marking at all.

There is one exception to the lack of subject marking, and that is when the subject is third person plural. In this case alone can the participle take subject agreement marking. The explanation for this may be due to the irregular marking of the 3 pl . That is, while the marking of every other person and number is a discrete suffix added to the verb, the 3 pl is often a portmanteau form. Even in those cases where it seems segmentable, i.e. when it takes the verb takes the suffix $/-\mathrm{\varepsilon}^{n} /$, this suffix still causes phonological changes on the verb.

[^29]Perhaps this subject-verb fusion results in the 3 pl subject marking being inextricable even in relative clauses. However, there is another factor to the 3 pl being marked in these cases, and that is that the meaning is usually an impersonal one; a specific subject is not implicated, and the construction takes on an almost passive meaning:
a. Gěm kòlò=nè. Kìdè káná bí- $\varepsilon^{n}$.
funeral inside. $\mathrm{L}=\mathrm{Obl}$ thing.L do.Impf be.Perf.Rel-3plS
'In funerals. The thing[s] [we] used to do (or the things that were done).' [Text
4]
b. $\varepsilon \varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon$ tégé-gú $i ́ 1 i=\mathrm{g} \varepsilon=\mathrm{\jmath} \quad$ én $=\mathrm{g} \varepsilon$ kòlò $=\mathrm{n} \varepsilon \quad$ núyó núyò-dè, ash $=$ Def drip -Ppl child $=\mathrm{Def}=\mathrm{Obj}$ ash $=$ Def inside $. \mathrm{L}=\mathrm{Obl}$ sing sing-Impf ì̀ dáí- ${ }^{\mathrm{n}}=\mathrm{g} \varepsilon$.
child.L kill.Perf.Rel-3plS = Def
'As the ash was dripping, the child [started to] sing [from] inside the ashes, the child that was killed.'

The passive reading is particularly clear in (xxb), since in the story, it is one woman who kills the child, not a group of people that would take 3 pl marking.

In summary:

1. Non-3sg pronominal subjects must be marked with an independent pronoun.
2. These pronouns typically procliticize to the main verb (participle).
3. Subject relatives do not take a resumptive 3 sg pronoun before the participle.
4. Other 3sg subjects are only optionally marked with a pronoun.
5. In pseudo-passive constructions, the participle can take 3 pl subject agreement.

PROBLEM!: wó táì- $\grave{\mathrm{n}}^{\mathrm{n}}=$ gè wó $=$ j̀.
3 sgPro shoot.Perf.Rel-3plS 3 sgPro $=$ Cop
'it was like that that they declared war.'
Subject mismatch!
16.3.2 TAN on the relative participle

Relative participles take a smaller set of tense-aspect-negation (TAN) categories than main verbs. This is particularly striking in the perfect. Where main verbs can take several different perfect forms, in relative clauses, this is usually condensed to just the defocalized

L perfect. This could be the result of the head of the relative clause taking default focus, which results in the verb being defocalized and hence imcompatible with the $/$-aa/ perfect forms. WHAT HAPPENS WHEN THE RELATIVE PARTICIPLE IS FOCUSED?

I apologized to the man that I kicked not the man that I hit.

We otherwise see more or less the same inflectional categories, but with differences in tonal realization. I will address each below.

### 16.3.2.1 Imperfect

The present/future form of the affirmative imperfect is segmentally identical to its form in main clauses. The suffix $/-\mathrm{d} \varepsilon /$ is added to the stem, which shows no changes in vocalism. However, while in main clauses this verb form takes a $\{\mathrm{HL}\}$ tone overlay, in relative clauses the verb stem also retains its lexical tone. This can be schematized as follows:

## (xx) Relative present/future affirmative imperfect participle <br> Verb-d $\varepsilon$

The suffix is underspecified for tone. The following table compares imperfect verb forms in relative and main clauses:

## Relative

a. yóó-d $\varepsilon$ '(that) enter'

## Main

b. jòbó-d $\varepsilon$
'(that) run'
yóò-d $\varepsilon$ '(will) enter'
c. káná-de '(that) do'
jóbò-dè '(will) run'
kánà-dè
'(will) do'

The one exception seems to be those L-toned subminimal verbs /yè/ 'see' and /gè/ 'say'. In relative participles, these verbs take H tone instead of lexical L, yielding /y $\varepsilon$ - $\mathrm{d} \varepsilon /$ and $/ \mathrm{g} \varepsilon$ - $\mathrm{d} \varepsilon /$ respectively.

In the negative, the form of the relative participle is totally identical to that in main clauses. For the formation of this verb type, see section XXX. DOUBLE CHECK THAT THE TONE IS REALLY IDENTICAL.

If the past imperfect is rare in main clauses, it is even rarer in relative clauses. Nonetheless, in those examples we see, the tone appears to be only specified on the first syllable of the root. IS THIS THE SAME AS MAIN CLAUSES?

As already indicated above, most of the verbal differences between main clauses and relative clauses are seen in the perfective, most notably in the near-total absence of /-aa/ perfects. Just as the use of the defocalized L perfect (the form found in relative clauses) is tied in with focus in main clauses, so too can we hypothesize that the predominance of this form in relative clauses is related to focus.

The segmental form of the perfect relative participle is identical to a perfect main verb, but rather than taking all $\{\mathrm{L}\}$ tonally, it appears to take $\{\mathrm{HL}\}$ overlay, which manifests itself as a smooth downward interpolation across the verb, much in the same way as present affirmative imperfect verbs in main clauses. Though the smooth interpolation suggests interpolation, the facts suggest otherwise. Recall that interpolation should be between two tonal targets on either side; if the verb were underspecified and preceded by a L tone, the interpolation should begin at that L . This is not what we see, as the following example indicates:
(xx) gààú íí wómo yàà-nà yímè $=\mathrm{g} \varepsilon$ last.year child 3 sgPoss woman-HumSg.L die.Perf.Rel $=$ Def 'the woman whose child died last year'

The L-toned internal head 'woman' immediately precedes the perfect verb 'died', and yet the verb begins its downward tone pattern on a H tone. GET PITCH TRACK

We can summarize the form of the perfect as follows:
(xx) Relative present affirmative perfect participle Verb\{HL\},FV/E,i/

For more on the segmental formation of these perfect verbs, see section XXX.
In the negative, the form of verb is once again the same as in main clauses, tonally and segmentally. For the formation of the negative perfect (the same in both the past and present), see section XXX.

## MAKE SURE THERE'S NO PAST PERFECT

### 16.3.2.3 Experiential perfect

The experiential perfect ('have the experience of doing') can also be used as the relative participle. In the affirmative, it takes the 'perfect imperfect' participle form,
common in relative modifiers. This is formed by adding the suffix /-d $\varepsilon /$ to the $/-\mathrm{aa} /$ perfect, which sees the H tone of the lexical $\{\mathrm{H}\}$ or $\{\mathrm{LH}\}$ extend through the $/$-aa/, unlike in normal $/-\mathrm{a} a /$ perfects. In the case of the experiential perfect, which always contains the auxiliary /tíy $\varepsilon$ /, the participial modifier takes $\{\mathrm{H}\}$ :
( xx ) Nàà mí yé tíyáá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon=\mathrm{mbe}$ kèlè póó yé $=\mathrm{s} \grave{\text { c̀ }} \mathrm{\varepsilon} \mathrm{E}$. cow.L 1sgPro see ExpPerf- $\operatorname{Impf}=\mathrm{Def}=$ Pl horn.L fat Exist $=$ have.L-3plS 'The cows that I've seen have big horns.'

Recall that in main clauses, the verb form would be /yé tíyaa $=$ wo/, with the $/-\mathrm{aa} /$ underspecified and the imperfect suffix /-d $\varepsilon /$ replaced with the quasi-verb auxiliary $/ \mathrm{wo} /$. The negative form of the experiential perfect is identical to that in main clauses due to the fact that the auxiliary /tíy $\varepsilon$ / is in the past perfect, a form shared by relative participles and main verbs:
( xx ) child $=$ Def thing.L 3sgPro eat ExpPerf-Neg.Perf $=$ Def $=$ Pl fear-MP.Perf $=$ be 'The child is afraid of things that he hasn't eaten.'

For more on the experiential perfect, see section XXX.
16.3.2.4 Progressive

Example ( xx ) has already indicated that the relative participle may be progressive. The formulation, affirmative and negative, past and present, is the same as in main clauses. The only difference is in the placement of the subject, as shown above. For more information on how to conjugate the progressive, see section XXX.

### 16.3.3 Quasi-verbs as relative participle

Quasi-verbs are relative participle tend to take $\{\mathrm{H}\}$ tone, unlike in main clauses where they are underspecified. This is true of both affirmative and negative quasi-verbs. Segmentally, they are identical. Some examples include:
( xx ) a. Sàbé jàdáa ǹdémbe yèndáa kòmmó $=\mathrm{n} \varepsilon$ nàmà tóó $=$ mbe yó because reflect.Perf LogProPl look.at.Perf cave $=\mathrm{Obl}$ meat.L be.in.Rel $=\mathrm{Pl}$ if

$$
\text { dògò } \text { úndu }=\mathrm{n} \varepsilon \quad \text { nàmà } \text { tóó }=\mathrm{mbe}=\text { ỳ } \quad \text { bìlé-lè } \quad \text { wa. }
$$

but forest $=\mathrm{Obl}$ meat.L be.in. $\mathrm{Rel}=\mathrm{Pl}=$ Obj be.possible-Neg.Impf Quot '[They said] because we thought it over, we saw that if not for the animals who are in caves, the animals in the forest will not be able to stand it.'
b. Àn-nà bàré $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ bé-lí $=\mathrm{g} \varepsilon \quad$ Móbl àmìrù $=\mathrm{g} \varepsilon$ man-HumSg.L meeting $=\operatorname{Def}=$ Obl be.Perf-Neg $=$ Def Mori chief.L $=$ Def wó $=$ ǹ.
$3 \mathrm{sgPro}=\mathrm{Cop}$
'The man who wasn't at the meeting, it was the chief of Mori.'

What about quasi-verbs as auxiliaries?
16.3.4 Relative participles based on adjectival predicates

DATA
16.3.5 Relative participles with verb chaining

Just like main clauses, relative clauses can contain verb chains. Chapter XXX will go in depth on verb chaining in Tommo So, but in brief, the non-final verb is either the $/-\mathrm{aa} /$ perfect base if perfect or the equivalent with the final vowel /-ee/ if imperfect. The final verb takes regular relative participial form.

It is a chained participle that is formed when two relative clauses with related meanings are coordinated with a single head. For example:
(xx) Nàà ébaa dámmá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ mí jécll $\varepsilon=\mathrm{g} \varepsilon \quad$ píli $=\mathrm{n}$.
cow.L buy.Perf village $=$ Def $=$ Obl 1sgPro bring.Impf.Rel = Def white $=$ Cop
'The cow that I bought and that I will bring to the village is white.'

The first verb in the chain 'buy' is perfect and thus takes /-aa/. The final verb, 'bring', takes the regular participial imperfect form. If the buying were imperfect ('that I will buy'), it would take the form /ébee/.

What about two unrelated relative clauses? 'The dog that the children found in the field and that I hate...'

### 16.4 Headless relative clauses

While oftentimes an overt, identifiable head can be found for the relative clause, headless relatives are more common in narratives. These null heads have a wide variety of interpretations, from 'person', to 'time', to simply an abstract concept like 'fact' that serves only to nominalize the following clause. Sometimes this nominalized form seems to just be a stylistic tool used in chaining clauses together. I will show examples of each type below, progressing from clearest null head to most obscure.
16.4.1 'Person' or 'thing'

In headless relative clauses with 'person' or 'thing' as the null head, the relative clause still refers to a concrete object.

### 16.4.1.1 'Person'

When referring to any person in general as the head of a relative clause, the word 'person' is optional. It may be present (xxa) or it may be null (xxb):
a. Ǹdè j̀rò jáá j̀yéé-lè $=g \varepsilon \quad$ dògò-nó $=l \varepsilon$. person.L baobab.L meal eat.NF-Neg.Rel = Def Dogon-HumSg = Neg.Cop 'He who doesn't eat toh is not a Dogon.'
b. Nàá úwo $=g \varepsilon$ wó gúy ${ }^{n} \grave{\varepsilon} \quad$ wó= ̀̀ yé $=$ pì̀-ndì- $\grave{c}^{n}$.
cow 2 sgPoss $=$ Def 3 sgPro steal.Perf.Rel $3 \mathrm{sgPro}=$ Obj Exist $=$ close-Fact.Perf3p1S 'They locked up the one who stole your cow.'

Notice that in (xxa) where the subject head of the relative is overt, no resumptive pronoun in the relative clause is required. In (xxb), on the other hand, /wó/ is needed to mark the subject in the relative clause. CAN THESE BE REVERSED?

If a pronoun is the logical head of a relative clause, it does not undergo tone lowering, suggesting that perhaps there is a null head 'person', as in the following:
( xx ) Émmé nònú wó $=\mathrm{g} \varepsilon=\mathrm{mbe} \mathrm{ATT}=\mathrm{y}$ vòtè.
1 plPro here $\mathrm{be}=\mathrm{Def}=\mathrm{Pl}$ ATT $=\mathrm{Obj}$ vote. Perf
'We [the people] who are here voted for ATT. ${ }^{36}$

The fact that the definite and plural clitics follow the participle suggests a null head, since these would never be combined with a pronoun. This example also shows an interesting loan from French, /vot $/$ / 'vote', which has been imported into the native inflectional system despite its utterly foreign phonology. Can it conjugate otherwise?
16.4.1.2 'Thing' or 'That which...'

More common are headless relative clauses with a null head meaning something like 'thing' or 'that which...'. Like 'person' headless relatives, 'thing' can be optionally overt, shown by (xxa).
(xx)
a. (Kìd $\grave{)}$ ú ínnè $=\mathrm{g} \varepsilon \quad$ ú= $\mathrm{y} \quad$ bàrmá-mó nàà-gú.
thing.L 2sgPro know.Neg = Def 2 sgPro $=$ Cop XXX
'What you don't know can't hurt you.'
b. émmé $\mathrm{g} \varepsilon$ - $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ Màndè góí-m... Màndé y $̀ \bar{l} \varepsilon$ - y .

1plPro say-Hab.Rel = Def Mande.L leave.Nom-HumPl Mande come.PerfL-
1 plS
'[what/ that which] we say is that [we], those who left Mande, came to Mande.'

### 16.4.2 'Time'

The generic word /wákádu/ 'time' can be used as the head of a relative clause, but it too can be null. The fact that the relative clause has a null time head is made clear by the associative clitic placed after it:
a. Mí ánìgè $=m b e$ wàgàdù nònú mí bé-lí $=g \varepsilon=l e \quad$ yèlì̀ ${ }^{\text {n }}$.

1 sgPro friend $. \mathrm{HL}=\mathrm{Pl}$ time.L here 1 sgPro be- $\mathrm{Neg}=\mathrm{Def}=$ Assoc come.PerfL3p1S
'My friends came when I wasn't here.'
b. Móólu $=\mathrm{mo}=\mathrm{g} \varepsilon$ tà̀i- $\varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon=\mathrm{le}^{37} \quad$ àn-sáárá $\quad$ yèláa $=\mathrm{wo}$.

Mori $=$ Poss $=$ Def shoot. PerfL-3plS $=$ Def $=$ Assoc white. person come. Perf $=$ is

[^30]'At [the time when] they started the Mori [war], the white people came.' [Text 2]

The example in (xxa) with an overt head is provided to show that the structure is exactly the same as the example in (xxb) with a null head.

### 16.4.3 'Fact', or nominalized clauses

All of the previous null heads referred to something identifiable outside of the clause itself-a person, a thing, or a time. More often, the headless relative clause is a nominalized clause, and if an external head could be identified, it would be something abstract like 'the fact'. Consider the following:
a. Néq́... émmé $=\grave{\jmath}$ gàá m̀b $\varepsilon$ $=g \varepsilon$ díyé gòrò bánu $=g \varepsilon$ émmé now 1 plPro $=$ Obj a.lot love.Rel $=$ Def for hat.L red= Def 1plPro
b ह́l $\grave{\varepsilon}=\mathrm{g} \varepsilon \quad$ wó $=\mathrm{n}$.
find.Perf.Rel $=$ Def $3 \mathrm{sg} \operatorname{Pro}=\mathrm{Cop}$
'Now... because our father loved us very much, it was [such that] we got the red hat.'
b. Nòó pínníyaa bé $=$ ỳ pàdéé-lè $=\mathrm{g} \varepsilon$ bé
this after $\quad 3 \mathrm{plPro}=$ Obj leave-Neg.Impf.Rel $=$ Def $\quad 3 p l P r o$ júgj̀ $=\mathrm{g}$ è (coughs) ǹdèmbé... íyèlè Bànjàgàrá yàì-દ̀n. know.Perf.Rel $=$ Def LogProPl again Bandiagara go.PerfL-3plS 'After that, [when] they ${ }_{i}$ realized that [they] wouldn't leave them [i.e. that they couldn't fight them], [when] they realized that, (coughs), they $y_{i}$ went to
Bandiagara again.'

In (xxa), repeated from (xx), there are two headless relative clauses, the first of which could be seen to have the null head 'the fact', as in '[the fact that] our father loved us very much'. The second headless relative clause is closer to the sort discussed in the next section. In (xxb), the first relative clause could be interpreted as also having a null head 'the fact', as in '[the fact that they] wouldn't leave them'. Otherwise, we could simply see this clause as being nominalized to act as an object of the verb/jùg'/ 'recognize'. Once again, the second headless relative clause will be discussed in the next section.
16.4.4 Headless relative clauses as main or conjoined clauses

The last kind of headless relative clause is the most difficult to explain and also extremely common in texts. The examples in (xx) above each contain a second headless relative clause that appears to function as a main clause. In (xxa), it is followed by /wó= $\mathrm{n} /$ 'it is' (or in this case, 'it was'), which when combined with the relative clause could be interpreted to form a construction like 'it was such that that got the red hat'. In (xxb), on the other hand, the headless relative clause $/ b e$ júgò $=g \varepsilon /$ '[that] they recognized' seems to move directly into the next clause 'they again went to Bandiagara'. That is, it seems that headless relative clauses can be used as a means of stringing together clauses in an utterance, though how they manage to do this is not clear. One possibility is that the null head is some sort of temporal element like 'when' or 'after', though this would not explain the examples in ( xx ) below. Other examples where the headless relative clause is followed by an inflected verb or copula include the following:

$$
\begin{aligned}
& \text { Bon, òlù nàmá kém bé móòmbì-yì }=\mathrm{g} \varepsilon \text { bé } \\
& \text { well field.L meat all 3plPro assemble-MP.Perf.Rel=Def 3plPro } \\
& \text { dánnì-yì }=\mathrm{g} \varepsilon \text {, kìdé kém yàá-m=le wo- } \mathrm{e} \text { n, kìd } \varepsilon \text { ḱ́m } \\
& \text { sit-MP.Perf.Rel = Def thing all woman-HumPl=Assoc be-3plS thing all } \\
& \text { líí-m=le }{ }^{38} \quad \text { wo- }{ }^{\mathrm{n}} \text {. } \\
& \text { children- } \mathrm{HumPl}=\text { Assoc be-3plS } \\
& \text { 'Well, [when] all of the wild animals got together and sat down, they were all } \\
& \text { wives, they were all with children.' }
\end{aligned}
$$ with

Here, we see two headless relative clauses strung together before the inflected clauses at the end. I have included 'when' in the translation as a possible analysis for this construction.

However, this analysis runs into problems when we consider examples like the following:

```
a. Yêm bé tó \({ }^{\mathrm{n}}=\mathrm{g} \varepsilon \quad\) kòmbó \(=\mathrm{g} \varepsilon\) yêm bé
    like.that 3plPro write.Perf.Rel \(=\) Def war \(=\) Def like.that 3plPro
    táè \(=g \varepsilon\).
    shoot.Perf.Rel = Def
    'They wrote like, they made war like that. \({ }^{39}\)
```

[^31]b. Mèèr gìné údáá-dìm $(=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon) \quad$ wó mayor.L house build.Perf-Impf.3plS = Def $=$ Obl 3 sgPro
$$
\text { sáná }=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{le} \quad \text { wó } \quad \text { jáwì-yì }=\mathrm{g} \varepsilon \quad \text { yò-yǒw }=\mathrm{g} \varepsilon .
$$
brother. $\mathrm{H}=\mathrm{Def}=\mathrm{Pl}=$ Assoc 3sgPro fight-MP.Perf.Rel $=$ Def Red-
mean.Nom $=$ De
'[By where] they built the mayor's office, ${ }^{40}$ she fought with her older brothers, she was mean.'

In these examples, there is no clause with an inflected verb following the headless relatives, leaving little room to analyze them as subordinated since they lack clauses to be subordinated to. Intonationally, these sentences give no indication of being any different than normal inflected clauses. Two parallels should be pointed out here. First, we saw in section XXX that non-final chain forms can sometimes be used as main verbs. This may be a similar situation; typically, these headless relatives or nominalized clauses are used as non-final members in a string of clauses, but at times in narratives they can be used finally as well. It is not clear what conditions trigger this. Second, notice that the final "clause" in (xxb) above is actually a nominalized adjective, not a clause at all. We see, then, that other nominalized forms can also sometimes be used in place of inflected verbs, though again, it is not clear how this functions syntactically as well as pragmatically.

For the time being, we must simply note that this use of relatives or nominalized clauses is extremely common in narratives. I leave an analysis for future work.

### 16.5 Subject relative clauses

In this section, I discuss the first category of relative clauses with overt heads: the subject relative clause. This subject can be any sort of noun, though the status of pronouns as head of a relative clause is less clear, since in this case there may be a null head; see example (xx) above.
16.5.1 Subject relatives: head placement

At the beginning of this chapter, I asserted that relative clauses in Tommo So are head internal. However, this does not always mean that the head noun will be non-initial. Rather, a head-internal language will leave the head of the relative clause in situ as opposed

[^32]to placing it before or after the relative clause. Since Tommo So is an SOV language, most subject relatives will appear indistinguishable from a head-initial relative clause:
(xx)
a. ògò kùyò yóó-d $\varepsilon=\mathrm{g} \varepsilon \quad$ Bènjì-yúú gè bì- $\varepsilon^{\mathrm{n}}$. Hogon.L first.L enter-Impf.Rel = Def Benjiyuu say be.Perf-3plS 'The first person to enter the Hogon, they called Benjiyuu.' [Text 1]
b. Ìyày núyó nùyò-lí $=\mathrm{g} \varepsilon$ tílày gós góò-dè. girl.L song sing-Neg.Perf= Def surely dance dance-Impf 'The girl who didn't sing will surely dance.'

However, there are cases in which another clause-internal element can precede it. The most common such construction involves an adjunct, either temporal (xxa) or locative (xxb):
a. TEMPORAL
b. Nìmbáà yàà-nà ì̀è ní mí báá íg-go=wo. over.there woman-HumSg.L stand.Rel.L that 1sgPro father.H know-Adv=be 'The woman standing over there knows my father.'

A few notes on (xxb): First, it appears that the least marked order of constituents is to put the locative adverb 'over there' after the head noun; this is the order first offered to me, though consultants also accepted the order in (xxb) as grammatical. Second, we see that in a relative clause, the stative verb 'stand' is not reduplicated, as it would be in a main clause. COULD IT BE? See section XXX for more on stative verbs. Finally, this stative verb also takes a $\{\mathrm{L}\}$ overlay because it is followed by a demonstrative /nǐ/ 'that'. Notice that the adverb is not tone lowered here, nor would it be if it followed the head; only the participle is affected by a demonstrative.

It is also possible to scramble the order of constituents in the relative clause such that an object precedes the tone-lowered subject head. For example:
( xx ) Kìlèmé ǹdè yàéé-lè $=\mathrm{g} \varepsilon=\mathrm{mbe}$ gìnc̀-ý $=\mathrm{g} \varepsilon \quad$ bé party person.L go-Neg. $\operatorname{Impf}=\mathrm{Def}=\mathrm{Pl}$ house-Dim $=$ Def 3plPro dómmì-yè-dè. watch-MP-Impf
'It is the people who are not going to the party who will watch the house.'

DOES THIS WORK IF THE OBJECT IS A TRUE DIRECT OBJECT? Here, the bare adjunct 'party' precedes the subject head. Note that the main clause puts the focus on the subject, shown by marking the subject with an independent pronoun and not marking the subject on the verb. For more on focus, see Chapter 15. Nonetheless, the form first offered by consultants places the subject head in initial position. It is not clear how fronting the object affects the semantics of the clause.
16.5.2 Conjoined NP subjects as head of a relative clause

When two conjoined NPs act as head of a relative clause, the preferred strategy for expressing this is to repeat the relative clause twice, once after each head. Both relative clauses are exactly what we would expect if there were only a single relative clause; that is, the subject head is clause-initial and tone-lowered:
(xx) Émmé dámmá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ yàà-m ìsé témé- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon=\mathrm{mbe}$ 1 plPro village $=\mathrm{Def}=\mathrm{Obl}$ woman-HumPl.L dog eat-Impf.Rel $=\mathrm{Def}=\mathrm{Pl}$ ànà-m ìsé témé- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon=\mathrm{mbe} \quad$ m̀bé-lè-y. man-HumPl.L dog eat.Hab-Hab.Rel = Def = Pl like-Neg-1plS 'We in the village, we don't like woman who eat dog and men who eat dog.'

No conjunction is required between the two clauses. CAN $=$ LE BE ADDED?
An alternative construction involves coordinating the two NPs in the usual way, either using the associative clitic after each or using direct juxtaposition, then modifying this conjoined phrase with one instance of the relative clause. In this case, the conjoined head NP does not undergo tone lowering.

> a. Émmé dámmá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ yàá-m $=\mathrm{le} \quad$ àná- $\mathrm{m}=\mathrm{le}$
> 1 plPro village $=\mathrm{Def}=\mathrm{Obl}$ woman-HumSg=Assoc man-HumSg = Assoc
> ìsé témé- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon=\mathrm{mbe} \quad$ m̀bé-lè-y.
> dog eat.Hab-Hab.Rel $=\mathrm{Def}=\mathrm{Pl}$ like-Neg- lplS
> 'We in the village, we don't like women and men who eat dog.'
b. ènè nò $=$ mbé pèdù nò $=$ mbé bándáykálá $=n \varepsilon$ píyé pìyè $=$ bè
nò $=\mathrm{mbé}$
goat. L this $=\mathrm{Pl}$ sheep this $=\mathrm{Pl} \quad$ courtyard $=\mathrm{Obl}$ cry cry.L=be.Perf.L this $=\mathrm{Pl}$
yé = sèmè-m.

Exist = slaughter.PerfL-1sgS
'I slaughtered these goats and these sheep that used to cry in the courtyard.'

Notice that in (xxb), where the head nouns are modified by a demonstrative, the demonstrative must also be repeated after the verb. IS THIS OBLIGATORY?

In the cases above, the coordinated heads are understood to each have separately performed the action signified by the relative participle. When the action requires both players, however, a resumptive pronoun /bé/ may be optionally used before the relative participle. This is seen below:

$$
\begin{align*}
& \text { Àná- } \mathrm{m}=\mathrm{g} \varepsilon=\mathrm{le} \quad \text { yàá- } \mathrm{m}=\mathrm{g} \varepsilon=\mathrm{le}  \tag{xx}\\
& \text { man- } \mathrm{HumPl}=\mathrm{Def}=\mathrm{Assoc} \text { woman- } \mathrm{HumPl}=\mathrm{Def}=\text { Asso 3plPro }  \tag{bé}\\
& \text { jáwì-yì }=\mathrm{g} \varepsilon \quad \text { sè́ } \quad \text { sòé-nnè. } \\
& \text { fight-MP.Perf.Rel = Def speech speak-Neg.Impf.3plS } \\
& \text { 'The men and women who fought no longer speak.' }
\end{align*}
$$

In this case, the first coordination strategy of repeating the relative clause cannot be used since the fighting cannot be carried out by either just the men or just the women, since the action is understood to be reciprocal.
16.5.3 Coordinated relatives with a shared subject head

Above we saw one relative participle with two different heads. When there is one head but two different relative actions, the two are joined together in a verb chain (see Chapter 17):
a. Ǹdè kíyé jùmbée kèbé-lè $=\mathrm{g} \varepsilon=\mathrm{mbe} \quad$ m̀bé-lè-m. person.L bone throw.NF pick.up-Neg.Impf.Rel $=\mathrm{Def}=\mathrm{Pl}$ like-Neg-1 sgS 'I don't like people who throw bones and don't pick [them] up.'
b. Yàà-nà Àmbìlè Sáná $=$ ỳ éa $^{\mathrm{n}} \quad$ Bàmàkó yàá-gú wó yàà woman-HumSg.L Ambile Sana = Obj marry.Perf Bamako go-Ppl be.Rel see.Perf bé-m.
be.Perf-1 sgS
'I saw the woman who married Sana from Ambile and is going to Bamako.'
c. Àn-nà fétu $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ bèlú $=\mathrm{mbe}$ sémee $\quad \operatorname{símb} \varepsilon$ - $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon=\mathrm{j}$ man-HumSg. L party $=\mathrm{Def}=\mathrm{Obl}$ animal $=\mathrm{Pl}$ slaughter $\cdot \mathrm{NF}$ grill-
Hab.Rel $=$ Def $=$ Obj

```
íg-go = wo-m
know-Adv be-1sgS
'I know the man who slaughters sheep and grills them for parties.'
```

A construction with two consecutive relative clauses, one with an inaudible head, is not allowed.

### 16.5.4 The participle and subject agreement in subject relatives

In section 16.3.1, we saw that subject pronouns are typically not repeated in subject relatives, though in cases like ( xx ) where a coordinated NP head must be understood jointly, the use of a 3 pl pronoun can strengthen this reading.

Another thing to be noted about subject relatives is the relative prevalence of the /-aa-d $\varepsilon /$ verb form when compared to object relatives. CHECK THIS. WHAT'S UP WITH AA-DE ANYWAY?

### 16.6 Object relatives

The basic formulation of object relatives is the same as that of subject relatives, only when the subject is non-pronominal, the head-internal nature of the relative clause becomes clearer.

### 16.6.1 Object relatives: head placement

Like subject relatives, the object head of a relative clause is typically left in situ, which given the SOV nature of the language will often result in clause-internal heads rather clause-initial. Nonetheless, when the subject of the relative clause is pronominal, this is marked with an independent pronoun typically directly before the verb, leaving the object in initial position. For example:
man-HumPl.L 1sgPro see-Neg.Perf= $\mathrm{Def}=\mathrm{Pl}$ where go.PerfL-3plS 'Where did the men go that I didn't see?'
b. Nàà nàmbá ú èmè-lí kó m̀̀bè-m.
cow.L yet 2 sgPro milk-Neg.Perf that.DD want.PerfL-1sgS
'I want a cow that you haven't milked yet.'

In (xxa), consultants accept a form with /mí/ placed at the front of the clause, but the unmarked placement of subject pronouns is immediately before the verb. (XXB) CAN NAMBA MOVE TO THE FRONT?

When a non-pronominal subject is introduced, however, the object head normally follows it.

Í́ $1=\mathrm{g} \varepsilon$ mí=ỳ màngòrò óbì $=\mathrm{g} \varepsilon \quad$ kém yé $=$ ỳyè-m.
child $=$ Def $1 \mathrm{sgPro}=\mathrm{Obj}$ mango.L give.Perf.Rel $=$ Def all Exist $=$ eat.PerfL1sgS
'I ate every mango that the child gave to me.'

Here, both the subject and the indirect object precede the object head. As the following examples show, a fair amount of scrambling is allowed:
(xx)
a. yògó Sáná nàà (wó) sémé-d $\varepsilon$

Adv S O (Pro) V
tomorrow Sana cow.L 3sgPro slaughter-Impf.Rel
'the cow that Sana will slaughter tomorrow'
b. yògó nàà Sáná (wó) sémé-d $\varepsilon$

Adv O S (Pro) V
c. Sáná nàà yògó (wó) sémé-d $\varepsilon$

S O Adv (Pro) V
d. Sáná yògó nàà (wó) sémé-d $\varepsilon$
e. *Wó yògó nàà Sáná sémé-d $\varepsilon$

S Adv O (Pro) V
*Pro Adv O S V

## What about object-initial orders?

In these examples, the relative ordering of the subject, the object, and the temporal adverb 'tomorrow' can be rearranged. What remains constant is that the optional subject pronoun always immediately precedes the verb. An order in which this pronoun is fronted, putting it before the subject noun, is not permitted. In the next section on possessives, we will see cases where a possessive pronoun can precede its referent, showing that there are different restrictions on subject pronouns and on possessive pronouns.

### 16.6.2 Conjoined NP objects as head a relative clause

## Get examples of coordinated object heads.

### 16.7 Possessive relatives

In speaking of possessive relative clauses, we may distinguish two types. First, the head of the relative clause might be a possessed noun, such as "Ramata's dog that..." where the possessed noun 'dog' (or the whole possessive NP) is the head. Second, the possessor alone can be the head of the relative clause, as in "Ramata, whose dog...", where the possessor 'Ramata' is head of the relative clause. I will address the former, which I call "possessed-type relatives", in section 16.7.1, and the latter, which I call "possessor-type relatives", in section 16.7.2.

### 16.7.1 Possessed-type relatives

Possessed-type relative clauses treat a whole possessive NP (and logically, the possessed noun itself) as the head of a relative clause. Grammatical tone is involved in both possession and relative clauses, and so the combination of the two systems leads to some interesting results. One thing to notice is that while generally a definite marker is not obligatory in plain possession, it is very common following a relative participle.

### 16.7.1.1 Non-pronominal alienable possession

Recall from section XXX that non-pronominal alienable possession in Tommo So involves the direct juxtaposition of the possessor and the possessed noun (in that order) with a $\{\mathrm{L}\}$ tone overlay on the possessed noun. The possessor retains its lexical tone. Contrast this with the $\{\mathrm{L}\}$ overlay the relative clause imposes on its head. The possessor's tone overlay is rightward, while the relative clause's is leftward. What happens when the two come face to face? Consider the following:
( xx ) arámátá ìsè díy $\varepsilon$-go bògó- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \ldots$
Ramata dog.L big-Adv bark-Impf.Rel = Def
'Ramata's dog that barks a lot...'

Here we see that both the possessor and the relative participle have their independent tone; a possessor cannot spread control beyond the possessed noun (plus adjective), nor can a relative clause alter the tone of the possessor. This is reminiscent of possessed NPs modified by a demonstrative, in which both the possessor and the demonstrative have
lexical tone. Following Heath (2008), we could say that the possessor and the possessed noun form a tonosyntactic island, impervious to external tone lowering effects. The only issue is that when a numeral is included in the possessed noun phrase, which in at least some speakers' idiolects remains tonally free (i.e. does not undergo tone lowering), this can be lowered by a relative clause. This is shown below:
(xx) a. Sáná jàndùlù tààndù-gò ~ tààndú-go

Sana donkey.L three-Adv.L three-Adv
'Sana's three donkeys'
b. Sáná jàndùlù tààndù-gò mí bénd $\grave{=}=\mathrm{g} \varepsilon=\mathrm{mbe}$

Sana donkey.L three-Adv.L 1sPro hit.Perf.Rel $=\mathrm{Def}=\mathrm{P}$
'Sana's three donkeys that I hit'

This indicates that we cannot take the whole possessed NP as a unit that forms a tonosyntactic island, since the relative clause could effectively then "reach inside" this unit to lower a numeral. Thus, we either have to redefine the tonosyntactic island as consisting of solely the possessor and possessed noun or we can say instead that possessors alone form a tonosyntactic island, that is, that they are above the tonal effects of other elements. I leave this analytical distinction to future work. Recall that adjectives are always controlled by both the possessor and a relative clause, and thus shed no light on the issue of tonosyntactic islands:
(xx)
a. Sáná jàndùlù pìlù

Sana donkey.L white.L
'Sana's white donkey'
b. Sáná jàndùlù pìlù mí bénd $\grave{=}=\mathrm{g} \varepsilon$

Sana donkey.L white.L 1sgPro hit.Perf.Rel = Def
'Sana's white donkey that I hit'

In both (xxa) and (xxb), the adjective /pílu/ 'white' is tone lowered.
While the definite article, plural particle, and quantifiers like 'all' belonging to the possessed noun follow the relative clause, those belonging to the possessor remain adjacent to the possessor:

$$
\begin{array}{llll}
\text { a. } & \text { yàa-ná }=\mathrm{g} \varepsilon & \text { jàndùlù } & \text { mí } \tag{xx}
\end{array} \quad \text { bénd } \varepsilon ̀=\mathrm{g} \varepsilon .
$$

'the woman's donkey that I hit'
b. yàá- $\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{mbe} \quad$ kém jàndùlù mí bénd $\grave{=}=\mathrm{g} \varepsilon=\mathrm{mbe}$ woman- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Pl}$ all donkey.L 1sgPro hit.Perf.Rel $=\mathrm{Def}=\mathrm{Pl}$ 'all of the womens' donkeys that I hit' (i.e. the donkeys belonging to all of the women, not all of the donkeys belonging to the women)

These elements also retain their lexical tone, showing that the boundary of the relative's tone control is to the left of the possessed noun, leaving anything belonging to the possessor NP intact.

We can summarize the tonal realization of non-pronominal alienable possessed-type relative heads as follows:
[Possessor possessed.L (adjective.L numeral.L)]

Be sure to get object relatives with non-pronominal subjects, like:
'Seydou's moto that my father borrowed broke down'

## ARE THERE DIFFERENCES BETWEEN RESTRICTIVE AND NON-RESTRICTIVE?

16.7.1.2 Pronominal alienable possession

While non-pronominal alienable possession affects the tone of the possessed noun, the same is not true for pronominal alienable possession. In section XXX, we saw that pronominal possessors made up of the independent pronoun fused with some version of the possessive particle $/ \mathrm{mo} /$ are placed after the possessed noun. This linear arrangement is retained when the possessive construction is the head of the relative clause, but the tone of the possessed noun is reduced to $\{\mathrm{L}\}$ by the relative clause. Interestingly, the pronoun retains its lexical tone:
(xx) a. jàndúlu ńmo
donkey 1sgPoss
'my donkey'
b. jàndùlù ḿmจ wó béndè $=\mathrm{g} \varepsilon$
donkey.L 1sgPoss 3sgPro hit.Perf.Rel = Def
'my donkey that he hit'

Up until now, we have only seen that adjectives and numerals remain in the internal head, with later NP elements appearing after the relative participle, but now we see that a pronominal possessor also remains adjacent to the possessed NP. CAN IT BE
OTHERWISE? The example below shows that the relative clause continues to control the tone of both the head noun and a modifying adjective, but not the pronominal possessor:
(xx) a. Jàndùlù pìlù ḿmo wó béndè $=\mathrm{g} \varepsilon \quad$ yímaa $=y$ ỳ. donkey.L white.L 1 sgPoss 3 sgPro hit.Perf.Rel $=$ Def die.Perf=Cop 'My white donkey that he hit died.'

## DO YOU GET ANY REARRANGEMENT OF MODIFIERS/POSSESSORS IN THE RELATIVE CLAUSE? <br> GET AN EXAMPLE WITH A NON-PRONOMINAL SUBJECT. WHAT HAPPENS WITH DEMONSTRATIVE?

### 16.7.1.3 Non-pronominal inalienable possession

Non-pronominal inalienable possession looks for the most part like its alienable equivalent. The possessor immediately precedes the possessed noun and imposes a $\{\mathrm{L}\}$ overlay. This situation remains the same when acting as the head of a relative clause:
a. Sáná nàà-dìyè

Sana aunt.L
'Sana's aunt (older sister of mother, lit. big mother)'
b. Sáná nàà-dìyè mí béndè $=\mathrm{g} \varepsilon$

Sana aunt.L 1sgPro hit.Perf.Rel=Def
'Sana's aunt that I hit'

While in alienable possession we saw that the relative clause is able to tonally control a numeral that the possessor otherwise would not, in inalienable possession, the relative clause can tonally control both an adjective and a numeral modifying the possessed noun; these would be tonally free in the absence of the relative clause:
(xx) a. Sáná nàà-dìyè kómmó kúlóy-go

Sana aunt.L skinny six-Adv
'Sana's six skinny aunts'

## b. AS HEAD

The tone lowering results with the relative clause are the same-the possessor has its normal tonal scope, but remains impervious to tone lowering itself, while the relative clause is able to affect the tone of any elements that remain free from the possessor's control. It is not clear in the case of the noun itself or adjectives whether the possessor or relative clause controls the tone, since both impose the same $\{\mathrm{L}\}$ overlay. We will see in the next subsection that the possessor might be the more powerful.
16.7.1.4 Pronominal inalienable possession

While in all other cases of possession the possessor either controls a $\{\mathrm{L}\}$ overlay or has no effect, in pronominal inalienable possession, the tone overlays are either $\{\mathrm{H}\}$ or $\{\mathrm{HL}\}$. These are imposed by an independent pronoun which immediately precedes the possessed noun and acts as the possessor. For example:
(xx)
a. émmé nínjú

1plPro uncle.H
'our uncle'
b. émmé nínjú Bàmàkó yáè $=\mathrm{g} \varepsilon$

1plPro uncle.H Bamako go.Perf.Rel = Def 'our uncle who went to Bamako'

## Get good recordings of all of this.

We see that the $\{\mathrm{H}\}$ overlay imposed by the possessor wins out over the $\{\mathrm{L}\}$ overlay imposed by the relative clause. Given this, we may surmise that in the non-pronominal cases, too, the $\{\mathrm{L}\}$ on the possessed noun was the result of the possessor, not the relative clause. However, this impotence of the relative clause with regards to the possessed noun is somewhat surprising. Recall from section XXX that when a noun possessed inalienably by a pronoun is modified by an adjective, the adjective's $\{\mathrm{L}\}$ overlay overrides the overlay required by the pronoun. For example, contrast (xxa) above with the following:
(xx) émmé nì̀jù kómmó

1 plPro uncle.L skinny
'our skinny uncle’

At the beginning of this chapter, I pointed out the parallel between modification and a \{L\} overlay common to both adjectives and relative clauses. It appears, though, that the strength and scope of these overlays are not parallel, these examples show.

## What happens with an adjective involved?

## Émmé n RECORDING

Our three uncles that you saw were going to Douentza.

### 16.7.2 $\quad$ Possessor-type relatives

In possessor-type relative clauses, the head is the possessor alone. These translate to "whose" relative clauses in English and dont relative clauses in French. As head of the relative clause, the possessor takes $\{\mathrm{L}\}$ tone, but this then disrupts the tonal associations between it and the possessed noun. Normally, the latter would take $\{\mathrm{L}\}$, but in relative clauses, it is tonally free.

### 16.7.2.1 Non-pronominal alienable possession

When a non-pronominal, alienable possessor is head of the relative clause, it typically still immediately precedes its possessed noun, which takes lexical tone instead of the $\{L\}$ possessive overlay. Instead, the possessor takes the $\{L\}$ overlay imposed by the relative clause. For example:
(xx)

```
a. yàa-ná \(=\mathrm{g} \varepsilon\) ì woman-HumSg = Def child.L 'woman's child'
```

b. yàà-nà í jángu jàngá-gú $\operatorname{sé}=g \varepsilon$ woman-HumSg.L child studies study- Ppl have. $\mathrm{Rel}=\mathrm{Def}$ 'the woman whose child is studying'

In this position, the possessed noun 'child' may optionally take a resumptive possessive pronoun, yielding /íí wómo/ 'her child’. Interestingly, this possessed noun can actually be moved before the possessor, breaking up the linear order required of possession, but when this occurs, the possessive pronoun is obligatory:
(xx) íi wómo yàà-nà jángu jàngá-gú sé $=\mathrm{g} \varepsilon$
child 3sgPoss woman-HumSg.L studies study-Ppl have $=$ Def 'the woman whose child is studying'

Linear order and tone overlays are the two normal ways in which non-pronominal possession is realized. Tone overlays are automatically lost as a cue in relative clauses, and so when linear order too is lost, these circumstances require an extra pronominal possessor to keep the possessive meaning alive.

What happens to adjectives on the possessed noun?

### 16.7.2.2 Pronominal alienable possession

We whose children have died... (i.e. "those of us whose children have died")
You whose house burned down... ("those of you whose house has burned down")

### 16.7.2.3 Non-pronominal inalienable possession

The pattern for inalienable possession is the same as that for alienable possession. It is the possessor that is lowered as head of the relative clause, leaving the possessed noun with its lexical tone. Typically the possessed noun follows the possessor and a resumptive pronominal possessor is optional, but if the possessed noun is fronted, then the pronominal possessor is obligatory:
a. àn-ná $=g \varepsilon$ bàà
man-HumSg = Def father.L 'the man's father'
b. àn-nà gààlúú (wó) báá yím $\varepsilon=\mathrm{g} \varepsilon$
man-HumSg last.year 3sgPro father die.Perf.Rel=Def 'the man whose father died last year'
c. gààlúú *(wó) báá àn-nà yím $\grave{=}=\mathrm{g} \varepsilon$
last.year 3sgPro father man-HumSg.L die.Perf.Rel=Def 'the man whose father died last year'

Note that in (xxb), the temporal adverb /gààlúú/ 'last year' intervenes between the possessor and the possessed noun, and yet the possessive pronoun is optional. This indicates that the
only requirement for a bare possessed noun is that the possessor precede it; adjacency is not required.

Do we get the usual tone overlays when the pronominal possessor is present?
16.7.2.4 Pronominal inalienable possession

DATA

### 16.8 PP relatives

Possessor-type relative clauses provide a good segue way into PP relatives, since we could envision them as actually being a sort of PP relative with the possessive postposition $/ \mathrm{mo} /$. The reason we could posit there being such a covert postposition even though we do not see one on the surface is because whenever a PP acts as head of a relative clause, the postposition is deleted.

To illustrate this connection, let us look at a benefactive construction, which also takes the postposition $/ \mathrm{mo} /$. The regular main clause is shown in (xxa), the relative clause in (b):
(xx)
a. Mí ánìgè $=\mathrm{mo}$ bògó $\grave{\text { èbè-m. CHECK }}$

1 sgPro friend.HL $=$ Poss dress buy.PerfL-1sgS
'I bought my friend a dress.'
b. Mí ánìgè bògó mí $\varepsilon b$ $\grave{\varepsilon}=\mathrm{g} \varepsilon \quad$ núyó núyò-dè.

1sgPro friend.HL dress 1 sgPro buy.Perf.Rel $=$ Def song sing-Impf
'My friend for whom I bought a dress will sing.'

Notice that in (xxb), an alternative translation would be 'my friend whose dress I bought...'. In this case, we would have a recursive possessive construction /mí ánìgè bògò/ 'my friend's dress' in the main clause, and (xxb) would be a possessor-type relative with an already possessed possessor. It is unclear to what extent speakers of Tommo So connect or differentiate benefactive constructions with an overt possessive clitic and more canonical possessive constructions achieved through juxtaposition. In any case, possessor-type relative clauses appear to be intimately connected with PP relative clauses, at least historically.

Let us now turn to more common postpositional cases. Recall that the instrumental is formed by adding the associative clitic /le/ after the instrument. When the instrument is head of a relative clause, this associative disappear:
a. Dàmmá $=$ le mìnné ń́mo wòlú wálà-dè-m. hoe $=$ Assoc field 1 sgPoss farming farm-Impf-1sgS 'I farm my fields with a hoe.'
b. Dàmmà mìnné ńmっ mí wàlá-d $\varepsilon=\mathrm{g} \varepsilon$ jùgù
hoe.L field 1sgPoss 1 sgPro farm-Impf.Rel = Def week.L
gálè $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ yé $=$ mùnjè.
pass.Perf.Rel $=$ Def $=$ Assoc Exist $=$ break.PerfL
'The hoe that I farm my fields with broke last week.'

In the head of the relative clause, the noun takes the usual $\{\mathrm{L}\}$ overlay and though the postposition is null, the meaning is still understood.

Locative postpositions behave the same way:
a. Tòndòó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ dí́ kúndò- $\mathrm{d} \varepsilon$ - m . water.jar $=$ Def $=$ Obl water put-Impf-1sgS 'I put water in the water jar.'
b. Tòndòò dí́ mí kúndó- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon$ bòndáa $=$ ỳ. water.jar.L water 1 sgPro put-Impf= Def have.hole. $\operatorname{Perf}=$ Cop 'The water jar I put water in has a hole in it.'

Once again, the oblique postposition $/ \mathrm{n} \varepsilon /$ is deleted in the relative clause. Note that nonhead constituents inside the relative clause can retain their postpositions:
( xx ) İ̀̀yè Nínálu $=\mathrm{n} \varepsilon$ yàée mí témbé- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon$ sáy-ni èlèlú=wo. honey.L Ninari $=$ Obl go.NF 1sgPro find-Impf.Rel = Def much-Adv sweet $=$ be 'The honey that I will go to Nigari and find is very sweet.'

The reason postpositions are deleted from the head of the relative clause seems to be the following: The head of the relative clause is broken up, leaving the noun plus any adjectives or numerals (or pronominal possessors) before the relative participle and late-NP elements like the definite, plural, and any postpositions after the participle. Since the postposition is meant to indicate a relation between the noun and the verb, this relationship is blocked if
the postposition were forced to show up after its predicate, the relative participle. Therefore, context alone must link the adjunct relative head and the relative participle.

The fact that the object marker is a clitic (and thus behaves like postpositions) is clear when a human object is head of a relative clause. Compare:
a. Ìyǎy $=\mathrm{g} \varepsilon$ àn-ná $=\mathrm{n} \quad$ òmó kánaa $=\mathrm{be}$.
girl $=$ Def man-HumSg $=$ Obj present do. $\operatorname{Perf}=$ be.. Perf
'The girl gave the man a present.'
b. Ìyǎy $=\mathrm{g} \varepsilon$ àn-nà òmó (wó) kánì $=\mathrm{g} \varepsilon \quad$ mí báá $=\mathrm{n}$
girl $=$ Def man-HumSg.L present 3 sgPro do.Perf.Rel $=$ Def 1 sgPro
father. $\mathrm{H}=\mathrm{Obj}$
íg $-\mathrm{go}=\mathrm{w}$.
know-Adv = be
'The man to whom the girl gave a present knows my father.'

In (xxa), the object marker on 'man' is obligatory. In (xxb), it is obligatorily absent, presumably because as a clitic it would be forced to follow the relative participle it stands in relation to.

### 16.9 Recursive relative clauses

Just as in English it is possible to stack relative clauses on top of one another ("I saw the cat that chased the rat..."), so too is it possible to embed relative clauses inside of one another in Tommo So. The one attested example has a possessor-type relative as the outermost relative clause, with an object relative embedded inside. This is shown in the following:
( xx ) Àn-nà nàá wómo yùù mí tóè $=\mathrm{g} \varepsilon \quad$ témè $=\mathrm{g} \varepsilon$
man-HumSg.L cow 3sgPoss millet.L 1sgPro plant.Perf.Rel $=$ Def
eat.Perf.Rel $=$ Def
wó = ̀̀ $\quad$ द́ć-ndí-yaa = wo.
$3 \mathrm{sgPro}=\mathrm{Obj}$ please-Fact-MP.Perf $=$ be
'The man whose cow ate the millet that I planted... XXX.'

Get more examples of recursive relative clauses. Are there restrictions on head placement? Ambiguity?

## Chapter $17 \quad$ Verb (VP) chaining and adverbial clauses

This chapter deals with all aspects of verb and VP chaining. In section 17.1, I address what I call direct chains, in which verbs with some shared argument are linked together in a clause; these are cases of canonical verb serialization. In section 17.2, I turn again to clause chaining of the sort seen with headless relative clauses in section XXX. In section 17.3, I turn to mainly temporal adverbial clauses, some formed with verb chains and some employing other methods of subordination.

### 17.1 Direct chains

Tommo So makes great use of direct verb chains, in which two (or more) verbal events are strung together with no overt subordinating morpheme. The events involved usually come together to form a coherent whole (i.e. the actions are related) and typically involve at least one consistent argument shared by all verbs in the chain.

### 17.1.1 AN marking

The AN inflection on non-final verbs in a direct verb chain is very limited. These non-final verbs appear to only exhibit a two-by-two contrast of perfect/imperfect and affirmative/negative, though progressive constructions in which the auxiliary is made into a participle could be interpreted as a case of a non-final verb.

### 17.1.1.1 Affirmative

Most commonly, the non-final verb is affirmative. This verb can be either perfect or imperfect. If the non-final verb is imperfect, the final vowel changes to /-ée/; I gloss this as NF for "non-final", with the imperfectivity implied. If it is perfective, it changes to /-áa/, which I gloss as simply Perf, since it is the form used with quasi-verbs in non-focalized perfectives. Where this ending differs is that in chained constructions, it often takes H tone,
whereas the tone is underspecified when used with an auxiliary to form the main verb complex. An alternative analysis is that it is equally underspecified as a non-final verb, but that it is followed by a H boundary tone indicating that the speaker intends to continue. I leave this decision for later analysis.

I write these endings as long vowels, but like the vowel in monosyllabic nouns, it is somewhere in between a true short and long vowel. The non-final chain form is one of the forms in which the lexical tone of the stem is audible. The one exception is that at times, rather than pronouncing a monosyllabic $\{\mathrm{LH}\}$ verb whose stem vowel is identical to the vowel ending for the chained form (generally /a/ stems) with a rising tone, speakers pronounce these as L-toned. Subminimal verb roots like /g $\grave{\text { / / 'say' also are generally }}$ pronounced L. Examples of this sort include:
a. yàá $\rightarrow$ yàà
'having gone'
b. gè $\quad \rightarrow$ gàà 'having said'

Both the non-final and final verb can be imperfect (xxa), both can be perfect (xxb), or there can be a mismatch wherein the non-final verb is perfect and the final imperfect (xxc). The last case is one in which the sequence of actions is in progress or partially completed. For logical reasons, the opposite scenario (in which the non-final verb is imperfect and the final one perfect) is not possible, since the order of verbs in a chain verb construction represents temporal linearity.
a. Bíku $=g \varepsilon$ gòò-ndéé ú =̀̀ óbò- $\mathrm{d} \varepsilon$-m.
pen $=$ Def go.out-Fact.NF $2 \mathrm{sgPro}=$ Obj give-Impf-1sgS
'I will take out a pen and give it to you.'
b. Bíku $=g \varepsilon$ gòò-ndáá ú=ỳ ò̀ì-m.
pen $=$ Def go.out-Fact.Perf $2 \mathrm{sgPro}=\mathrm{Obj}$ give.PerfL-1sgS
'I took out a pen and gave it to you.'
c. Bíku $=\mathrm{g} \varepsilon$ gòò-ndáá $\quad$ ú $=\mathrm{j} \quad$ óbò- d と̀-m.
pen $=$ Def go.out-Fact.perf $2 \mathrm{sgPro}=\mathrm{Obj}$ give-Impf-1sgS
'I have taken out the pen and will give it to you.'

It is also possible to speak generally by making the final verb an infinitive. In this case, the non-final verb is always imperfect:
(xx) a. Tàráá $=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{le}$ jòbéé màndá- dim nám-go $=\mathrm{wo}$.
hyena $=\operatorname{Def}=\mathrm{Pl}=$ Assoc run.NF escape-Inf difficult-Adv $=$ be 'It is difficult to run away from hyenas.'
b. Díí $=\mathrm{g} \varepsilon=\mathrm{mbe}$ mìnn $\varepsilon=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ kárée kúndó- $\mathrm{dim}=\mathrm{g} \varepsilon$ sáy-ni síy $\varepsilon=\mathrm{n}$. water $=\operatorname{Def}=\mathrm{Pl}$ field $=\operatorname{Def}=$ Obl dig.NF put-Inf $=$ Def $\quad$ very good $=$ Cop 'Irrigating the fields is very important.'

Again, these infinitives are probably related to relative clauses in their formation, with the infinitival suffix /-dìm/ related to 3p1S imperfective suffix /-dìn/. This would leave (xxb) translating to something like '[The fact that] they irrigate the fields is very good.'

I have no textual examples of true nominalizations of chained verbs of the sort seen in Jamsay (Heath 2008: 521).

### 17.1.1.2 Negative

Typically, if one member of a chain verb construction is negative, both will be. In this situation, negation need only be marked on the final verb, and from this position, it can scope over the whole VP. For example:

$$
\begin{align*}
& \text { Yàà-ná }=\mathrm{g} \varepsilon ́=\text { ǹ dùgáá dàà-lí. }  \tag{xx}\\
& \text { woman-HumSg }=\text { Def }=\text { Obj poison.Perf kill.Neg.Perf-Neg } \\
& \text { 'He didn't poison the woman.' }
\end{align*}
$$

In this example, it is understood that the man neither poisoned nor killed the woman, but the negation is only marked on 'kill'. The semantic bracketing should be understood as [ [poison] kill]-Neg. What about the case [poison] kill-Neg? What if the negation only belongs on the second verb? He poisoned her but didn't kill her?

It is rare, but not impossible, that the non-final verb be negated but not the main verb. In these cases, the non-final verb is made into an adverb with the suffix /-go/. Again, the aspect division is between perfect and imperfect, but with a morphologically imperfect negative non-final verb form very rare; my only documented cases of it are elicited.

The first case, the /-lú/ negative non-final perfect, is reminiscent of a perfect negative verb, but it differs in two respects. First, the suffix is /-lú/ not /-lí/. Second, the verb stem retains its lexical tone instead of taking a $\{L\}$ overlay. A more natural translation in English of negative non-final verb would be "without X-ing". Examples of /-lú/ negative non-final verbs include:
témé-lú-go 'without eating’

$$
\begin{array}{ll}
\text { jòbó-lú-go } & \text { 'without running' } \\
\text { nòó-lú-go } & \text { 'without drinking' }
\end{array}
$$

Another form of the negative non-final verb uses a suffix /-ndú/ in the place of /-lú/. It is otherwise identical.

| (xx) | témé-ndú-go | 'without eating' |
| :---: | :--- | :--- |
|  | jòbó-ndú-go | 'without running' |
| nòó-ndú-go | 'without drinking' |  |

In terms of usage of these two forms, consultants report that both can be used interchangeably in imperfect cases. In the perfect, however, only the /-lú/ form can be used. For example:
a. Jóbu jòbó-lú-go támà-dè-m.
run run-Neg.Perf-Adv persist-Impf-1sgS
'I will persist without running.'
-or-
Jóbu jòbó-ndú-go támà-dè-m.
run run-Neg.Ppl-Adv persist-Impf-1sgS
b. Jóbu jòbó-lú-go támaa $=$ be-m.
run run-Neg.Perf-Adv persist.Perf=be.Perf-1sgS
'I persisted in not running.'
-but-
*Jóbu jòbó-ndú-go támaa = be-m.

In the examples above, I gloss the /-ndú/ suffix as Neg.Ppl for "negative participle". Consultants also report that in the imperfect, an adverbial form built off of the negative imperfect verb form can be used, but only for third person subjects.

## GET MANY MORE EXAMPLES

There is only one example of this construction in my texts, which is:
(xx) Donc kò bǎy nàmí=ǹ yàa-ná óbó-lú-go kó=ge

```
    thus that.DD.L day sun=Obj woman-HumSg give-Neg.Perf-Adv
that.DD= Def
    s\grave{\varepsiloǹ...}
    speak.PerfL
    'So on that day they spoke without giving the sun a wife...'
```

A similar construction with these negative adverbial forms will be seen in Chapter XXX on conditionals.

### 17.1.2 Subject marking on non-final verbs

Non-final verbs in verb chains do not take regular subject inflection, as we have seen. Since the subject is shared between final and non-final verbs, the subject marking on the final verb will indicate the subject of all preceding non-final verbs, which can be many in number when multiple clauses are strung together:
(xx) Ûnh Ségú $=n \varepsilon$ úngúlaa... néé kày Bùgùní yèláa...
uh Ségou=Obl get.up.Perf now Top Buguni come.Perf
Bùgùní gọ̀áa... Màndé yèlè-y.
Buguni leave.Perf Mande come.PerfL-1plS
'Uh, [we] got up, and now, [we] came to Buguni, [we] left Buguni...[and] we
came
to Mande’

Sometimes even the final verb is in non-final form, though, and in this case there is no way to mark the subject with a suffix. It is either left unmarked (xxa) for context to disambiguate or it is marked with an independent pronoun (xxb); if the chain verb form is the only verb (used as the final verb) in the sentence, the subject must be marked with an independent pronoun (xxc):

b. Gòrò gém $=\mathrm{g} \varepsilon$ bé dùùundáà.
hat.L black $=$ Def 3plS bottom-Fact.Perf
'They put down the black hat.'
[Text 2]

We see once again that in (xxc), the verb need not even be part of a chain to be in chain form. It is not clear what style this imparts that using a finite verb would not.

### 17.1.3 Arguments of directly chained verbs

As mentioned at the beginning of this chapter, Tommo So verb chains can be used both to link somewhat related clauses or consecutive actions, or they can be taken together as a whole to stand for a single complex action. In the former, the two verbs are not as closely knit, and as such, each can take its own arguments. That is, objects or adjuncts can intervene between the two verbs, as in:
a. Pédu $=\mathrm{g} \varepsilon$ píyáá kúú $=\mathrm{g} \varepsilon$ jììbì.
sheep $=$ Def cry.Perf head $=$ Def shake.PerfL
'The sheep cried and shook its head.'
b. Kònó úngúláá Ànjú yàè.
there.DD get.up.Perf Anji go.PerfL
'He got up from there and went to Anji.'

In both examples, the verbs are understood as two consecutive actions as opposed to two facets required of a single action.

In the latter sort, where the two verbs are really fused together and take an often idiomatic meaning, the verbs cannot typically be separated by other objects. The idiomatic verb chain acts as one verb, taking one object before both verbs. If something intervenes, they are interpreted as separate events. Compare (a) and (b) below:

$$
\begin{align*}
& \text { a. Yàa-ná }=\mathrm{g} \varepsilon \quad \text { í } \quad \text { wómっ nàláá dàè. }  \tag{xx}\\
& \text { woman-HumSg = Def child } 3 \mathrm{sgPoss} \text { birth.Perf kill.PerfL } \\
& \text { 'The woman miscarried her baby.' } \\
& \text { b. Yàà-ná }=\mathrm{g} \varepsilon \quad \text { í́ } \quad \text { wómっ nàláá pédu dàè. } \\
& \text { woman-HumSg = Def child } 3 \text { 3sgPoss birth.Perf sheep kill.PerfL } \\
& \text { 'The woman had a baby then slaughtered a sheep.' }
\end{align*}
$$

In (a), the combination of 'give birth' and 'kill' with one object (child) means 'miscarry'; in (b), on the other hand, when a separate object is added before 'kill', the verbs are no longer interpreted together, but rather as a sequence of events. It would be a stretch of the imagination to get 'child' bracketed with just the first verb in (xxa), meaning 'the woman gave birth to her child then killed [it]'.

### 17.1.4 Common chain verbs

There are some verbs that form a large number of different idiomatic or fixed chained expressions. I will present each of them and their subsequent verb chains here.

### 17.1.4.1 /yè-ndé/ 'look at'

Tommo So has a large vocabulary of idiomatic verb chains with /yè-nd $\varepsilon$ / 'look at', in either initial or final position. Since these have a fixed, idiomatic meaning, the two verbs generally take one object, placed before the initial verb, as discussed above:
(xx) Nùmó wómっ $=\mathrm{n} \varepsilon$ tóó $=\mathrm{g} \varepsilon$ gùynáá yè-ndáa $=$ be-m. hand 3 sgPoss $=$ Obl be.in $=$ Def steal.Perf see-Fact.Perf $=$ be.Perf- 1 sgS 'I peeked at what he had in his hand.'

Here, 'steal' with 'look at' combine to form an idiomatic verb chain meaning 'peek', which takes a single object.

Other examples with 'look at' include:


| b. In initial position | Gloss | Literal translation |
| :--- | :--- | :--- |
| yè-ndé dàgá-ndá | 'examine' | 'look at and fix' |
| yè-ndé sóó | 'tell fortune' | 'look at and speak' |

In many of these examples, where /yè-ndé/ does not literally mean 'look at', it takes on a meaning like 'try'.

### 17.1.4.2 /bìnjé/ 'pull'

Many verb chains include the verb 'pull', particularly in initial position. This positional bias has to do with the fact that often the final verb in a chain encodes the result, and the initial verb the action undertaken to reach that result. Take, for instance, the following list of verb chains with initial verb /bìnjé/ 'pull':

| Tommo So | Gloss | Literal translation |
| :---: | :---: | :---: |
| bìnjé ćén-ndé $^{\text {n }}$ | 'tighten (knot, rope)' | 'pull and make tight' |
| bìnjé gòò-ndó | 'pull out' | 'pull and take out' |
| bìnjé jéćlć | 'pull towards self' | 'pull and bring' |
| bìnjé káádí-yé | 'rip off' | 'pull and tear' |
| bìnjé kóz | 'pick/pull off' | 'pull and pick' |
| bì̀jé nállá | 'break off (small branch)' | 'pull and break off' |
| bìnjé pállá | 'pull off (head of seared chicken) | 'pull and snap' |

Common to all of these is /bìnjé/ 'pull', which encodes the same manner in which a variety of results (breaking, snapping, removing) can be attained. Since pulling is not typically a result, it is unsurprising that we find no verb chains in which /bìnjé/ is the final member.

### 17.1.4.3 /sع/'have'

We saw with /bìnjé/ a large list of verb chains in which the manner (the non-final verb) was the same but the results were different. Similarly, the result can be the same but be reached in different ways. This is nicely exemplified in Tommo So with verbs of holding, nearly all verb chains in which the initial verb encodes the manner of picking up or attaching the held object to oneself; the final verb is simply the quasi-verb /se/ 'have'. This also shows that quasi-verbs can participate in verb chaining, at least as the final member:


These are just a few verb chains among others that specify the manner of picking something up or otherwise bringing it close to the subject with the result that the subject has it in his or her possession. The final verb remains constant while the non-final verb change according to the manner in which the result is reached.
17.1.4.4 /mò 4 ndó/ or /mò̀̀mbí-yé/ 'assemble, do together'

A chain verb construction in which the non-final member is either the verb /mò̀̀ndó/ or /mòòmbí-yź/, synonyms meaning 'get together, assemble', contributes the meaning that the action denoted by the final verb is done together as a group. For example:
a. Mòòndáá bìré-gú se-y. assemble.Perf work-Ppl have-1plS
'We are working together.'
b. Mò̀̀mbí-yáá núyó-gú $s \varepsilon$-y. assemble-MP.Perf sing-Ppl have-1plS
'We are singing together'

It is interesting to note that in both cases, the usually ubiquitous cognate nominals /bíré/ 'work' and /núy'// 'song' are absent. This is probably due to the fact that objects cannot intervene between the two verbs in these constructions, and placing the cognate nominal before the non-final verb disrupts its relationship with the cognate verb. MUST IT BE THIS WAY?
17.1.4.5 /dàá/ 'kill'

While verbs like 'strangle' or 'shoot' can imply death in English, in Tommo So this result must be encoded by using /dàá/ 'kill' as the final verb in a verb chain. The following verb chains including 'kill' are attested:

| Tommo So | Gloss | Translation |
| :--- | :--- | :--- |
| póró dàá | 'strangle to death' | 'strangle and kill' |
| nàlá dàá | 'miscarry' | 'give birth and kill' |
| dúgó nóó-mó dàá | 'poison (to death)' | 'make drink poison and kill' |
| Others? |  |  |

17.1.5 Adverb-like non-final verbs

Some adverbs look suspiciously like non-final verbs in a chain verb construction, though in many cases they seem to have lost all synchronic verbal specification. For some, the connection with an extant verb is clear.
(xx)
a. jàbí-yáá 'side by
b. pìnníyé 'later'
$>$ jàbá 'put next to'
c. kàníyé 'after' ??
> káná ‘do’, kání-yé 'be done'?

The example in (xxb) can also be put in the perfective non-final verb form, shown by the following example:
(xx)

$$
\begin{aligned}
& \text { Nòó pínníyáá } \quad \text { bé }=\text { j̀ } \quad \text { pàdé-lè }=\text { g } \varepsilon \quad \text { bé } \\
& \text { this after } \quad 3 \text { plPro }=\text { Obj leave-Neg.Impf.Rel = Def } 3 \text { plPro } \\
& \text { júgò }=\text { g } \varepsilon \\
& \text { know.Perf.Rel = Def } \\
& \text { (coughs) ǹdèmbé... íyèľ̀ Bànjàgàrá yàì- } \grave{c}^{\mathrm{n}} . \\
& \text { LogProPl } \quad \text { again Bandiagara go.PerfL-3plS } \\
& \text { 'After that, [when] they }{ }_{\mathrm{i}} \text { realized that [they] wouldn't leave them [i.e. that they } \\
& \text { couldn't fight them, [when] they realized that, (coughs), they } \mathrm{y}_{\mathrm{i}} \text { went to Bandiagara } \\
& \text { again.' }
\end{aligned}
$$

EXAMPLES, are they used like non-final verbs?
Some are clearly decomposable, but take on a lexicalized meaning as an adverb. Examples of this sort include:
(xx) a. kánáá jéé 'later on’ lit. 'having finished doing'

| b. yém gàà | 'then' | lit. 'having said like that' |
| :--- | :--- | :--- |
| c. támá-lú-go | 'soon' | lit. 'without persisting' |
| d. pádáá | 'after' | lit. 'leaving' |

For more on this last example, see section XXX.

### 17.2 Clause chaining with nominalized clauses

We saw above that non-final verb forms can be used in place of a fully inflected verb in order to string clauses together. As I introduced in the last chapter, however, nominalized clauses or headless relative clauses can also fill this role. In these cases, the clause being linked has the exact form of a relative clause but with no overt head. Whether there is a covert head or if the clause is simply nominalized is not clear.

Elicit these examples—are they different than chaining? What do they contribute? Investigate further.

### 17.3 Adverbial clauses

This section addresses all manners of adverbial subordinate clauses; generally, these adverbial clauses set the time frame for the main clause and are another means of combining clauses. For conditional expressions with a temporal reading, see Chapter 18.

### 17.3.1 'Before'

To subordinate a clause and give it the meaning 'before', the following construction is used: the verb stem, with lexical tone and vocalism intact, is followed by $/ \mathrm{mo}=\mathrm{n} \varepsilon /$ (which sometimes harmonizes to $/ \mathrm{m} \varepsilon=\mathrm{n} \varepsilon /$ ). This looks at first to be a sequence of the possessive an oblique clitic, but evidence from the 3 pl below indicates that $/ \mathrm{mo} /$ is instead some kind of auxiliary or even suffix. For example:
 white.person come $=\operatorname{Poss}=\mathrm{Obl}$ Hogon 10.L 6 3-Adv more $=\mathrm{Obl}$ 'Before [the] white people came, the Hogons [were] at [the number of] 63.'
[Text XXX]
b. Ú núyó núyó $\mathrm{mo}=\mathrm{n} \varepsilon$ díí ńdì-yè-dè-m.

2 sg Pro song sing before $=\mathrm{Obl}$ water bathe-MP-Impf-1sgS
'Before you sing, I'm going to take a bath.'

Since the verb in the subordinated clause is just a stem, it cannot be inflected for subject agreement, and so we see the reappearance of independent pronouns marking the subject in (xxb).

When the subject is the 3pl, however, we see a divergence from what looks like two clitics. Now, instead of $/ \mathrm{mo} /$ preceding the oblique clitc $/ \mathrm{n} \varepsilon /$, we see $/ \mathrm{mi}-\mathrm{\varepsilon}^{n} /$, joining together with the oblique clitic to form a complex [miènnè]. For instance:
a. Dàràgá ńyé mi- ${ }^{\mathrm{n}}=\mathrm{n} \varepsilon \quad$ òlú $=\mathrm{n} \varepsilon$ bíré bírè-dìn. lunch eat before-3plS $=$ Obl field $=$ Obl work work-Impf.3plS 'Before eating lunch, they work in the fields.'
b. Díí ǹdí-yé mi- $\varepsilon^{\mathrm{n}}=\mathrm{n} \varepsilon \quad$ jáá fи́yè-dìn.
water bathe-MP before-3plS $=$ Obl meal eat-Impf.3plS
'Before bathing, they will eat.'

Notice that the subordinated clause always comes first. FIGURE OUT WHAT'S UP WITH MO—suffix? clitic? auxiliary? tone?

Get examples of 'before' clauses in all time frames. Does the tense/aspect of the main clause make a difference in the construction?

Note that in at least one case, the oblique $/ \mathrm{n} \varepsilon /$ is added to an imperfect verb; that is, this construction looks like the 'after' construction discussed in the next subsection, but with an imperfect verb instead of a perfect one. WHY?
(xx) Nònú mí yéllè=ne Etas-Unis yáà-dè-m.
here 1sgPro come.Impf $=\mathrm{Obl}$ United.States go-Impf-1sgS
'Before coming here, I will go to the United States.'

Though not clausal adverbials, it seems appropriate to point out two adverbs with the meaning 'before' (either 'at first' or 'in the past'). These are bolded in the following examples:
( xx ) a . Bòmbú $=$ báà $=\mathrm{mbe}$ kúý́ dàbá $=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{le} \ldots$ dàbà ǹd $\varepsilon$ $=\mathrm{g} \varepsilon \quad$ wòlú Bombu $=\mathrm{Loc}=\mathrm{Pl}$ before hoe $=\mathrm{Def}=\mathrm{Pl}=$ Assoc hoe. L person $=$ Def farming
wàlá

$$
\mathrm{bè}=\mathrm{g} \varepsilon=\mathrm{mbe} \ldots
$$

farm. Hab.Rel be.Perf= $=\mathrm{Def}=\mathrm{Pl}$
'The people of Bombu, before, [they would take] hoes and... the hoes the person used to farm with...,
b. Àníyé nòngónu bè-lí-y.
before like.this be.Perf-Neg-1plS
'We weren't like this before.'

### 17.3.2 'After'

While there was only one adverbial clause construction meaning 'before', there is a greater proliferation of forms meaning 'after'. The most common form involves a nominalized perfect clause, looking like a headless relative clause with the verb in the perfect relative participle form, which is in turn followed by the oblique postposition $/ \mathrm{n} \varepsilon /$. For example:
a. ògó nàm tégé gálè $=\mathrm{n} \varepsilon \quad$ yàgá Dèyèn $\varepsilon=\mathrm{mo}$ nòó dògò kòmbó Hogon sun.L shining pass.Perf.Rel $=$ Obl other Dey $\varepsilon$ n $\varepsilon=$ Poss this but war ùggùlò-lí.
arise-Neg.Perf
'After the noon time [for] the Hogon passed, except for [the war] for Dey£nع, no wars were started.' [Text XXX]
b.

Another construction involves non-final verb forms. Specifically, the verb in the subordinated clause takes the perfective non-final /-aa/ form, which is then followed by the postposition /diye/ 'than' or 'since'. This form is more likely to be used when the whole scenario is set in the future. That is, the action of the verb in the subordinated clause has yet to take place, but in the future it must before the action of the main clause can. For example:
a. Jáá f́yáá diye díí ńdì-yè-dè-m.
meal eat.Perf than water bathe-MP-Impf-1sgS
'I will bathe after eating.'
b.

Another form of 'after' clauses involves a verb chain with the auxiliary / $\mathfrak{j}$ / 'take', which in this case is used like finish. Both the verb in the subordinated clause and the auxiliary are in the perfective non-final /-aa/ form:
(xx) a. Dìgé góó gò áá jáá jím ji

## More examples of this form.

Finally, a conditional construction can be used to express the temporal precedence of a subordinated clause. For more on this construction, see Chapter 18.
17.3.2 Durative verb iterations chained to a motion verb

A special construction is used if there is an ongoing or durative background action, typically with a foregrounded motion verb. In this construction, a H-toned version of bare stem of the durative verb is repeated three times, with successive downstep between each; the motion verb is inflected at the end:
(xx)

dance. H dance. H dance. H come- Ppl have-3plS
'They are coming while dancing.'
b. Bógóló 'bógóló 'bógóló yàá-gú $s \varepsilon-$ èn $^{n}$.
make.racket.H make.racket.H make.racket.H go-Ppl have-3plS 'They are leaving, making a huge racket.'

All examples I have are elicited-I have no textual examples. Nevertheless, the elicited examples were offered with only minor prompting.

### 17.3.4 Adverbial clauses with /-gú/ or /-nú/ participles

A common adverbial clause construction involves the verb in the subordinated clause being in progressive participial form, taking either the suffix /-gú/ or /-nú/. These clauses translate to the French en V-ant construction, or to two different constructions in English: ‘while' clauses and 'by’ clauses.

In 'while' (or 'when') clauses, the subordinated clause marked with the participial suffix sets the timeframe in which the main clause happens. That is, it is while the action of the verb in the subordinated clause is ongoing that the action of the verb in the main clause can occur.

The complication in these constructions arises when we consider the choice of participial suffix, /-gú/ or /-nú/. We saw in progressive constructions that /-nú/ is typically reserved for future progressives (see section XXX). In participial clauses, the general pattern is the same, but there is more variation. While one speaker has a clear correlation between aspect and the choice of suffix, another speaker can use /-gú/ for any aspect; /-nú/ typically patterns with the imperfect, but in rare cases, she allows it with perfect sentences as well.

Examples from the first, more restrictive speaker include:
( xx ) a. Nònú yèlé-gú (*-nú) yìrré yàà = bé-m. here come-Ppl snake see.Perf=be.Perf-1sgS
'She saw a snake while coming here.'
b. Nònú yèlé-nú (*-gú) yì̀ré yé-dè-m.
here come-Ppl snake see-Impf-1sgS
'While coming here, I (often) see snakes.'

Compare this with examples from the less restrictive speaker:
a. Tòyò-Tóyó yàá-gú (*-nú) mòtó $=$ n $\varepsilon \quad$ nùmbì-m.

Tongo-Tongo go-Ppl motorcycle $=$ Obl fall.PerfL-1sgS
'While going to Tongo-Tongo, I fell off the motorcycle.'
b. Wó ígé=ỳ ádúbá-nú/-gú wàkàdù gàmbáá píyé píyè-dè. 3sgPro husband $=$ Obj think-Ppl time.L some cry cry-Impf 'While thinking about her husband, she cries sometimes.'

Then there are cases where the action in the main clause is in the perfect, and yet the speaker still allows the use of /-nú/:
( xx ) Émm $\varepsilon=\mathrm{n} \varepsilon \quad$ yèlé-gú/-nú ìyǎy $=\mathrm{g} \varepsilon$ gòòmbíyó sègìrì.
$1 \mathrm{plPoss}=$ Obl come-Ppl girl $=$ Def hedgehog meet.PerfL
'While coming to our house, the girl met a hedgehog.'

## Double-check acceptability

Note that the division between /-gú/ and /-nú/ is one of aspect, not tense, as the following past imperfect shows:
(xx) Díí jàà-ndá-gú/-nú, líbúru ḿmo jángà $=$ bè-m. water cook-Fact-Ppl book 1 plPoss read.Impf=be.Perf-1sgS
'I was reading my book while heating up water.'

Because the aspect of the main clause is imperfect, this utterance by the less restrictive speaker can use either participial suffix, /-gú/ or /-nú/.

If the subject of the 'while' adverbial clause is different than the subject of the main clause, then a fuller progressive form is used in the adverbial clause. Namely, the participle is followed by the auxiliary verb/wo/ which also bears the participial suffix /-gú/. An independent pronoun is placed before this auxiliary verb to mark the subject. For example:
a. Píyé píyé-gú wó wó-gú jáá $=g \varepsilon$ j̀̀ỳ̀-m. cry cry-Ppl 3 sgPro be-Ppl meal $=$ Def eat.PerfL-1sgS 'I ate while he was crying.'
b. Bèré wómv=le bé wó-gú wó báá 'yímáá-d $\varepsilon=\mathrm{g} \varepsilon$ stomach 3 sgPoss $=$ Assoc 3 plPro be-Ppl 3sgPro father.H die.Perf-
Impf.Rel = Def

$$
y \grave{\text { èm }}=\mathrm{le} .
$$

see.PerfL-2sgS = Q
'[When] they were pregnant with him, his father died, you see.'

In both cases, the upcoming change in subject is indicated by a pronominal subject in front of the participial auxiliary.

It also possible, though not as common, to use the participial auxiliary with the same subject in the next clause. In this case, there is no need to put an independent subject pronoun in front of the auxiliary, since it will be specified by the next clause:
 wó now... woman-HumSg have-Neg like.that sit-Ppl be-Ppl now house $=$ Def 3sgPro
údò $=g \varepsilon$.
build.Perf.Rel=Def
'Now, he had no wife... while being settled like that, he built a house.'

It is possible that the pause between the participle 'sitting' and the participial auxiliary indicates that they are not connected in the way they would be with a different subject but that the speaker is simply stalling as he tries to remember the next part.

Like all of the other chaining strategies we have seen thus far, these participial clauses can be used as the main clause in some cases. It is not clear what governs this use. When they are used as the main clause, the subject must be marked with an independent pronoun. Consider the following exchange:
( $x x$ ) V: Wó yòè.
3sgPro enter.PerfL
'He became [the Hogon] (lit. he entered).'

MM: [Yớáá wó-gú] [wó wò-gù].
enter.Perf be-Ppl 3sgPro be-Ppl
'He had already become [it].'

In the restatement by MM, the main clause originally uttered is reformulated as a participial clause. In fact, the doubling of /wó-gú/ shows that one of them is connected with the action 'enter' ('by entering' or 'while entering') while the second is actually a participle of 'be'. This whole clause would translate to something like 'he entered (became the chief) and was there (as such)'.

### 17.3.4.2 'By' clauses

The same construction can be used not to provide a background action against which the action of the main clause takes place but instead to serve as the catalyst for the main action or the reason it takes place. For example:

b. Mí=ǹ m̀bé-lè-n gè-gú ú kíndé ḿmo yàmì-lì-w. $1 \mathrm{sg} \operatorname{Pro}=$ Obj love-Neg-Comp say-Ppl 2sgPro heart 1sgPoss ruin-Rev-2sgS 'By saying that you don't love me, you broke my heart.'

I have no doubt that speakers view 'while' and 'by' clauses as the same construction, and indeed with some stretching of translations, we can group them together in English too. For instance, ( xx ) above, we could translate the Tommo So as, "By coming to our house, she met a hedgehog." That is, if it were not for the fact that she came to our house, such a sighting or a meeting could not have taken place.

### 17.3.5 'Since'

The construction translating to 'since' in Tommo So is no different morphologically from the 'after' construction that involves the oblique postposition $/ \mathrm{n} \varepsilon /$ after a perfect verb; context alone distinguishes between them. Compare the examples below to those in (xx) above:
a. Wó $\quad$ と́ñ $=n \varepsilon \quad$ ḿmo $=n \varepsilon \quad$ yèlé-gú $\quad$ sè-lé.

3 sgPro marry.Perf.Rel = Obl 1sgPoss = Obl come-Ppl have-Neg
'Since she got married, she doesn't come over to my house anymore.'
b. Bé yélè=ne òlú yàà-nní.

3 plPro come.Perf.Rel = Obl field go-Neg.Perf.3plS
'Since they've arrived, they have not [once] gone to the fields.'

When the timeframe for 'since' is a specific time expression (i.e. 'yesterday') instead of an action, we see a more curious construction. The temporal adverb is followed by a chain verb construction, with the non-final member being /gòó/ 'go out' or /jè/ 'take' in the perfect and the final verb become /yèľ/ 'come' in the imperfect. It is not clear why there is this switch from perfect to imperfect. This construction is exemplified by the following:
a. Yáá jáá yèlé-d $\varepsilon=n \varepsilon \quad$ yèy-yè-lí-m.
yesterday take.Perf come-Impf.Rel $=$ Obl sleep-MP-Neg.Perf-1sgS
'I have not slept since yesterday.'
b. Gààlúú gòáá yèlé- $\mathrm{d} \varepsilon=\mathrm{n} \varepsilon \quad$ àná òndú.
last.year go.out.Perf come-Impf.Rel=Obl rain be.Neg
'There has been no rain since last year.'

I have shown 'yesterday' with 'take' as the non-final verb and 'last year' with 'go out', but the opposite scenario is in each case also grammatical.

### 17.3.6 'As soon as'

'As soon as' clauses seem to parallel each of the forms 'after' clauses can take, but with some differences. Recall that 'after' clauses can be formed with an oblique postposition after a nominalized perfect verb, with a non-final perfect verb either followed by the postposition /diyz/ or by the non-final chainer /jáá/ derived from /jè/ 'take', or with a conditional construction. We find this same three-way division in 'as soon as' clauses, but they are all tied together by the fact that the universal quantifier /kém/ 'all' is added at the end of the clause.

The parallel of the oblique 'after' form also contains a nominalized perfect verb, identical to perfect verb forms found in relative clauses. However, instead of being followed by the oblique postposition, the 'as soon as' clause follows the verb with the definite article, which is in turn followed by /kém/.
(xx)
a. Émmé dó $\grave{\varepsilon}=\mathrm{g} \varepsilon$
kém j̀jjì-yì-y.
1 plPro arrive.Perf.Rel $=$ Def all lie.down-MP-1p1S
'We went to bed as soon as we arrived'

## b. CHECK THAT THE POSTPOSITION NE ISN'T POSSIBLE

The next construction found in 'as soon as' clauses is the parallel of the non-final chain verb construction found in 'after' clauses. Once again, while 'after' requires a further subordinator like /diye/ or /jáa/, just the bare non-final verb can be used in the 'as soon as' clause, followed by /kém/. If the main clause is perfect, then the non-final verb in the subordinated clause is perfect; if the main clause is imperfect, so too is the non-final verb in the subordinated clause:
a. Émmé yèláá kém àná $=\mathrm{g} \varepsilon$ tòlè.

1 plPro come.Perf all rain $=$ Def start.Perf
'It started to rain as soon as we arrived.'
b. Fàntá dànní-yéé kém yéy-yè-dè.

Fanta sit-MP.NF all sleep-MP-Impf
'As soon as Fanta sits down, she falls asleep.'

In (xxa), the verb 'come' in the subordinated clause takes the /-áa/ ending because the whole action described is already completed. In (xxb), 'sit' takes the /-ée/ ending because the action is habitual.

Finally, 'as soon as' clauses can also take a conditional form, identical to 'after' clauses with the addition of /kém/. These will be discussed and exemplified in the next chapter.

Is it possible for these verbs to be negative?

### 17.3.7 'Until'

The construction translating to French jusqu'à 'until, up to' in Tommo So uses a grammatical element /hálè/ borrowed from Fulfulde. This word can also be used to mean 'even', as we will see in the next chapter on conditionals.

The verb forms in sentences with 'until' are unusual, often containing no finite inflected verb at all. Both the clause before the 'until' and what follows tend to contain nonfinal verb forms, as in:
(xx) a. Bíré bìráá hálè mí óní-yaa. work work.Perf until 1 sgPro get.tired-MP.Perf 'I worked until I got tired.'
b. Díí nòó-ndú-go hálè wó óní-yee.
water drink-Neg.Ppl-Adv until 3sgPro get.tired-MP.NF 'He's going to resist drinking water until he tires himself out.'

In both (xxa) and (b), all verbs in the sentence are in their non-final form, be that affirmative or negative, perfect or imperfect.

In at least one case, however, the clause with /hálè/, that is the final clause, does contain an inflected verb:
( xx ) Àn-ná $=\mathrm{g} \varepsilon$ mìnné wómo wàláá hálè nùmó wómo ìlìyé man-HumSg $=$ Def field 3 sgPoss farm.Perf until hand 3 sgPoss blood gòè.
go.out.PerfL
'The man worked his fields until his hands bled.'

In this example, 'farm' is in the perfect chaining form, but the final verb of the sentence 'go out' is conjugated.

It will take more examples to know what is standard for this construction, as it is not attested in any texts.
17.3.8 Relative clauses with adverbial meanings

This section briefly outlines some common relative clause types that used with adverbial meanings, be they temporal or locative. For a discussion of the formation of these relative clauses, see Chapter 16.

### 17.3.8.1 'When'

Relative clauses meaning roughly 'when' can take many heads, depending on the exact time referenced. The general 'when' has the head/wákádu/ 'time', leaving the clause to translate as 'the time that...' or 'the moment that...'. When the head is this general, it can be omitted, and the presence of the postposition /le/ after the relative clause makes its temporal use clear. For instance:
 time.L 1 sgPoss $=$ Obl 3 sgPro come. Perf.Rel $=$ Def $=$ Assoc meal síré-gú = be-m.
cook- $\mathrm{Ppl}=$ be.Perf- 1 sgS
'When he arrived at my house, I was cooking.'
b. Mí ánìgè $=$ mbe wàgàdù nònú mí bé-lí $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ yèlì- $\mathrm{e}^{\mathrm{n}}$.

1 sgPro friend $. \mathrm{HL}=\mathrm{Pl}$ time. L here 1 sgPro be-Neg $=\mathrm{Def}=$ Assoc come.PerfL3plS
'My friends came when I wasn't here.'

In (xxb), we see that these adverbial clauses do not always need to precede the whole main clause. They can go in the adverb slot immediately before the verb.

Other more specific heads can also be used, among these 'day' or 'year':

> a. Àná $=g \varepsilon$ bày míyè $=\mathrm{g} \varepsilon \quad$ sáy-ni kilèmó kíĺ́máá $=$ be-y. rain $=$ Def day.L rain.Perf.Rel $=$ Def much-Adv party party.Perf=be.Perf-1pIS 'We partied a lot on the day that the rain came.'
b. Ànàgùdù kà-kàá $=\mathrm{g} \varepsilon=\mathrm{mbe} \quad$ yúúu $=\mathrm{g} \varepsilon \quad$ tém $\grave{=}=\mathrm{g} \varepsilon \quad$ émmé $=\mathrm{n} \varepsilon$ year.L Red-locust $=\operatorname{Def}=$ Pl millet $=$ Def eat.Perf.Rel $=$ Def 1 plPro $=\mathrm{Obl}$ sáy-ni óg-go = be.
much-Adv hot-Adv = be. Perf
'The year that the locusts come was very trying for us.'

When the speaker bothers to specify the exact time like 'day' or 'year', clearly this head cannot then be left null, as more general 'time' can. Also notice that the associative is not necessary on these relative clauses, presumably because their temporal adverbial nature is clear. ACTUALLY, SECOND ONE IS A SUBJECT RELATIVE.

### 17.3.8.2 'Where'

A locative adverbial clause can be formed by using a head like 'place' in a relative clause. For example:
( xx ) Yáá hálè ódu $=\mathrm{g} \varepsilon$ gàndà jáw jáwáá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$.
go.Imper until road $=$ Def place.L split split.Perf-Impf.Rel $=$ Def $=\mathrm{Obl}$
'Go up until the place where the road splits in two.'

This example shows that adverbial clauses can also be post-posed after the verb of the main clause. Further, it shows a spatial use of /hálè/ 'until' as opposed to the temporal ones given in section 17.3.7.

As with 'when' relative clauses, more specific locations like 'village' or 'country' could replace the general 'place' as head of the relative clause.

### 17.3.9 'As though'

The clitic (???) /gónu/ (or [géni]) 'like’ can be used after verbal participles to create a clause with the meaning 'as though'. For example:

Mí=ỳ yè-ndáá kìdè-kámá mí=ǹ tágá-dé=gónu kànù.
$1 \mathrm{sgPro}=$ Obj see-Fact.Perf something $\quad 1 \mathrm{sgPro}=\mathrm{Obj}$ tell-Impf.Rel $=$ like do.PerfL
'He looked at me as if he had something to tell me.'

Get more examples! Are there every truer verbs??
17.3.10 'From... to...'

A complex adverbial clause that involves a chain verb construction within the adverbial clause itself is a construction translating roughly to 'from the moment... to the moment...'. For example:
(xx) a. Wó nálí-én jáá wó yímé-d $\varepsilon=n \varepsilon \quad$ sénu

3sgPro give.birth.Perf-3plS.Rel take.Perf 3sgPro die-Impf.Rel = Obl prayer sénu tìyè-lí.
pray.Nom experience-Neg.Perf
'From the moment he was born until the moment he died, he never prayed.'
b. Úngúláá mí jиjí-yó-d $\varepsilon=n \varepsilon \quad$ jáá j̀̀yè-lí-m.
get.up.Perf 1sgPro lie.down-MP-Impf=Obl meal eat-Neg.Perf-1sgS
'From the moment I got up until the moment I went to bed, I didn't eat anything.'

Notice that the exact construction differs between the two examples. In the first, the linker /jáá/ meaning 'finish' (derived from 'take') is used in the perfect chain form, preceded by a non-specific 3plS verb form representing a passive. In the second, the verb 'get up' is used without the use of the linker. The /jáá/ in the second should not be confused with this linker; it is simply homophonous, but means 'meal'.

## Chapter $18 \quad$ Conditional constructions

This chapter treats all manners of conditional or hypothetical clauses. Section 18.1 deals with canonical hypothetical conditional constructions translating to English 'if' that use the clause-final particle /yo/. As this section will lay out, such constructions can also be used temporally to string clauses together ('if' as 'when'). Next, section 18.2 addresses 'whether or not' conditionals with two opposing conditions. Section 18.3 discusses 'unless' conditionals, section 18.4 'even if' conditionals, and finally section 18.5 treats counterfactual conditionals.

### 18.1 Hypothetical conditional with /yo/ 'if'

Hypothetical conditionals are the most basic in form, with other more specific conditionals often built off of this base. The conditional clause introduces a hypothetical situation ( X ) that would condition the action of the main clause ( Y ) were it real, as in 'if X , then Y '. This same construction can also loosely translate to 'when X , then Y '. That is, the probability of the event in the antecedent clause can be anywhere from unlikely to $100 \%$ likely to happen. Usage of conditional clauses as 'when' will be treated in section XXX below.

### 18.1.1 Conditional particle/yo/

The particle /yo/ can have a number of different realizations. In terms of vowel quality, we see it optionally fronted to [ye] when preceded by a high front vowel /i/ or a +ATR mid vowel /e/. In the extremely rapid speech of a couple of my consultants, the particle actually appears to be swallowed the preceding word; to my non-native ears, it is completely gone, and even spectrograms reveal no trace of it in length of the preceding vowel or any other factor. Whether listeners still perceive the particle or not, I cannot say.

In terms of tone, the conditional particle must be assumed to be underspecified. It often surfaces as $L$ because most verbs preceding it end in $L$ (or an equally underspecified suffix, leaving the conditional particle at the tail of end of downward interpolation).

However, as discussed in section XXX, speakers may employ a $\mathrm{H}^{-}$boundary tone at the end of a clause to mark that the utterance is not yet finished. In this case, the particle may carry an interpolated rising tone or even a full-fledged H tone, as though this boundary tone docked on the particle itself (perhaps to avoid rising interpolation). See (xx) below for an example with a H particle. Note that this realization, presumably with the $\mathrm{H}^{-}$boundary tone, is much rarer a realization indicating a $L^{-}$boundary tone, particularly in rapid speech. In what follows, I will mark the particle with H tone if it is realized as such, and otherwise leave it blank, indicating that the tone interpolates to L .
18.1.2 Form of the verb in hypothetical constructions

### 18.1.2.1 Antecedent verb: perfect

The unmarked verbal category for the antecedent ('if' clause) is the perfective. As in focalized sentences, the affirmative perfective is unsuffixed and L-toned. However, when the subject is 3 pl , there are cases where the verb does not seem strictly L-toned. Instead, the 3plS suffix $/-\mathrm{\varepsilon}^{\mathrm{n}} /$ often appears to be H-toned (which is realized at only a slightly higher pitch than the preceding L syllable due to downdrift). This is often most audible not on the suffix itself but by the fact that the conditional particle /yo/ drops substantially in pitch after the verb, much more so than if the verb ended in a L tone. It appears, then, that in this subordinated clause, the 3 plS suffix is actually $/-\varepsilon^{n} /$, at least some of the time (this realization is somewhat variable). It is conceivable that even in main clauses the suffix is H , but that because of the intonational de-emphasizing of the verb, this slight pitch raise is not audible.

The negative perfect, however, also deviates from its usual main clause tonal realization. Instead of taking its regular $\{\mathrm{LH}\}$ melody, it opts for a $\{\mathrm{HL}\}$ (possibly L with H spreading) melody like that found in relative clauses. It is clear that the antecedent clause is not nominalized, however, since subject suffixes are allowed. As subordinate clauses, they simply show a combination of features from nominalized subordinate clauses and nonnominalized main clauses. We will see a couple cases of relative-like tone on imperfect verbs as well.

The unmarked category for the consequent (or main) clause is imperfective or imperative. As main clauses, their conjugation follows the rules laid out in Chapter 12.

The following examples show affirmative perfect verbs in the antecedent followed by imperfect verbs in the consequent:
( $x x$ ) a. ògó nè $\varepsilon$ ǹdé sàdè yó nè $\varepsilon$ yàn-gé-ní áwà-dìn?
Hogon now person miss.PerfL if now how-Adv-Adv catch.Hab-Hab.3plS
'[In the] Hogon-dom, now, if a person missed [a payment], how would they catch
[him]?' [Arrival text]
b. Nǎm gòè $=y o$, kèlì- $-\mathrm{y}=\mathrm{g} \varepsilon=$ mbe máàyì-yè-dìn.
sun go.out.Perf $=$ if road- $\operatorname{Dim}=\mathrm{Def}=\mathrm{Pl}$ be.dry-MP-Impf. 3 plS 'If the sun comes out, the roads will dry out.'

Notice here the variability in the pronunciation of the particle. In the first, the participle takes a clear H tone, while in the second, it simply interpolates from the L tone of the verb to a $L^{-}$boundary tone.

Examples wherein the antecedent verb is in the negative perfect are given below. Note that in these cases, the construction could also be translated as 'unless'.
a. Nǎm gòò-lí=yo, $\quad$ mí $=$ ǹ $\quad$ èlè-ndì-yé-lè.
sun go.out-Neg.Perf $=$ if $1 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj}$ sweet-Fact-MP-Neg.Impf 'If the sun does not come out, I won't be happy.' (or 'unless the sun comes out')

$1 \mathrm{sgPoss}=\mathrm{Obl}$ horse buy-Neg.Perf $=$ if $3 \mathrm{sgPro}=\mathrm{Obj}$ forget-Impf- 1 sgS 'If he doesn't buy me a horse, I will forget him.' (or 'unless he buys me a
horse')
c. Ámíru $=\mathrm{g} \varepsilon=\mathrm{mbe}$ nònú òndì- $\hat{\varepsilon}^{\mathrm{n}}=\mathrm{yo}$, èné sému bèé-lè-y. chief $=\operatorname{Def}=\mathrm{Pl}$ here be.Neg-3plS $=$ if, goat slaughter.Nom can-Neg.Impf1plS 'If the chiefs aren't here, we can't slaughter a goat.' (or 'unless the chiefs are here')

In (xxa) and (b), we see the difference between a main clause negative verb, which would take a $\{\mathrm{LH}\}$ overlay, and a negative perfect verb in a subordinated clause, where the same segmental form takes a $\{\mathrm{HL}\}$ overlay, with the HL fall executed on the first syllable.

## Record all unless clauses

18.1.2.2 Antecedent verb: imperfect

Though rarer, we do find examples of imperfective verbs in the antecedent clause. In all examples of which I am aware, the imperfect verb gives a habitual reading in the antecedent clause, in contrast to the single instance reading given by the perfect verb. An imperfect in the antecedent is always followed by an imperfect in the consequent. In all such examples, the tone of the particle is underspecified and interpolates to L :
a. Àrámátá nàmá tèmé-lè = yo kèm yímè-dè.

Ramata meat eat-Neg.Impf=if all.L die.Hab-Hab 'If Ramata doesn't eat meat, she'll die.'
b. Kòmbó yàá-din = yo nè̀̀, ògò-nó ǹdè wó ńb $=$ ỳ war go-Impf.3sgS = if now, Hogon-HumSg person.L 3sgPro like. Rel = Obj
túyò-d $\varepsilon$ mà ǹdě-m = gé kém yáà-d $\varepsilon$.
send.Hab-Hab or person-HumPl = Def all go.Hab-Hab
'Now, if they [would] go to war, would the Hogon send [only] the people he liked or would everyone go?' [Arrival text]

The imperfect in the first case highlights the fact that every day, if Ramata doesn't eat meat, she will die. In the second, it highlights the fact that in the past, habitually, when people went to war, the chief would send certain people to fight. Recall from Chapter 12 that often the present imperfect is used in narratives where a past timeframe is clear.

### 18.1.3 Post-particle /kèm/ 'all'

Example (xxa) above shows the first case we have seen where the conditional particle /yo/ is followed by /kèm/ 'all'. Although the usual universal quantifier has a H tone, when used after the conditional particle /kèm/ is L-toned. It is possible that in this environment, the quantifier is simply underspecified for tone and thus continues the particle's interpolation towards L. I have seen no cases of /kèm/ before a putative $\mathrm{H}^{-}$ boundary tone.

The addition of this particle intensifies the meaning of the hypothetical conditional. This intensity is clear in the gravity of the statement in (xxa) above. It can also yield English translations closer to 'as soon as' or 'if only', depending on the certainty of the statement. Something that is certain to take place gets more of a 'when' interpretation, while a less certain statement will get an 'if' interpretation. For example:
a. Dámmá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ wó gòè $=$ yò kèm kìlèmó kíl̀̀mò- d と̀- y .
village $=$ Def $=$ Obl 3sgPro leave.PerfL $=$ if all.L party celebrate-Impf-1plS 'As soon as he leaves the village, we will party.' 'If only he left the village, we would party.'
b. Î́ ńmo jángu dùmò-ndì = yó kèm, sàlìyò kán-né-go child 1sgPoss studies finish-Fact.PerfL = if all.L law do.Nom-HumSg-Adv bíyè-dè.
be-Impf
'As soon as my child finishes school, he will become a lawyer.'
'If only my child finished his studies, he would become a lawyer.'

It appears that context must differentiate the two interpretations.
In the next section, we will see that /kèm/ can be used on its own in 'whether or not' clauses. In section 18.4, we will see another post-particle clitic, the negative $/ \mathrm{l} \varepsilon$ /, in 'even if' constructions.

### 18.1.4 'If' on non-verbal predicates

All of the examples that we have seen so far involve the particle $/ \mathrm{yo} /$ after a verbal predicate, either perfect or imperfect. In addition, /yo/ can be added directly to a noun or an adjective with no overt copula. For example:
a. Bé ségu = yo yàeé táá wa.

3plPro numerous = if go.NF shoot.Imper Quot
'[They said], if they are more numerous, [then] go make war.' [Text 2]
b. Néé kày... dògǒ-m... ò̀̀... dìgè nǎm... kádá-na $=y o \Rightarrow$
now Top Dogon-HumPl uh evening.L sun oldest.man-HumSg = if
Nìnàlù íb $\varepsilon=\grave{j}^{41} \ldots$ Nìnàlù íb $\varepsilon=\mathfrak{\jmath}$ dìgè nǎm dìgè nǎm Ningari.L market $=$ Cop Ningari.L market $=$ Cop evening.L sun evening.L sun tígì-rè-dìn... kádá-na = j̀. call.names.of.ancestors-Tr-Impf.3plS oldest.man-HumSg $=\mathrm{Obj}$ 'Now... [the] Dogon... uh... in the evening... if it was the oldest man (in the village), it was [on] Ningari's market day... it was [on] Ningari's market day, in the

[^33]evening, in the evening, they would call out the names of [his] ancestors, the
oldest man's.' [Text 4]

In the first, the conditional particle is added to an adjective /ségu/ meaning 'numerous'. There is no copula or other inflection on the adjective, and so the subject must be expressed with an independent pronoun /bé/ 'they'. In (xxb), /yo/ is added after a noun /kádá-ná/ 'oldest person in a village'; again, we see no copula. The subject is not otherwise marked, since it is clear from the context that we are speaking about the deceased person.

In the past, just use BE?

## 18.2 'Even if'

'Even if' constructions are based in form on the general hypothetical conditional, but with a couple minor changes. First, the conditional particle is followed by $/ \mathrm{l} /$, which I take to be the negative copula clitic. It is underspecified for tone, but interpolates to L. Second, the conditional particle itself generally takes H tone and has a lengthened vowel. Finally, the antecedent clause may optionally be preceded by the word /hálè/, borrowed from Fulfulde and meaning something akin to 'even'. Not always! Is there tone polarity here?

Examples of 'even if' constructions include the following:
(xx) a. Hálè Bàmàkó yàè- $\mathrm{m}=$ yóó $=1 \varepsilon$ mòtò nòngònù kànú even Bamako go.PerfL-1sgS = if = Neg.Cop moto like.that do.Nom bèléé-lè-m.
find-Neg.Impf-1sgS
'Even if I go to Bamako, I won't find a motorcycle like that.'
b. Bé ségu $y o=1 \varepsilon$, Nám-tínè $=g \varepsilon$ Bànjàgàrá bè $\varepsilon$-n $\varepsilon$-go

3plPro numerous if $=$ too Nam Tin $\varepsilon=$ Def Bandiagara person.from-HumSg.L-
Adv

$$
=\mathrm{be} .
$$

$$
=\text { be.Perf }
$$

'Even if [they] were more numerous, Nam Tine (the chief) was from Bandiagara.'

The verb in the antecedent may also be negative in 'even if' constructions, as in:
( xx ) a. Hálè ḿmo $=\mathrm{n} \varepsilon$ sòm tùmò-ý èbè-lí $=y o o=l \varepsilon$, even 1sgPoss $=$ Obl horse. L one- Dm buy-Neg. $\cdot$ erf $=$ if $=$ Neg.Cop
m̀bé-go = wo-m.
love-Adv = be-1sgS
'Even if he didn't buy me one horse, I would love him.'
b. Hálè íbé yàé-lè-y $=y o o=l$ é, màngóró $\varepsilon$ ह́bu béè-dè-y. even market go-Neg.Impf-1plS $=\mathrm{if}=$ Neg.Cop mango buy.Nom can-Impf1 plS 'Even if we don't go to the market, we will be able to buy mangoes.'

Since the consequent in (xxb) is speaking about a future event relative to the antecedent, the antecedent too contains an imperfect verb.

### 18.3 Conditionals as clause chaining

As I mentioned in Chapter 17, conditional constructions with /yo/ are often used not in a hypothetical sense but in order to chain verb clauses together. I have said before that the certainty in a hypothetical clause can range from very low to $100 \%$, so it is conceivable that these "conditional-as-chaining" constructions are simply $100 \%$ certain hypotheticals. However, the fact that these chaining constructions always contain perfect verbs, even when the context is imperfect, suggests that it is a different phenomenon. Consider the following, with what looks like a long strings of antecedents put together with a shared consequent clause:
(xx) Dámmá jàwí-yaa kòmbó $=\mathrm{g} \varepsilon$ yáà-dìn $=$ yo $\mathrm{k} \varepsilon \mathrm{m}$, àùrì-yì- $\varepsilon^{n}=$ yo, village fight-MP.Perf war $=$ Def go-Impf.3plS $=$ if all.L agree-MP.PerfL$3 \mathrm{plS}=$ if
yàì- $\varepsilon^{\mathrm{n}}=\mathrm{yó} \quad$ ǹd $\check{-}-\mathrm{m}=\mathrm{g} \varepsilon=$ ǹ mòmbí- yéé
go.Perf.H-3plS $=$ if person- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Obj}$ get.together-MP.NF
sáà-dìn, d̀dě-m $=\mathrm{g} \varepsilon=\mathrm{j} \quad$ dáà-dìn.
destroy-Impf.3plS person-HumPl $=\mathrm{Def}=\mathrm{Obj}$ kill-Impf.3plS
'If a village fought and went to war, once they agreed, once they went, they
would
get together and destroy people, they would kill people.'

Both the initial antecedent, 'if they went to war', and the final consequent(s), 'they would destroy, they would kill people', are in the imperfect, since here they represent a habitual case from the past. However, two more apparently conditional clauses intervene, supposedly 'if they agreed, if they went', but these two clauses are in the perfect. As such, I argue that they are used instead to string clauses together in temporal order. This leaves the first clause as a true conditional, but the next two as actions that temporally precede the final consequents, translating to something like 'once they had agreed and once they went'.

In the setting of a text, one simply has to speculate on the exact intended meaning (temporal or conditional), but we gain an insight into the construction through sentences offered during elicitation. While eliciting 'as soon as' clauses (see section XXX), in addition to clauses with non-final verbs followed by /ḱm/, I was offered conditional clauses as well:
a. Jàndúlu $=\mathrm{g} \varepsilon=\mathrm{\jmath}$ dè̀è- $\mathrm{w}=$ yó kem, ú $=\mathrm{\jmath}$ támbà-dè.
donkey $=\operatorname{Def}=$ Obj touch.Perf-2sgS $=$ if all $2 \mathrm{sgPro}=$ Obj kick-Impf 'As soon as you touch the donkey, he will kick you.'

Ambile arrive.PerfL-1plS = if all food eat-Impf-1plS
'As soon as we arrive in Ambile, we will eat.'

Here, the exact emphasized time 'as soon as' is indicated with the addition of $/ \mathrm{kem} /$, paralleling the emphasis of conditional clauses. It is easy to see how a conditional of $100 \%$ certainty could lead to constructions like this. There is a fine line between 'If you touch the donkey, he will kick you' and 'As soon as you touch the donkey, he will kick you'. What is interesting to note, though, is the continued presence of perfect verb forms in the antecedent, as in (xxb), where given the future verb in the consequent we would expect a future verb in the antecedent as well, as in (xxb) above.

## 18.4 'Whether or not' conditionals

While the last three sections dealt with conditionals (and clause chaining) involving the conditional particle $/ \mathrm{yo} /$, here at 'whether or not' conditionals, we depart from this template. In 'whether or not' conditionals, there are two opposing conditions stated in the antecedent, both of which are irrelevant to the consequent, as in 'whether X or $\mathrm{Y}, \mathrm{Z}$ ' where it does not matter whether X or Y or neither take place for Z to be achieved. Both of these opposing conditions are stated explicitly. In this case, the conditional particle $/ \mathrm{yo} /$ is not
used, but $/ \mathrm{kem} /$ is, in order to signify that the action stated in the consequential clause will happen whether any or all of the situations in the antecedent occur. TONE OF KEM

The two conditions in the antecedent can be expressed in one of two ways. First, the two clauses can both contain a defocalized perfective verb and can be directly juxtaposed with /kém/ after the second:

> a. Nàmá $=\mathrm{g} \varepsilon=\mathrm{\jmath} \quad$ tèmè-w nǔm $=\mathrm{g} \varepsilon$ j̀yè-w kém, meat $=$ Def $=$ Obj eat.PerfL-2sgS bean $=$ Def eat.PerfL- 2 sgS all

> 1plPro baobab.L sauce = Def eat.Hab-Hab-1plS
> 'Whether you eat beans or whether you eat meat, we will eat toh.'
b. Gìnè kàndá ùdò-m ùdò-lí-m kèm,
house.L new build.PerfL-1sgS build-Neg.Perf-1sgS all.L
mí náá $=$ le bíyè-dè-m.
1 sgPro mother. $\mathrm{H}=$ Assoc remain-Impf-1sgS
'Whether I build a new house or not, I will continue to live with my mother.'

In both of the examples above, the two actions in the antecedent are placed one after another with no coordinator of any kind; both are conjugated as if the only verb in the clause, and in most cases are perfective, just like the hypotheticals above. In (xxa), both actions are affirmative, each with its own object. Note in this example the interesting differences between 'eat' verbs in Tommo So, with /nàmá/ 'meat' obligatorily with the verb /témé/ and /nǔm/ 'beans’ obligatorily with the more general verb /ńyź/. In (xxb), the two actions share a single object, placed before the first verb; in fact, both verbs refer to the same action, the first affirmative and the second negative.

Though perfect verbs are more common, imperfectives are not impossible:

Àná míyè-dè mìyé-lè kém, òlú yáà-dìn. rain fall-Impf fall-Neg.Impf all field go-Impf.3plS 'Whether it rains or not, we go to the fields.'

In this example, the antecedent is allowed to be imperfect because the action is habitual.
The other construction is equally unusual. It is most common when the two actions represented in the antecedent clause are the same verb, one affirmative one negative. The first is in the affirmative imperfect non-final chain form ending in /-ee/, while the second is in the negative chain form ending in the suffix /-ndu/. Though these are already chain forms and could conceivably be immediately followed by the consequent clause, instead this chain
of verbs must be followed by the chained form of /káná/ 'do' with the subject pronoun restated before it. This construction does not take $/ \mathrm{kem} /$ 'all' at the end, instead transitioning from the non-final form of 'do' into the consequent clause. Consider the following:
(xx)
a. Ú yíméé yímé-ndú ú kánéé dámmá $=\mathrm{g} \varepsilon ́=n \varepsilon ̀ ~ k i ̀ d e ̀ ~$ 2 sg Pro die.NF die-Neg.NF 2 sgPro do.NF village $=\mathrm{Def}=\mathrm{Obl}$ thing. L sáygí-yé-dè òndú. change.MP.Hab-Hab.Rel be.Neg 'Whether you live or you die, nothing changes in the village.'
b. Wó yèléé yèlé-ndú wó kánéé kìdè mí=ỳ

3sgPro come.NF come-Neg.NF 3 sgPro do.NF thing.L 1 sgPro $=\mathrm{Obj}$ kán-dè òndú.
do-Impf.Rel be.Neg
'It doesn't matter to me whether he comes or not.'

In this construction, the positive verb is stated first in non-final form with a preceding independent pronoun marking the subject; this is followed by the non-final negative form suffixed with /-ndú/, followed again by 'do' in non-final form with a preceding independent subject pronoun. The consequent phrase follows 'do'.

I have no textual examples of 'whether' clauses.

Can you use the structure below for these? What is the nuance? No nuance, and yes, you can form it, either with chained forms or without (i.e. it can be in the perfect ùdò-m údó-ndú mí kànì) WHAT DOES THIS MEAN?

### 18.5 Counterfactual conditional

Counterfactual conditionals are always in the perfect, since they express a possibility in the antecedent that could have happened but did not in reality. In Tommo So, these counterfactuals are like hypotheticals in that they also take the usual conditional particle $/ \mathrm{yo} /$. If the eventuality in the antecedent is negative, it is expressed by a negative adverbialized verb followed by the past existential quasi-verb /be/; if affirmativ, it is expressed with the past perfect form of the verb used in main clauses. The consequent is in the past imperfective:

$$
\text { yèĺé-lú-go = bi- } \hat{\varepsilon}^{\mathrm{n}}=\text { yo, }
$$

jáá sáy-ni

Red-locust $=$ Def $=$ Pl this.year come-Neg-Adv $=$ be.Perf-3plS $=$ if meal much л́y $\grave{\varepsilon}=$ be- $y$
eat. $\mathrm{Impf}=$ be. Perf-1plS
'If the locusts hadn't come this year, we would have eaten a lot.'
b. Mí báá yímé-lú-go $=$ be $=$ yo, díyè-n $\varepsilon=\mathrm{g} \varepsilon \quad$ mí-go

1sgPro father.H die-Neg-Adv=be.Perf=if big-HumSg=Def 1sgPro-Adv bíyè bè-lè.
be.Impf be.Perf-Neg
'If my father hadn't died, I wouldn't be chief.'
c. Àníyé mí= j̀ tágaa $=$ be-w $=$ yo, $\quad$ yél $\grave{\varepsilon}=$ be-m.
before $1 \mathrm{sgPro}=\mathrm{Obj}$ tell.Perf= be.Perf-2sgS $=$ if come.Impf $=$ be. $\mathrm{Perf}-1 \mathrm{sgS}$ 'If you had told me before, I would have come.'

It is not possible to put the negative past perfect in the conditional clause ( ${ }^{*}$ yímaa $=b e$ $l e=y o$ ), though why this restriction is in place is not entirely clear. Instead, the negative verb must be adverbialized and combined with an affirmative quasi-verb, as seen in (xxa-b) above.

Can those adverbialized negatives be used in main clauses?

## Chapter 19 Complement and purposive clauses

This chapter covers all kinds of complement and purposive clauses. Complement clauses are diverse in Tommo So; the complementizer can be null or overt, the clause can look like a nominalized (or relativized) clause, or the form of the verb alone can mark it as a complement, depending upon the construction. Purposive clauses tend to emply /-nú/ participles, but can take other forms as well.

### 19.1 Quotative complement

19.1.1 Conjugation of /gè/ 'say'

The verb /gè/ 'say' is the most commonly used verb in quotative complements. It is subminimal and hence slightly irregular, but it is not a quasi-verb and it behaves more or less like a regular verb in terms of inflection. The places where it diverges are due to its short vowel, so those inflections that affect the final vowel of the stem tend to completely overwrite the $/ \varepsilon /$. The following table summarizes the inflectional patterns of /gè/:
(xx) Inflection of $/ \mathrm{g} \varepsilon /$

| Indicative |  | gè 'say' |  |
| :--- | :--- | :--- | :--- |
| Aspect | Tense | Affirmative | Negative |
| Imperfect | Pres/Fut | gé-dè | gé-lè |
|  | Past | gé bè | gé bè-lé |
|  | Chain form | géé | XXX |
| Imperfect <br> (focused) | Pres/Fut | kì-kílèmò-d $\varepsilon ̀$ |  |
| Perfect (-aa) | Present | gàà wo | gè-lí |


|  | Future | gàà bíyè-dè | XXX |
| :---: | :---: | :---: | :---: |
|  | Past | gàà be | gè-lí |
|  | Chain form | gàà or gáá | gè-lú-gó |
| Perfect <br> (defocalized) | Present | gì | gè-lí |
|  | Future |  |  |
|  | Past |  |  |
| Perfect <br> (focused) | Present | XXX |  |
| Experiential perfect | Present | gè tíyáá wo | gè tìyè-lí |
|  | Future |  |  |
|  | Past |  |  |
| Progressive | Present | gè-gú sع <br> gè-gú wo | gè-gú sè-lé gè-gú òndú |
|  | Future | gè-gú síyè-dè <br> gè-gú bíyè-dè <br> (what about - <br> nu?) | XXX |
|  | Past | gè-gú sع be gè-gú be | XXX |
| Imperative |  | gé | gè-gú <br> gé nàà-gú |
| Hortative |  | gé-mó | XXX |

While we can conjugate /gè/ fully in a table like this, a few forms dominate in actual conversation. These are the imperfect present/future, the past perfect, the perfect chain form, and the defocalized perfect. In the sections that follow, we will see each of these in use in texts.

### 19.1.2 /gè/ with nominal complements

In its simplest use, /gè/ takes a nominal complement, which can be either a regular direct object like "a word", "a blessing", or a direct quote, like "he said 'dog'". In the former usage, the direct object is typically not marked with the object marker, since this is normally reserved for human nouns, i.e. nouns that are unlikely to find themselves as the complement of 'say'. For instance:

## I SAID SOMETHING SMART

Note that there are a lot of other verbs specific to different things being said, such as /kálá/ 'tell a lie’, /sénél 'pray, say prayers', /(tààlé) dàgá/ 'say a proverb', etc. Similarly, /sóó/ 'speak, say' is also common in contexts with nominal complements. The result is that / gè/ is relatively rare in these uses, though it is still attested.
$/ \mathrm{g} \overline{\mathrm{g}} /$ is common in single word direct quote settings:
(xx) Tíyáá... Tíyáá... Tíyáá gé-dìn.
tiyaa tiyaa tiyaa say-Impf.3plS
'Tiyaa... tiyaa... they say tiyaa.' [Text XXX]

This is explaining what the people of Tongo-Tongo say after somebody says their last name. For instance, if a person were to call out to you, "Hey, Ouologuem!", you would reply, Tiyaa.

In naming things or saying what an object is called, a chain verb construction with $/ \mathrm{g} \overline{/} /$ as the non-final and /bòó/ 'call' as the final can be used, though using /gè/ on its own is also possible:
a. Frànsé $=\mathrm{g} \varepsilon$ wó $=\mathrm{\jmath}$ orge géé bóò-d c .

French $=$ Def $3 \mathrm{sgPro}=$ Obj barley say.NF call-Impf 'The French call it "barley".,
b. Émmé Yà-tèz̀-gòmbóló gé-dè-y, Yà-téq. 1plPro Ya T $\varepsilon \varepsilon$ lumpy.head say-Impf-1plS Ya T $\varepsilon \varepsilon$ 'We call [her] Ya Teء the Lumpy Head, Ya Teq.' [Text XXX]

In (xxa), /wó/ 'it' is the object of the final verb /bòó/ while the French word orge 'barley' is the object of / $\mathrm{g} \grave{/} /$.
19.1.3 /gè/ with phrasal complements: direct vs. indirect quotations

With phrasal quotative complements, we must distinguish between direct and indirect quotations. In direct quotations, the quoted clause looks exactly as it would if it were a main clause-no complementizer is necessary and all pronoun participants remain as they would have been in the original utterance. For example:
(xx) a. Ííyé dìgè nàm yéllè-m.
today evening. L sun. L come. $\mathrm{Impf}-1 \mathrm{sgS}$
'I will come this evening.'
b. [Ííyé dìgè nàm yéll̀̀-m] gì. today evening.L sun.L come.Impf-1sgS say.PerfL 'He said "I will come this evening."'

The quotation in this case looks identical to the utterance on its own and no complementizer is required. However, this lack of complementizer is only true with the generic verb/g $\grave{\varepsilon} /$ 'say'. If a verb like /tágá/ 'tell' is used in its place, the complement clause must take the definite determiner, which acts as a complementizer.
(xx)
a. Dúmásá yàè-m.

Douentza go.PerfL-1sgS
'I went to Douentza.'
b. Mí Dúmásá yáè- $\mathrm{m}=\mathrm{g} \varepsilon \quad$ wó $=\mathrm{j} \mathrm{y} \quad$ tágá.

1 sgS Douentza go.Perf.Rel-1sgS = Def 3sgPro=Obj tell.Imper
'Tell him that I went to Douentza.'

Here, the quotation has the same segmental form as the plain utterance in (xxa), but the verb 'go' takes the $\{\mathrm{HL}\}$ tone seen on relative participles. Nonetheless, it still carries a subject suffix (in addition to an independent pronoun), so it is not entirely like a relative clause. SORT THIS OUT

In indirect quotative complements, on the other hand, we see shifting of the pronouns contained within the quotation from what they would have been in the original utterance to either logophoric or third person pronouns in the indirect quotation. PRONOUN IDENTICAL WITH SPEAKER? For example, while in English a person may utter "I will come". Quoting this directly, we can say "He said, 'I will come.'" Quoting indirectly, the 1 sg pronoun shifts to the third person, and we get "He said he would come." The same is true in Tommo So, except that when pronouns shift in indirect quotations, logophoric pronouns are also an option. (For an in-depth discussion of pronouns and anaphora, see the next chapter.) We saw an example of a direct quotation retaining the 1sg subject suffix in (xxb) above. The same sentence can be made into an indirect quotation by adding the logophoric pronoun /ǹdèmó/. Interestingly, this logophoric pronoun appears to vacillate between agreeing with the verb in the 3 sg and the 1 sg :
[1́íyé dìgè nàm ǹdèmó yéllè(-m)]
gì.
today evening.L sun.L LogSg come.Impf(-1sgS) say.PerfL
${ }^{\prime} \mathrm{He}_{\mathrm{i}}$ said he $\mathrm{e}_{\mathrm{i}}$ will come this evening.'

## CHECK IF THIS IS 1sg OR COMP

The logophoric pronoun makes it such that the subject of the embedded clause is unambiguously co-referent with the subject of the main clause. I have shown this by coindexing the pronouns in the English translation above. It is also possible to have an ambiguous sentence by leaving out the logophoric pronoun and simply having a bare 3 sg verb. In this case, the subject of the embedded and main clauses can either be interpreted as being the same or different:


To make it clear that the embedded subject is different from the main clause subject, an independent pronoun is used followed by the quotative particle/wa/. Usually this is used to mark the addressee in quotative sentences, but it can also be used in cases like this to differentiate between subjects:
(xx) [Ííyé dìgè nàm wó wa yéllè] gì.
today evening.L sun.L 3sgPro Quot come.Impf say.PerfL
${ }^{\prime} \mathrm{He}_{\mathrm{i}}$ said he ${ }_{\mathrm{j}}$ will come this evening.'
**Could this mean 'he said to him to come?'
**Could 'this evening' modify either the saying or the coming?
Tà-táà-dìn bé gàà. M̀̀̀hh àà $=$ mbé ségú má wà.
Red-shoot.Hab-Hab.3plS 3 plPro say.Perf $m m h m$ who $=\mathrm{Pl}$ numerous Q Quot
'They would make war, they said. Mmhmm, [they asked] who are more numerous.'

GET EXAMPLES: with objects, "he said he would kill me", etc.
Sort out agreement of the logophoric pronoun
19.1.4 Possibility of a complementizer /-n/

We saw above that most often quotative complements of / $\mathrm{g} \grave{\varepsilon} /$ 'say' do not take any sort of complementizer or other marker on the clause. However, in narratives, we do occasionally see other strategies, such as placing

$$
\begin{aligned}
& \text { [[Wó } \left.\quad[\text { ògó yóò-dè }]]=\text { j̀ }]^{42} \quad \text { [wó gáà }\right] \text { nć } . . . \\
& \text { 3sgPro Hogon enter.Imperf-Imperf }=\text { Obj } 3 \text { sgPro say.Perf now } \\
& \text { 'He said he would become chief, now...' }
\end{aligned}
$$

## SORT OUT THE COMPLEMENTIZER ISSUE

### 19.1.5 Quotative particle /wa/

The particle /wa/ can play two roles in quotative complements. It can either follow a quotation in place of a verb like /g $\bar{\varepsilon} /$ 'say' to indicate that the preceding material is indeed a quotation. This use is discussed in section 19.1.5.1. It can also be used to mark the addressee in a quotative construction, discussed in section 19.1.5.2.

### 19.1.5.1 Phrase-final /wa/

Often, long stretches of narratives are quotations, either direct or indirect. When this is clear from context, no 'say' verb is necessary; in fact, 'say' seems to be unable to cooccur with / wa/. Instead, the quotative particle /wa/ can simply be placed at the end of the quotation. Examples of indirect quotations expressed in this way include:
a. Íí ǹdém $=\mathrm{m} \supset$ yàbáá $=$ wo ma wa.
child $\operatorname{LogPro}=$ Poss where $=$ be Q Quot
‘[She asked] where is my child?'
b. É wó=j̀ ǹdémó wó=lé pádáá dámmá yàè-m wà.
eh $3 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj}$ LogPro $3 \mathrm{sgS}=$ Assoc leave.Perf village go.PerfL-1sgS Quot '[She said] "Eh! I left him here with her and went to the village".'

In both examples, we can tell that the quote is indirect because of the use of the logophoric pronoun. However, in (xxb) (as in (xx) above), the logophoric subject pronoun is accompanied by the 1 sg subject agreement suffix, blurring slightly the line between direct and indirect quotations.

[^34]True direct quotations, include quoted imperatives, are also possible:
(xx)
a. [[Ǹ̀dè yàgá] $=$ へ̀ óbó $]$ wa.

Person.L other $=$ Obj give.Imp Quot
'Give it to someone else [they said].'
b. Wó wa $\varepsilon$ ع́én $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ jòbó yóó wa...

3sgPro Quot ash $=$ Def $=$ Obl run.Imper enter.Imper Quot
'She told him to run into the millet stalks (soon to become ashes)...'

While the context usually makes the speaker of the quotation marked by $/ \mathrm{wa} /$ clear, it can sometimes be used generally without a specific referent, as in the following:

Yàà-nà wó = j̀ kò bǎy gàndà kònó woman-HumSg.L $3 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj}$ that.DD.L day place.L there.DD àwì- ${ }^{n} \quad$ wa. catch.PerfL-3plS Quot
'[They say] that that day they caught that woman there [to find out what happened].'
[Text 5]

This quote, with a general reading of 'they say', immediately follows clear direct quotes from one of the characters in the story. Since context cannot make the general reading of the speaker clear, it must be the content in this case, the broad general statement of 'that day', that makes it clear to listeners that it is no longer the child speaking.

It seems that/wa/ and /gè/ 'say' never co-occur as marking the same quotation. Even in those cases that we do find this combination in texts, it appears that we have embedded quotations, where someone is quoting someone else saying something. That is, /gè/ 'say' forms part of the actual quotation denoted by $/ \mathrm{wa} /$.
a. Àà, ǹdémbé yàmmé mómbu $=\mathrm{g} \varepsilon$ gáà $\left.=\mathrm{bi} \mathrm{-} \mathrm{\varepsilon}^{\mathrm{n}}\right] \quad$ wa mè, jòmó ah LogProPl other.day meeting $=$ Def say.Perf $=$ be.Perf-3plS Quot but hare wa nòngónu gì wa de.
Quot like.that say.PerfL Quot Emph
'[They said], ah, they had met the other day, but Hare had said like that (that it wasn't good).'
b. ǹdè-m $=\mathrm{mbé}=\mathrm{g} \varepsilon \quad$ dàgáa $=$ wo gì- $\varepsilon^{\mathrm{n}} \quad$ wa.
person- $\mathrm{HumPl}=\mathrm{Pl}=$ Def be.good.Perf $=$ be say.PerfL-3plS Quot 'The people said it is good.'

In (xxa), we see two instances of the quotative particle following the verb /gè/ 'say'. In the first, it is likely that/gè/ comes together with the noun /mómbu/ 'meeting' to form an idiomatic expression 'hold a meeting'. Thus, in this case, the quotation is "They said that the other day they held a meeting", meaning that /g $\grave{z} /$ is not being used to mark the quotation but rather forms part of the quotation itself. In the second instance of $/ \mathrm{g} \bar{\varepsilon} /$ followed by /wa/ in (xxa), 'like that' refers to Hare's disapproval of the peoples' idea to give the sun a wife. Once again, if /gغ̀/ in this case was being used to mark a quotation, there would be nothing but an adverb forming the quotation itself. Thus, it seems more likely that the people are quoting Hare, translating to something like "they said that Hare had said like that". We have nested quotations.
(xxb) looks at first glance to be a more convincing case of a quotative particle and the verb /gè/ 'say' marking the same quotation. However, this once again depends upon us attributing /wa/ to the same speaker as the subject of /gè/ 'say', which in this case seems questionable. This quotation is both preceded and followed by quotations by Hare. Preceding it, we have a sentence, "Hare asked, 'Is that good?'". The example in (xxb) makes it look as though the people are responding to him, saying "It is good". The following sentence shows Hare saying "In my opinion, it is not good". Given this context and the apparent restriction on $/ \mathrm{g} \grave{\varepsilon} /$ and $/ \mathrm{wa} /$ marking the same quotation, it seems better to put all of (xxb) in quotations, marking it out as part of Hare's ongoing dialogue. Instead of the people at that moment saying "It is good", it would appear instead that Hare is saying "The people say that it is good".

Sometimes this embedded quotation situation is made clear by something intervening between 'say' and the quotative particle, as in the following:
( xx ) Bé wa bé ségu gè-lí ma wa.
3plPro Quot 3plPro numerous say.Neg.Perf-Neg or? Quot
'[He asked (them?)] "Didn't you say that you were more numerous?""

Here, the question particle /ma/ intervenes between 'say' and the quotative particle, making it clear that/wa/ is quoting a question that happened to contain 'say'. It is unclear whether the initial /bé/ followed by /wa/ is being marked out as the addressee of the highest quote ('he asked them') or whether it is marked as the subject (speaker) of the embedded quote ('they said that...').
19.1.5.2 Addressee-marking /wa/

Verbs other than /gè/ 'say' that denote speech acts, such as /yàbílá/ 'reply', /tágá/ 'tell', etc., typically mark the addressee with the object marker / = j̀/. For example:
a. Ú mí=ỳ yàbílaa nìmèm sàdám yéllè-w gì-w.
$2 \mathrm{sgPro} 1 \mathrm{sgPro}=$ Obj reply.Perf now right come.Impf-2sgS say.PerfL- 2sgS
'You replied to me saying that you are coming just now.'
b. Mí Dúmásá yáè-m=g $\varepsilon$ wó = ǹ tágá.

1 sgS Douentza go.Perf.Rel-1sgS = Def 3 sgPro $=$ Obj tell.Imper 'Tell him that I went to Douentza.'

For the addressee of the verb /g $\grave{\ell} /$, however, this strategy is not an option. Instead, the addressee is marked with the quotative particle /wa/. If the addressee is pronominal, the form is an amalgamation of the oblique or possessive pronoun followed by the quotative particle /wa/:

| $(\mathrm{xx})$ | 1 sg | ńmaa | 1 pl |
| :--- | :--- | :--- | :--- |
| 2 sg | úwaa | 2 pl |  |
|  | 3 sg | wómaa | 3 pl |

The $/ \mathrm{w} /$ of the quotative particle gets deleted and the $/ \mathrm{o} /$ of the possessive portion merges with the $/ \mathrm{a} /$ of the quotative to derive a long vowel. This process is illustrated below for the 1sg:
(xx) ńmo + wa $\rightarrow$ ńmoa $\rightarrow$ ḿmaa

Check the tone.
I gloss these complexes as XQuot, where X stands for 1 sg , 2 sg , etc. For example:

> a. Úwaa ýj́́́ gì?
> 2sgQuot what say.PerfL
> 'What did he say to you?'
b.

If the addressee is a full noun (non-pronominal), /wa/ alone is used; there is no need for the possessive clitic. This is shown by the following:
(xx) ...jòmó wa wóò gàà...

Hare Quot come! say.Perf
'...[they] said to Hare, come here!' [Text 6]

Things are more complicated than they first appear, however, because the particle /wa/ seems to also be able to pick out the speaker in a quotation. On pronouns, at least, this is differentiated from the addressee construction in that a speaker is indicated by an independent pronoun followed by /wa/rather than by a possessive pronoun. Check this with 1sg. For example:

In some stretches of speech, quotations are embedded within quotations, and many instances of /wa/ can follow in short succession. Consider the following short passage. The storyteller is quoting the child who was killed by his stepmother (the ash in the following passage, since he was burned to death), and the child is in turn quoting the stepmother:
( xx$) \quad$ écin $=\mathrm{g} \varepsilon$ wó yábìlì $=\mathrm{g} \varepsilon \quad$ yàà-nà ǹdémó óbó $=\mathrm{g} \varepsilon$ wa ash = Def 3sgPro answer.Perf.Rel = Def woman-HumSg.L LogPro step $=$ Def Quot
ǹdémó wa sǒm yદ́lè-d $\varepsilon \Rightarrow$ と̀ ${ }^{n} \quad$ dúm $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ jòbó $\quad$ yóó
LogPro Quot horse come-Impf ash.L pile = Def=Obl run.Imper enter.Imper wó gàà yóaa ǹdémó kánaa wó wa nǎm tớaa ${ }^{\mathrm{n}}$ kùndù
wa,
3sgPro say.Perf enter.Perf LogPro do.Perf 3sgPro Quot fire strike put.PerfL
Quot
'The ash replied that his stepmother told him that a horse was coming, run inside, and [when] he had entered, she lit a fire...'

In the passage above, I have underlined the two instances of the quotative particle marking the speaker. In the first, the child is quoting his stepmother's command to him. The second underlined particle harks back to an earlier sentence from the tale where the stepmother says (to herself) that she will light the fire (repeated from (xx)):
( xx ) Néé gày íí=ge jòbáa yòè = yó jǎm kúndò-dè gàà.

$$
\text { now Top child }=\text { Def run enter.PerfL }=\text { if fire put-Impf say.Perf }
$$

'Now, when the child runs into [there], she said she would light the fire.' [Text 5]

If this particle were meant to mark the addressee, the pronoun before it should be the logophoric pronoun used to indicate the child. The bolded particle does follow a logophoric pronoun indicating the child, and in this case, it marks the addressee, since the child is quoting a command given to him by his stepmother. Note that with the logophoric pronoun as well, we see no possessive marking when used with the quotative particle as an addressee. ${ }^{43}$ Finally, the italicized quotative particle is of the clause-final variety, used to indicate that everything preceding it was a quotation.

Kándá ògó yòé-lè =nè wó wá ògó=gé ǹdè
Kanda Hogon enter.Neg.Hab-Neg = Obl 3sgPro Quot Hogon = Def person.L
yàgá $=$ ỳ óbó gì.
other $=$ Obj give.Imper say.PerfL
'[They said] Kanda would not be chief, he (they) said give the Hogon-ship to someone else.'

Ànjú bèlè-m $=$ gè gôáá wó wá Tógó-ó-tògò,
Anji person.from-HumPl.L = Def go.out.Perf 3sgPro Quot pour-o-pour.L Bílú-ó-bìlù.
ladder-o-ladder.L
'The people from Anji came out and called him Togo-o-Togo, Bilu-o-bilu.'

3sgPro Quot ash $=$ Def $=$ Obl run.Imper enter.Imper Quot
'she told him to run into the millet stalks.'

person-HumPl=Def $=$ Obj call.Perf 3sgPro come.Perf.Rel $=$ Def 3plPro Quot sit-
MP.Imper
wà.
Quot

[^35]'[When] she had called the people and come [back], [she told] them to sit.'

Kìdé kém yàá-m=lé wò- n $^{n}$ nǎm wà yàà-ná sè-lè. thing all woman-HumPl = Assoc sun Quot woman-HumSg have-Neg 'Everyone was with wives, [but] the sun did not have a wife.'

### 19.1.6 Non-quotative uses of /gè/ 'say'

At times, morphologically quotative complements seem to take on other semantics in narratives. For example, they may be used to express intention, as in:
( xx ) Néé gày íí $=\mathrm{g} \varepsilon$ jòbáa yòè = yó jǎm kúndò-dè gàà. now Top child = Def run enter.PerfL = if fire put-Impf say.Perf 'Now, when the child runs into [there], she said she would light the fire.' [Text 5]

In this part of the story, the woman has told her co-wife's child to run into a pile of millet stalks she has gathered up, with the intention of burning the child to death. It seems here that the use of /gàà/ 'said' is less a literal saying (as this would clue the child in to his impending doom), but either a saying to oneself or just an expression of intention.

These intention expressions often come up when the intended action is in a complement clause. For instance:
(xx)
a. Ú =ỳ nínè-ndè-dè-m gàà bèndè-lí-m.

2 sg Pro $=$ Obj be.afraid-Fact-Impf-1sgS say.Perf hit-Neg.Perf-1sgS 'I didn't hit you to scare you.'
b. Mòtó ḿmo bé Tó-Tółó yáà-dìn bé gàà
moto 1sgPoss 3plPro Tongo-Tongo go-Impf.3plS 3plPro say.Perf pàdè-m.
leave.PerfL-1sgS
'I left my motorcycle so that they could go to Tongo-Tongo.'

In (xxa), the complement clause marked by /gè/ 'say' does not imply any actual saying. Instead, the sentence could translate to 'I did not hit you with the intention of scaring you.' Once agan, 'say' marks out the intention. In (xxb), the situation is complicated by the fact that the subject of the main clause and complement clause are not the same. Thus, the one
who is (morphologically) 'saying' is not the same person as the one who did the leaving. Nonetheless, we can interpret this clause as the speaker leaving the motorcycle with the intention that the subject of the complement clause go to Tongo-Tongo.

### 19.1.7 Jussive complement

Following Heath (2008), I use the term "jussive complement" to refer to imperatives or hortatives embedded under a verb like /gè/ 'say'.

### 19.1.7.1 Embedded imperatives

Embedded imperatives are fairly common in texts, and they take the same morphological form as they would as a main clause; no complementizer is needed. The same is true for both imperatives embedded under /g $\grave{\varepsilon} /$ 'say' as well as imperatives embedded under the quotative particle alone. Examples of affirmative imperatives under /gè/ 'say' are as follows:
(xx)
a. Ḿmaa yદ́lé gì- ह̀n.

1 sgQuot come.Imper see.PerfL-3plS
'They told me to come.'
b. Wó náá wó wa bándáykálá $=\mathrm{g} \varepsilon$ sémbé gì. 3sgPro mother.H 3sgPro Quot courtyard = Def sweep.Imper say.PerfL 'Her mother told her to sweep the courtyard.'

We see that in both cases, an embedded imperative can translate to English "tell (sb) to (do sth)", but in Tommo So the quoted action that has been demanded is in the imperative. The one to whom the imperative is addressed is marked by /wa/. Strangely, the 1 sg subject marked by /wa/ takes the possessive/oblique form of the pronoun, but the 3sg pronoun can be directly followed by /wa/. Note that if the addressee is God, when a person is asking God to do something for him or her, God /ámbá/ is not followed by/wa/:

$$
\begin{align*}
& \text { Ámbá bé }=\mathrm{\jmath} \quad \text { dòmmí-yó gàà bòáa }=w--\grave{\varepsilon}^{n} .  \tag{xx}\\
& \text { God } 3 \mathrm{plPro}=\text { Obj protect-MP.Imper say.Perf call.Perf }=\text { be- } 3 \mathrm{plS} \\
& \text { 'They begged God to protect them.' }
\end{align*}
$$

Here, the imperative is embedded under /gè/ 'say' which is in turn chained with the verb /bòó/ 'call'. This verb chain gives the main clause verb a meaning of 'beg' or 'call upon' as
opposed to simply 'say'. In blessings, 'God' is simply placed before an imperative with no qutoative marking and no embedding verb; for more on this construction, see section XXX.

Affirmative imperatives embedded under the quotative particle are common in texts. For example:
(xx)
a. wó wa $\quad \varepsilon^{n} \varepsilon^{n}=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ jòbó yóó wa...

3sgPro Quot ash = Def = Obl run.Imper enter.Imper Quot 'she told him to run into the millet stalks...' [Text 5]
b. ǹd $\check{-}-\mathrm{m}=\mathrm{g} \varepsilon=$ ỳ bòáá wó yélı $=\mathrm{g}$ g̀, bé wa person-HumPl $=$ Def $=$ Obj call.Perf 3sgPro come.Perf.Rel $=$ Def 3plPro Quot dànní-yé wa.
sit-MP.Imper Quot
'[When] she had called the people and come [back], [she told] them to sit.'
[Text 5]

The form of the embedded imperative is exactly the same as seen in ( xx ) above. The addressee is marked by the quotative particle, and in place of the verb /gè/ 'say' after the imperative, the quotative particle /wa/ alone is used.

Embedded negative imperatives (prohibitives) are formed the same way, replacing the affirmative imperative verb form with the negative:
a. Ú wa mòmó nàà-gú gì-m.

2sgPro Quot laugh.Imper NAA-Neg.Imper say.PerfL-1sgS
'I told you not to laugh.'
b. Yàá- $\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{mbe}$ ḿmwaa úndu $=$ báà mí túmáá yàà-gú woman- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Pl} 1 \mathrm{sgQuot}$ wilderness $=$ Loc 1 sgPro alone go-
Neg.Imper
gì- ${ }^{\mathrm{E}}$.
say.PerfL-3plS
'The women told me not to go out to the bush alone.'

Recall from section 12.8.1.2 that the negative imperative can take two forms: a regular suffixed form and a complex form with a sort of dummy verb /nàà/ carrying the suffix. The former is illustrated in (xxb) and the latter in (xxa), showing that both forms of the negative imperative can be embedded.

Though rarer in texts, we can also see negative imperatives embedded under the quotative particle /wa/:

Bànjàgàrá bè $\grave{-n}$ と̀ $=\mathrm{g} \varepsilon \quad$ sòì-n $\varepsilon=\mathrm{g} \varepsilon$
bílé-bílé
Bandiagara person.from-HumSg.L = Def speak.Nom-HumSg.L = Def
double.speak
tàà-gú wa kòy.
shoot-Neg.Imper Quot Emph
'The speaker from Bandiagara said "Don't double speak" (i.e. yesterday you
said
you were more numerous, today you say it's them).' [Text XXX]

A larger corpus of texts should reveal more examples of this sort.

## EXAMPLE WITH PLURAL IMPERATIVE?

### 19.1.7.2 Embedded hortatives

Embedded hortatives closely resemble embedded imperatives. Like these, embedded hortatives look morphologically identical to main clause hortatives, and they are simply followed by either /gè/ 'say' or the quotative particle. Examples of affirmative hortatives include:
a. Wó wa yàà-mó gì-w.

3sgPro Quot go-Hort say.PerfL-2sgS 'You told him "Let's go!",
b. Kìdè kó hákílé ǹdémbé = mo yèlè wa, bé thing.L that.DD mind LogProPl=Poss come.PerfLQuot 3plPro
dánnì-yì $=\mathrm{g} \varepsilon \quad$ yàà-ná óbó-mó wa
sit-MP.Perf.Rel = Def woman-HumSg give-Hort Quot
'[They said] that thing (idea) came into their minds, that they sat down and said let's give [him] a wife.'

Example (xxa) shows a hortative embedded under the verb /gè/ 'say', while (xxb) shows that the same construction is possible with the quotative particle.

Negative hortatives are predictably also possible. Though my texts offer no examples of negative hortatives (either under /g $\grave{\varepsilon} /$ or the quotative particle), elicited examples show this construction with /gè/:
a. Ḿmwaa nònú jáá j̀ỳ̀-mò-gú gì-èn.

1sgQuot here meal eat-Hort-Neg.Imper say.PerfL-3p1S
'They said to me, "Let's not eat here.""
b. Mí báá ńmwaa nìměm yúú $=\mathrm{g} \varepsilon=\mathrm{mbe}$ gìyè-mò-gú

1sgPro father.H 1sgQuot just.now millet $=\mathrm{Def}=\mathrm{Pl}$ harvest-Hort-Neg.Imper gì.
say.PerfL
'My father said to me, "Let's not harvest the millet right now.""

## EXAMPLE WITH PLURAL HORTATIVE?

### 19.2 Infinitival complements

This section treats those complement phrases in which the verb of the complement is placed into the infinitive, which is then taken as the object of the main clause verb with no other object marking or complementizer necessary. This construction is typically used when it is just the VP and specifically the action of the verb that acts as the complementizer of the main clause, rather than a full phrasal complement. Verbs that take this construction include /nàá/ 'forget’, /m̀bź/ 'want’, /níní-yź/ ‘be afraid to’, and /dàgá/ 'be good’ (used in a should construction). It is interesting to note, however, that all of these verbs can also fit into other complementizer constructions, which I will address in later sub-sections; cross-references will be provided here.

### 19.2.1 /nàá/ 'forget'

When 'forget' in Tommo So takes a verb as its complement rather than a full clause, then the infinitive may be used. This corresponds to the English "forget to" construction instead of the more clausal "forget that". By making the verb infinitive, it is made more nominal, and hence it can be taken as the object by the verb just as a noun could be (compare "I forgot to sweep" vs. "I forgot the cake"). In every case of this kind, the subject of the main clause must obligatorily be understood as the subject of the infinitive as well.
(xx)
a. Ú $=$ ỳ $\quad$ sárá-dim nàè-m.
$2 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj}$ pay-Inf forget.PerfL-1sgS
'I forgot to pay you.'
b. Ú =j̀ sárá-dim nàé-lè-m.
$2 \mathrm{sg} \operatorname{Pro}=$ Obj pay-Inf forget-Neg.Impf-1sgS
'I won't forget to pay you.'

Another morphological option for the construction in which the VP is understood as the object of 'forget' is to put the VP into a nominal compound form; see section 19.3.1.

In the imperative, we find yet another nominalized form of the verb: the /-lé/ suffix. I will illustrate this construction here, as 'forget' is the only potentially clausecomplementizing verb I have seen taking deverbal /-lé/ nouns as complement:

$$
\begin{array}{lll}
\text { Fílm }=\mathrm{g} \varepsilon \quad \text { yé-ndí-lé }=\mathrm{g} \varepsilon & \text { nàá } & \text { nàà-gú. }  \tag{xx}\\
\text { film }=\text { Def } \text { see-Fact-Nom.H = Def } & \text { forget } & \text { NAA-Proh } \\
\text { 'Don't forget to watch the film!' } & &
\end{array}
$$

## Can you use yendiye? Is the /gz/ obligatory? Can you use /gz/ with /dim/? Tone on /nàá/.

When 'forget' takes a phrasal complement, then that phrase is either turned into a relative clause (if the matrix verb is imperative) or it is marked by a/gz/ complementizer (in all other cases). See sections 19.5.1 and 19.6.1, respectively.

### 19.2.2 /m̀bé/ 'want, like'

Like 'forget', 'want' (or 'like') takes an infinitival complement when the complement is not phrasal. This translates to English 'want to' or 'like to'. However, the situation is much more complicated than that of 'forget' in that the tense of the main clause affects the morphological form of the complement verb; it is not the case that it always takes the infinitival suffix /-dim/nor is it even the case that the verb is always nominalized.

The tense/aspect/negation specifications of the main clause for which we find the infinitival complement include:

2. Present affirmative of 'like’ (m̀ bé-go wo)
3. Future negative (nàmà-lé)

Recall from section XXX that 'want/like' is a highly irregular (and somewhat adjectival) verb. Thus, in the list above, I have included the morphological forms associated with the TAN specifications, since other forms may also exist that fit them. For example, in (1), I listed /m̀̀bé-ľ́-go be/ and /nàmà-lé-go be/, since there also exists a past negative form of 'want'/bè-lí/, and this form does not take the infinitival complement. Similarly, in (2) I specify 'like', since this same morphological form /m̀̀ $\varepsilon$-go wo/ can also mean 'want', in which case it does not take the infinitive as a complement. The same holds true of (3), where the same morphological form /nàmà-ĺ̌/ can be interpreted as either present or future, and yet only the future takes the infinitive. These examples show that morphological form, semantics, and inflection can all affect the choice of complement when it comes to 'want/like'. Much more data will be required to fully sort out all possibilities.

Beginning with the past negative, we find examples like the following:
a. Wó ḿmo $=\mathrm{n} \varepsilon \quad$ yèlé-dim m̀ mé-lé-go $=\mathrm{be}$.

3 sgPro $1 \mathrm{sgPoss}=\mathrm{Obl}$ come-Inf want-Neg-Adv = be.Perf 'She didn't want to come to my house.'
b. Wó gòó-dim nàmà-lé-go $=$ be.

3 sgPro go.out-Inf want-Neg-Adv = be.Perf
'She didn't want to go out.'

The system is complicated by the fact that this is not the only morphological possibility for the past negative. Also possible are forms that appear to the non-final chain form with /-ee/ except that the tone of the stem is always $\{\mathrm{LH}\}$ instead of lexical. These will be discussed in section 19.8.1. Equally possible are compound VP constructions, shown in section 19.3.2.

Next, we find the infinitive used as the complement of 'like' but not of 'want', even though these two verbs are morphologically identical.
(xx) Mí kìlèmó kééní-yé-dim m̀bé-gó=wo-m.

1 sgPro music listen-MP-Inf like-Adv $=$ be-1sgS
'I like listening to music.'

In this case too we see that the infinitive can co-vary with a deverbal compound. See section 19.3.2 for a discussion. Similarly, a cognate nominal of the verb in question can be used instead. This construction is treated in section 19.4.1.

Finally, the infinitive can be used in the future negative, but not in the present negative, even though the two are morphologically identical. Consider the following:
(xx)
a. Yè-ndé-dim nàmà-lé-m.
see-Fact-Inf want-Neg-1sgS
'I will not want to look.'
*'I do not want to look'
b. Yògó $=\mathrm{m}\rangle \quad$ ádúbá-dim nàmà-lé-m.
tomorrow $=$ Poss think-Inf want-Neg-1sgS
'Tomorrow, I will not want to think.'

It is not clear whether the other nominalizing strategies (cognate nominal, deverbal compound, etc.) are also possible in the future negative or not. Check this!

For more discussion of 'want/like', see sections 19.3, 19.4, and 19.8.

### 19.2.3 /níní-yé/ 'be afraid to'

The pattern for 'be afraid to' is much like that of 'forget' at the beginning of this section. If the subject of the main and the complement clause are the same and if it is the action of the verb rather than a full clause that is the object of the main clause verb, then the infinitive is used. This marks out the difference between "be afraid to (do sth)" and "be afraid that (sb does sth)". The latter sees the verb of its complement in the non-final verb form /-ee/ and will be discussed in section 19.8.2.

Examples of 'be afraid to' with an infinitival complement are illustrated below:
(xx) a. Dúú $\mathfrak{m} m จ=n \varepsilon$ dòó-dim nííí-yaa = wo.
side 1 sgPoss $=\mathrm{Obl}$ arrive-Inf fear-MP.Perf $=$ be
'He is afraid to come close to me.'
b. Tòmmò Sò ó sóó-dim nìỳ̀-yè-lí-m.

Tommo.L speech speak-Inf fear-MP-Neg.Perf-1sgS
'I am not afraid to speak Tommo So.'

Both examples in (xx) can also be constructed using a non-final /-ee/ complement; see example ( xx ) in section 19.8.2.

### 19.2.4 /dàgá/ 'be good'

The verb /dàgá/ 'be good' is used in constructions translating to 'should'. It marks out an action that would be desirable or good if performed. The subject of the verb /dàgá/ in
the main clause is always an impersonal 3sg, corresponding to the English expletive 'it'. The subject of the complement, if pronominal, takes an object marker. This is shown in the following examples:
a. Àná- $\mathrm{m}=\mathrm{mbe}$ jàà síré jènné-dim bé $=\mathrm{j̀}$ dàgáa $=$ be. man $-\mathrm{HumPl}=\mathrm{Pl}$ meal.L cook.H pick.up-Inf 3 plPro $=$ Obj be.good.Perf $=$ be.Perf 'Men should have learned how to cook.'
b. more examples

The pattern set out by the previous constructions is continued here-the infinitive in these expressions is interchangeable with the /-ee/ non-final form. For this morphological form, see section 19.8.3.
19.2.4 /pádá/ 'cease'

The last construction that can take an infinitive as its complement is a construction with /pádá/ 'leave’ or 'cease' meaning 'stop doing (something)'. Once again, this is unsurprising since the complement of the verb is itself an action or a verb instead of a whole clause. The subject is understood to be the same for both the main clause and the embedded infinitive.

Kééní-yé-dim yé = pàdè-m.
listen-MP-Inf Exist = cease.PerfL-1sgS
'I stopped listening.'

## More examples

In place of the infinitive, deverbal compounds may also be used as the complement of 'cease'. This construction is treated in section 19.3.3.
Can the -ee form be used?

### 19.3 Complements with a gerundive compound

The last section showed the first complement construction to use a nominalized complement in the form of an infinitive. This section treats those verbs that can take deverbal compounds as their complement. Recall from section XXX that deverbal (or
gerundive) compounds are those right-headed compounds in which the verbal head takes a $\{\mathrm{H}\}$ tone overlay with no other morphology. The non-head is an argument of the verb, typically the object, though locatives and instrumentals also are possible; any clitics that would be present in a regular VP are deleted when the compound is formed. An example of a deverbal compound can be seen in example (xx) above. /Jàà síré/ 'meal cooking’ shows /jáá/ 'meal' with L tone as the non-head and /síré/ 'cook' with $\{\mathrm{H}\}$.

Many of the verbs we have already seen in section 19.2 can also take a compound complement. These verbs are /nàá/ 'forget', /m̀bé/ 'want', and /pádá/ 'cease', discussed in sections 19.3.1, 19.3.2, and 19.3.3, respectively. In addition, section 19.3.4 discusses 'prevent', which can either be a causativized form of 'cease’, /pádá-mó/, or the verb /kédé/, which literally means 'cut'. Finally, section 19.3.5 discusses a construction meaning 'be possible (that)'.

### 19.3.1 /nàá/ 'forget'

We saw in section 19.2.1 above that /nàá/ 'forget' in the "forget to" rather than the "forget that" construction may take an infinitive as its complement. The verb can also take a deverbal compound, though it appears that this is true only under certain circumstances. Consider the following:
( $x x$ ) Òlù yáá nàì $\varepsilon^{n}$.
field.L go.H forget.PerfL-3plS
'They forgot to go to the fields.'

Here, the verb /yàá/ 'go' forms a compound with the noun /òlú/ 'field'. It appears that such a nominal argument is necessary to form a deverbal compound; that is, the stem on its own with the $\{\mathrm{H}\}$ overlay of the compound is not possible (*/yáá/ 'going'). Nor is it possible to use a pronominal object like /ú/ 'you' seen in the infinitival example to form the compound (*/ù sárá/ 'paying you'). Thus, while any example with a deverbal compound may be put into the infinitive with 'forget', the opposite does not seem to be true.

## MORE EXAMPLES

Make sure this is right

### 19.3.2 /m̀bé/ 'want'

In a small number of cases, we find a past negative verb 'want' taking a gerundive complement instead of an infinitive. These are:
a. Jòbù jóbś m̀ mé-lé-go $=$ be.
running.L run.H want-Neg-Adv=be.Perf
'He didn't want to run.'
b. Bàmàkò yáá m̀bé-lé-go $=$ be-m.

Bamako.L go.H want-Neg-Adv = be.Perf-1sgS
'I didn't want to go to Bamako.'

It is not clear whether the other contexts for infinitival complements (present 'like' or the future negative of 'want') can also take gerundive complements. What is clear, however, is that we find no cases of a gerundive complement in a context that cannot take an infinitival one. Either the two morphological forms are completely interchangeable or the gerundive can apply in a subset of the infinitival cases. Infinitival cases are discussed in section 19.2.2.

### 19.3.3 /pádá/ 'cease’

In the case of /pádá/ 'cease', it appears that gerundive compounds are the preferred way of forming a complement of the verb. The majority of attested cases of /pádá/ with a complement include a compound. Examples include:
(xx)
a. Néé nàmà témé pádaa $=$ wo .
now meat.L eat.H cease.Perf=be
'He has stopped eating meat (for now).'
b. Sìgàrèdì nó ${ }^{\text {a }}$ pàdé-lè-m.
cigarette.L drink.H cease-Neg.Impf-1sgS
'I will not stop smoking cigarettes.'
c. (Nùyò) núyó pádà-dè-m.
song.L sing.H cease-Impf-1sgS
'I am going to stop singing.'

In (xxa), the distinction between 'for now' and 'for forever' is controlled by which adverb meaning 'now' is used. /néé/ imparts the temporary meaning, whereas /nìměm/, typically meaning 'just now', implies that though he has just now stopped eating meat, his intention is to stop eating meat forever.
(xxc) gives an example in which the non-initial compound element appears to be optional, contrary to what I described at the beginning of this section. However, I argue that the structure changes completely in the absence of the initial argument, and /núyó/ is no longer interpreted as the verb stem but rather as a simple noun 'song'. This explanation is supported by another example in which a simple noun related to the implied action stands in as the object of 'cease'. Consider:

$$
\begin{align*}
& \text { Íí }=\text { g } \varepsilon \quad \text { íru pàdà-lí námbà. }  \tag{xx}\\
& \text { child }=\text { Def breast cease-Neg.Perf yet } \\
& \text { 'The child has not yet been weaned (lit. quit the breast).' }
\end{align*}
$$

Here, /íru/ 'breast' stands in for the implied action of nursing. Thus, if /núyó/ alone is used as the complement of /pádá/ 'cease', we may interpret this as meaning 'quit song' rather than 'cease singing'.

For infinitival complements with /pádá/ 'cease', see section 19.2.4.

### 19.3.4 /pádá-mó/ 'prevent'

If the verb /pádá/ 'cease' is causativized, we get a verb used like 'prevent'. Like its underived form, this verb typically takes gerundive compounds as its complement. The intended subject of the gerundive complement is marked with an object marker. WHAT IF IT IS NON-PRONOMINAL? The complement is also optionally followed by a possessive pronoun co-referent with the subject of the complement. For example:
(xx)
a. Mí=j̀ sìgàrèdì nóv́ (ḿmっ) pàdà-mì.
$1 \mathrm{sg} \operatorname{Pro}=\mathrm{Obj}$ cigarette.L drink.H (1sgPoss) cease-Caus.PerfL
'He prevented me from smoking cigarettes.'
b. Mí=j̀ yàà-nà jé (ḿmo) pàdà-mì.
$1 \mathrm{sgPro}=$ Obj woman-HumSg.L take.H (1sgPro) cease-Caus.PerfL 'He prevented me from marrying (a woman).'

The optionality of the possessive pronoun is understandable even in English if we translate (xxa) literally, to illustrate, as 'He made me cease (my) smoking cigarettes.'

In place of /pádá-mó/, we also find the verb /kédél 'cut' being used to mean 'prevent', especially when the complement action is one of motion. The structure is very similar to that found with /pádá-mó/, with the exception that /kédé/ does not require the logical subject of the complement to be present, marked with an object marker; instead,
only the possessive pronoun after the compound indicates the subject. The necessity of /mí= $\mathfrak{n} /$ ' $m e$ ' in the examples in ( xx ) is most likely due to the morphological causative on /pádá-mó/. We will see this object marking return in the final 'prevent' strategy below. The following illustrates an example of /kédé/ 'cut' used like 'prevent':
( xx ) Àná $=\mathrm{g} \varepsilon$ Dùmàsà yáá ḿmo kédaa $=$ wo.
rain $=$ Def Douentza.L go.H 1sgPoss cut.Perf= be
'The rain prevented me from going to Douentza.'
Check for more examples, and whether this can be said with other 'prevent' strategies.
Finally, a simple negative causative can be interpreted as meaning 'prevent'.
Structurally speaking, this construction does not belong in this chapter, since it lacks any semblance of a complement verb or clause; what would have been the complement is subsumed into the main verb and causativized. Semantically, however, this is just another strategy speakers may use to create 'prevent' phrases. Consider the following:
a. Nǎm $=\mathrm{g} \varepsilon$ yúú $=\mathrm{g} \varepsilon \quad$ mí=j̀ wàlà-mé-lè.
sun $=$ Def millet $=$ Def 1 sgPro $=$ Obj farm-Caus-Neg.Impf
'The sun prevented me from farming millet.'
b. $\grave{n} \varepsilon \dot{\varepsilon}=\mathrm{g} \varepsilon=\mathrm{mbe}$ bògòlı̀ $=\mathrm{g} \varepsilon \quad$ Ámádu yèy-yè-mé-lè.
goat $=\operatorname{Def}=\mathrm{Pl}$ bellow.L=Def Amadou sleep-MP-Caus-Neg.Impf 'The goats' bellowing kept Amadou from sleeping.'

Since the morphological causative has returned, so has object marking on the embedded subject, if that subject is pronominal. Notice that there is no object marking on proper nouns in this context. For more on causatives, see section XXX.

### 19.3.5 /béż-dè/ 'it is possible that'

Another construction that takes a gerundive complement is a construction meaning 'it is possible that'. The imperfect inflected verb /béz̀-dè/ is also used to mean 'can' (see section XXX), and being highly irregular, it is not easy to say what the stem form is. In English and French, 'it is possible' constructions involve an expletive subject 'it' in the main clause followed by a fully inflected phrase in the complement clause. In Tommo So, on the other hand, the verb /bé $\varepsilon$-d $\mathrm{\varepsilon} /$ is inflected for the subject and what follows (the equivalent of the English complement clause) is a gerundive compound. For example:
(xx) a. Béc̀-dè ènjè sémé.
be.able-Impf chicken.L slaughter.H
'It is possible that he is slaughtering a chicken.'
b. Béc̀-dè-w kònjò dónó.
be.able-Impf-2sgS millet.beer.L sell.H
'It is possible that you sell millet beer.'

Notice that the distinction between the progressive and the present habitual is neutralized in this construction. What about past?

While the verb /béc̀-d $\check{\varepsilon} /$ is found in 'can' or 'be able to' constructions, these never employ a gerundive complement nor do they have this structure wherein /béz̀-d $\grave{\text { g }}$ / precedes the action that is possible. Both of these mark out 'it is possible' phrases as being an entirely different construction.

### 19.3.6 /bàrá/ 'help'

I have one example of the complement of /bàrá/ 'help' being in the gerundive compound form. This compound is not directly followed by the main clause verb, however, instead being linked to it with the oblique postposition $/ \mathrm{n} \varepsilon /$, as illustrated below:
 money find.PerfL-1sgS = if $2 \mathrm{sgPro}=\mathrm{Obj}$ house.L rent. $\mathrm{H}=\mathrm{Obl}$ help-Impf-1sgS 'If I get money, I will help you rent a house.'

Most complements of /bàrá/ 'help' are formed with a chain verb construction; see section 19.9.3.

### 19.4 Complements with /u/- or /y/-final verb

This section treats complements whose verbs take a final /u/ if polysyllabic or $/ \mathrm{y} /$ if monosyllabic. At first glance, these look like deverbal nouns (see section XXX), but we find this form applying even to those verbs whose deverbal nouns are not normally formed in this way. That is, this appears to be an entirely productive process affecting any verb. Similarly, unlike in true deverbal nouns where the tone has an unpredictable relationship with the verb, in these complement constructions, the /-u/ final verbs always have the same lexical tone as the verb stem. A final piece of evidence that these $/ \mathrm{z} / \mathrm{u}$ forms are not the same as cognate nominals is that they appear to still be verbal, shown by the fact that their
objects retain lexical tone. If they were nominal, the two nouns together would be forced to form a compound, and this is not the case.

There are only two such verbs that I know of that take these /-u/ or /-y/
complements, and those are /m̀b $\varepsilon /$ when it means 'like' (not 'want') and 'be able to', whose exact stem form is unclear due to a high degree of irregularity.

### 19.4.1 /m̀̀bé/ 'like'

We have seen the stem /m̀b $\varepsilon$ / with two forms of complements so far, the infinitive and a gerundive compound. As example ( xx ) in section 19.2.2 shows, the infinitive can be used when the stem /m̀ $\mathbf{m}$ '/ means 'like', and it is in this same case that we find deverbal noun complements.

## FIND EXAMPLES! WHERE DID THEY GO?

19.4.2 'be able to'

The verb 'be able to' is rather irregular. At times, the stem appears to be monosyllabic, something like /bèź/, but the past reveals that it may be more like /bèľ́/, homophonous with the verb 'find'. The table below summarizes the main forms found in the data:

| (xx) |  | Affirmative | Negative |
| :--- | :--- | :--- | :--- |
|  | Imperfect | béz̀-dè | bèé-lè / bèlé-lè |
|  | Perfect | XXX | bèlè-lí |

As a modal verb, certain aspectual categories like progressive are not available. Likewise, imperatives and hortatives do not exist.

Like 'want', the tense of 'be able to' determines what kind of complement it will take. In the perfect, the complement verb forms a verb chain with 'be able to', with the complement taking final /-aa/. This construction will be discussed in section 19.9.XXX. In the imperfect, both affirmative and negative, the $/-\mathrm{u} /$ construction is used. Consider the following examples:
a. Bíré bìrú bèé-lè.
work work.U be.able-Neg.Impf
'She can't work.'
b. Mí ánìgè ú=ỳ bàrú béc̀-dè.

1 sgPro friend.HL $2 \mathrm{sgPro}=\mathrm{Obj}$ help.U be.able-Impf
'My friend can help you.'
c. Mí jóbu jòbú bèé-lè-m.

1sgPro running run. U be.able-Neg.Impf-1sgS 'I can't run.'
(xxa) and (c) highlight the fact that the $/-\mathrm{u} /$ form of the verb used in 'be able to' constructions is not the same as the deverbal noun. In (xxa), the cognate nominal of /bìré/ 'work' is segmentally identical /bírह́' 'work'. In (xxc), the cognate nominal of /jòbó/ 'run' does end in [u] (arguably epenthetic), but its stem vowel is specified as [+ATR] and it takes $\{\mathrm{H}\}$ rather than $\{\mathrm{LH}\}$ tone.

It is possible that here too the $[\mathrm{u}]$ is epenthetic and really what characterizes the verb form before 'be able to' is a deletion of the stem-final vowel. However, this would not explain why monosyllabic verbs take /y/ (as in /gó ǧ gǒy bèe-lè-m/ 'I can't dance'), a problem for cognate nominals as well (see section XXX). Also problematic both for the epenthetic vowel story and for the replacive story are verbs like /ńyé/ 'eat' that do not change form. For example:
(xx) Jáá f́yé béż-dè-m.
meal eat be.able-Impf-1sgS
'I can eat.'

It is not clear why this verb does not change. It may have to do with its unusual form, with a syllabic nasal at the beginning, such that it is not entirely monosyllabic nor is it entirely disyllabic. Do other verbs work this way?

Record these /- $\mathrm{u} /$ verbs and compare their tone and $/ \mathrm{u} /$ quality to those of cognate nominals.

### 19.5 Relative clause complements

A half a dozen verbs take headless relative clauses (or nominalized clauses) as their complement. Here we move into true complement clauses rather than verbal or nominal complements-the subject can differ between the main and the complement clause, and the verb in the complement can be inflected. I call these relative clause complements since the form of the complement clause is identical to that found in relative clauses; there are a
reduced number of inflectional categories (the same as those found on relative participles), and there is no subject agreement on the verb. This is in contrast to complements with the $/ \mathrm{g} \varepsilon$ / complementizer, discussed in section 19.6, where the subject can be marked.

The verbs that take this form of the complement clause are /àmbà bòó/ 'hope' (literally 'call god'), /દ̀દ̀lú wo/ 'be happy that' (with the subject marked as an object, literally, 'be sweet to X '), /mìlદ/ 'doubt that', /kǎy-go wo/ 'be important that', /i'íň̀/ 'be necessary that' (literally 'be standing'), /yàbá/ 'accept that' or 'consent to', and a construction indicating causation.

### 19.5.1 /àmbà bòó/ 'hope that'

There are two constructions in Tommo So meaning 'I hope that', one of which is /àmbà bòó/. (The other, /àdùbú $\mathrm{X}=\mathrm{mv}=\mathrm{n} \varepsilon /$, will be discussed in section 19.7.1.) This phrase translates literally to 'call god', though it is unusual in that 'god' takes L tone. This is the only case I know of where an object is L-toned without being grammatically controlled. A similar phenomenon is seen in blessings, which are treated in section XXX. It appears that /ámbá/ 'god' is being used almost adverbially or as a particle rather than as a true article, and it is not clear to what extent speakers decompose the expression /àmbà bòó/ when using it to mean 'hope'.

As we will see with many of the verbs below, the relative clause complement follows the matrix verb /boó/ in these constructions. Examples include the following:
a. Àmbà bòé-m ènè àsúú pìyè = bè nǒ ú
god.L call.PerfL-1sgS goat.L always cry.Impf $=$ be.Perf.L this 2 sgPro
sémè $=\mathrm{g} \varepsilon$.
slaughter.Perf.Rel $=$ Def
'I wish that you'd slaughter that goat that cries all the time.'
b. Àmbà bòé-w mí yél $\grave{c}=\mathrm{g} \varepsilon$.
god.L call.PerfL-2sgS 1sgPro come.Perf.Rel = Def 'You wish that I'd come.'
c. Àmbà bòé-m ú yèlé-le $=\mathrm{g} \varepsilon$.
god.L call.PerfL-1sgS 2 sgPro come-Neg.Impf.Rel $=$ Def
'I wish that you wouldn't come.'

There are several things to notice in these examples. First is that the verb /bòo/ is placed in the perfect even when the interpretation of the hoping is imperfect. Second, this perfect
form is segmentally the defocalized perfect, but it takes $\{\mathrm{LH}\}$ tone rather than all $\{\mathrm{L}\}$. It is possible that there is a $\mathrm{H}^{-}$boundary tone at the end of the phrase to make it clear to speakers that something more is coming, since otherwise in an SOV language a listener could assume that the inflected verb marks the end of the phrase. Finally, at least in these examples, the affirmative verb in the complement clause is morphologically perfective while the negative verb is in the imperfective, even though they ought to be simply an affirmative-negative pair.

More examples with other tenses and other persons.

### 19.5.2 /èlèlú wo/ 'be happy that'

The expression /દ̀lèlú wo/ literally means 'it is sweet'. When preceded by a noun or pronoun marked with the object marker / $=\mathfrak{j} /$, the expression takes on the meaning ' X is happy that', or literally 'it is sweet to X that'. Recall that 'happiness' in Tommo So is expressed as /kìndè élćlu/ or 'sweet liver'; there is no dedicated adjective meaning 'happy'.

Like 'hope that', the complement clause to 'be happy that' may follow it, putting the inflected verb in the middle of the sentence:

$1 \mathrm{sgPro}=\mathrm{Obj}$ sweet $=$ be 3 plPro sleep $-\mathrm{MP}-\mathrm{Ppl}$ have $=$ Def 'I am happy that they are asleep.'
 $2 \mathrm{sgPro}=\mathrm{Obj}$ happy-Neg $2 \mathrm{sgPoss}=\mathrm{Obl} 1$ sgPro come.Impf.Rel $=$ Def 'You are not happy that I am coming over.'

In these examples, the implied subject (the one who is happy or unhappy) is marked out by an object marker, while the verb/wo/ is in a neutral 3 sg form. This verb is immediately followed by the complement clause with no linking particle.

It is also possible to put the complement clause first followed by the particle /diye/. This more explicitly states that the happiness in the main clause is the result of the complement clause. The two forms are interchangeable:

3 plPro sleep-MP-Ppl have.Rel $=$ Def than 1 sgPro $=$ Obj sweet $=$ be 'I am happy that they are asleep.'
b. Góó ú gòó- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ diye mí èlèlú=wo. dance 2 sgPro dance-Impf.Rel $=$ Def than 1 sgPro sweet $=$ be 'I am happy that you are dancing.'
check tone on these and check necessity of the object marker.

### 19.5.3 /mìlé/ 'doubt that'

The verb /mìlé/ 'doubt' tends to take relative complements, but unlike the two preceding expressions, they are typically pre-verbal; my data includes only one example of a post-verbal complement and it does not look to be a relative clause. More data are required to properly identify the morphological form of post-verbal complements of /milé/.

Examples of relative clause complements with /mìlé/ are illustrated below:
a. Mí=j̀ ú ḿ mè $=\mathrm{g} \varepsilon \quad$ mílè-dè-m.
$1 \mathrm{sgPro}=$ Obj 2 sgPro love $\cdot \mathrm{Rel}=$ Def doubt-Impf-1sgS
'I doubt that you love me.'
b. Bùdú ú $\quad s \varepsilon ́=g \varepsilon \quad$ mílè-dè-y.
money 2 sg Pro have.Rel $=$ Def doubt-Impf-1plS
'We doubt that you have money.'

Being pre-verbal with no particle like /diye/, the relative clause is very clearly the object of the verb/mìlé/.

More post-verbal examples, different tenses...
19.5.4 /kǎy-go wo/ and /màá-go wo/ 'be important that'

Two different predicate adjectives can mean 'be important that' when they take a complement clause: more common is /kǎy/, which independently means 'best', but also we find /màá/, which independently means 'dry' or 'difficult'. Once again we return to a construction where the complement clause follows the predicated adjective, like we saw with 'be happy that'. For example:
a. Wó màá-go = wo tàgá ḿmo wó jéc̀lì.

3 sgPro hard-Adv $=$ be shoe 1 sgPoss 3 sgPro bring.Perf.Rel 'It is important that he bring my shoes.'
b. Kǎy-go = wo gó $\quad$ wóm $0=$ báà mí yàá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon$. important-Adv $=$ be dance 3 sgPoss $=$ Loc 1 sgPro go-Impf.Rel $=$ Def 'It is important that I go to his dance.'
c. Ḿmo $=\mathrm{n} \varepsilon \quad$ kǎy- $\mathrm{go}=\mathrm{w} 0 \quad$ mí náá $=\mathrm{y}$ ú

1 sgPoss $=\mathrm{Obl}$ important $-\mathrm{Adv}=$ be 1 sgPro mother $\cdot \mathrm{H}=\mathrm{Obj} 2 \mathrm{sgPro}$ bòó- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon$.
call-Impf.Rel = Def
'It is important to me that you call my mother.'

First, we see a slight difference in complement structure between (xxa) and (xxb). The verb in the complement in (xxa) is in the perfective, while those in (xxb-c) are imperfective. Also, the independent pronoun/wó/ occurs before /màá-go wo/ in (xxa), while the predicate adjective has a null subject in (xxb-c). Whether this is a property of the different adjective or simply a fluke is unclear given the small number of data points.

Second, note in (xxc) that to add an experiencer argument to the main clause, the oblique form of the pronoun is used, combining the possessive pronoun with the oblique particle $/ \mathrm{n} \varepsilon /$. This is in contrast to 'be happy that', where the experiencer of the happiness was marked with the object marker.

It is also possible to have the complement clause precede the main clause, as in the following:

$$
\begin{align*}
& \text { Ú } \quad \text { yと̌ll } \varepsilon=\mathrm{g} \varepsilon \quad \text { kǎy-go }=\text { wo. }  \tag{xx}\\
& 2 \text { sgPro come.Impf.Rel }=\text { Def important-Adv }=\text { be } \\
& \text { 'It is important that you come.' }
\end{align*}
$$

As with /mìlé/ 'doubt' but unlike with /દ̀lèlú wo/ 'be happy that', the bare relative clause precedes the main clause; no particle /diyz/ is necessary.

### 19.5.5 î'ínè/ 'be necessary that'

There are at least two expressions in Tommo So that mean 'it is necessary that'. The one discussed here is i 'ín$\varepsilon ̀ /$, literally a stative verb meaning 'it is standing', which takes a relative clause as its complement. The other, /tílày/, will be discussed in section 19.8.5. My data contains only one example of fi'íng̀/ in this capacity, and it too precedes the relative clause complement:
( xx ) Ì'ínè úlùm $=\mathrm{g} \varepsilon$ jángu díyè-go bé jàngá-d $\varepsilon=\mathrm{g} \varepsilon$.
Red-stand children $=$ Def studies big-Adv 3plPro study-Impf.Rel $=$ Def
'It is necessary that the children study a lot.'

## More examples

19.5.6 /yàbá/ 'consent'
/yàbá/ 'consent' or 'agree' works much like /mìlé/ 'doubt' in that the relative clause always (in this case) precedes it. It is clear that the clause is acting as the O in SOV, since the main clause subject (if present) generally precedes it, nestling the embedded clause inside of the main clause:
( xx ) a. Mí báá Bàmàkó $=$ báà jángu émmé jàngá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ yàbáa $=$ wo.
1 sgPro father. H Bamako $=$ Loc studies 1 plPro study-Impf.Rel $=$ Def
agree. Perf $=$ be
'My father consented to us studying in Bamako.'
b. Mól-n $\varepsilon$ bángàlu $=\mathrm{g} \varepsilon$ émmé kán- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ yàbà-lí.
cleric-HumSg wedding $=$ Def 1 plPro do-Impf.Rel $=$ Def agree-Neg.Perf 'The cleric did not consent to our carrying out the wedding.'
c. Ú báá mí yè $\varepsilon$-́- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ yàbé-lè.

2 sgPro father.H 1sgPro come-Impf.Rel = Def accept-Neg.Impf 'Your father won't accept that I come.'

However, relative clauses are not the only attested complement types for /yàbá/. What is up with the first example on page 20'?
19.5.7 'because of'

The final case of relative complement clauses differs from the others in that it is a configuration with a set meaning rather than a set verb that takes a complement clause. That is, a relative clause X followed immediately by a main clause Y takes on the meaning ' X because of $\mathrm{Y}^{\prime}$. It is interesting that Y is the main clause in Tommo So, since in English it is the cause that is subordinated, not the result. The following examples illustrate this construction:
a. Mí póó-ndí-yó-d $\varepsilon=\mathrm{g} \varepsilon$ jáá sáy-ni j́yé-gú $\mathrm{s} \varepsilon$-m.

1 sgPro fat-Fact-MP-Impf.Rel = Def meal much-Adv eat-Ppl have-1sgS 'I am getting fat because I eat a lot.'
b. Íí=ge píyé-gú sé=ge wó délé wó=ỳ bèndè. child $=$ Def cry-Ppl have.Rel $=$ Def 3 sgPro brother.H 3sgPro $=$ Obj hit.PerfL 'The child is crying because his brother hit him.'

In both of these cases, the initial clause is the result of the second, and it is this result clause that is subordinated by being relativized.

While this construction is common, it is also possible to have the result clause be a bare main clause. This form is treated in section 19.7.5.

## Can you ever get past tense relatives like this? How about bare clauses in the present?

## 19.6 /ge/ complementizer 3-4

This section discusses a construction that at first glance looks like the relative clauses seen before, but that is set apart by the presence of subject agreement on the complement clause's verb. The similarity is that both the relative clauses and these clauses are followed by the definite article $/ \mathrm{g} \varepsilon /$. Until now, we have only ever seen $/ \mathrm{g} \varepsilon /$ following nominal elements, be they true nouns or nominalized verbs. In this construction, however, the verb looks exactly as it would in the main clause, agreeing for subject and taking main clause tonal overlays. This leads me to conclude that $/ \mathrm{g} \varepsilon /$ in this case is not so much a definite article as it is a homophonous complementizer. Thus, in the examples that follow, I gloss it as "Comp" instead of "Def".

Verbs of perception are particularly likely to take the /g $\varepsilon /$ complementizer. /nàá/ 'forget' makes another appearance, followed by /yè/ 'see that', /દ́ǵ/ 'hear that', and /íígo wo/ 'know that'. Finally, we find another adjective-like main clause with the adjectival verb /ésé/ 'be clear that'.

### 19.6.1 /nàá/ 'forget'

Up until now, we have only seen 'forget' in a form where the subject is shared between the main clause and a verbal complement (i.e. "forget to" constructions). Here we turn to "forget that" constructions, where 'forget' takes a phrasal complement that can take a different subject than the main clause.

In this capacity as "forget that", the complement clause looks like a main clause but with a/ge/ complementizer. This can be used both when the subjects differ between the two clauses and when they are the same:
a. Mí náá ííyé góó góò-dìn $=\mathrm{g} \varepsilon$ náá $=\mathrm{y}$.

1 sgPro mother. H today dance dance-Impf. $3 \mathrm{plS}=\mathrm{Comp}$ forget.Perf $=$ Cop 'My mother forgot that they are dancing today.'
b. Nàmá $=\mathrm{g} \varepsilon$ ع́baa $=\mathrm{be}-\mathrm{m}=\mathrm{g} \varepsilon$ nà $\varepsilon-\mathrm{m}$. meat $=$ Def buy.Perf $=$ be.Perf-1sgS $=$ Comp forget.PerfL-1sgS 'I forgot that I had (already) bought meat.'

We can see in these examples that the verb form of the complement is exactly as it would be in a main clause. In (xxa), the imperfect verb takes a $\{\mathrm{LH}\}$ overlay, which it would not receive were it in a nominalized or relativized clause. The perfect form in (xxb) is not typically used in relative clauses, which prefer the defocalized perfect. The fact that both take subject agreement cinches the case that these are not relative clauses like those seen in the last section.

For uses of /nàá/ in "forget to" constructions, see sections 19.2.1 and 19.3.1.

### 19.6.2 /yz̀/ 'see that'

The verb/yè/ 'see' can be used in two types of complement clauses in Tommo So. One translates to roughly English "see (sb) do (sth)", and in this construction, the complement clause takes a participial suffix on the verb; see section 19.10.1. In this section, I discuss the other use of /yغ̀/ in "see that" constructions. Here, the complement clause takes the $/ \mathrm{g} \varepsilon /$ complementizer.

Check if the complement is in the relative clause or $/ \mathrm{g} \varepsilon /$ complementizer form.

### 19.6.3 /égé/ 'hear that'

/'́gé/ 'hear' patterns in the exact same way as /yè/ 'see' in that direct perception "hear (sb) do (sth)" takes a participial complement while indirect perception "hear that" takes a complement with the $/ \mathrm{g} \varepsilon /$ complementizer. For example:

$$
\begin{aligned}
& \text { a. Ámíru }=\mathrm{g} \varepsilon \text { dámmá }=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad \text { sóó } \quad \text { sóa }=\mathrm{be}=\mathrm{g} \varepsilon \\
& \text { chief }=\text { Def village }=\operatorname{Def}=\text { Obl speech speak. } \operatorname{Perf}=\text { be. } \operatorname{Perf}=\text { Comp }
\end{aligned}
$$

غ́gaa $=$ be-m.
hear.Perf=be.Perf-1sgS
'I heard that the chief spoke in the village.'

## b. More examples

For direct perception constructions with / $\varepsilon$ ǵg/, see section 19.10.2.

### 19.6.4 /íí-go wo/ 'know that'

There are two ways of forming 'know that' expressions that differ in the order of the clauses. When the complement clause follows the main clause verb /íígo wo/ 'know', it takes no complementizer. This form is presented in section 19.7.2. When the complement clause precedes the verb, on the other hand, the $/ \mathrm{g} \varepsilon /$ complementizer is used. It seems that this form is the more common of the two, with most post-verbal complements being predicate structures with a copula.

Examples of pre-verbal complement clauses with 'know' include the following:
a. Dúmásá $=\mathrm{n} \varepsilon \quad$ yèlé-lè- $\mathrm{m}=\mathrm{g} \varepsilon \quad$ íí-go $=\mathrm{w} 0-\mathrm{w}$.

Douentza $=$ Obl come-Neg.Impf-1sgS $=$ Comp know-Adv $=$ be- 2 sgS 'You know that I am not coming to Douentza.'
b. Ámíru $=\mathrm{g} \varepsilon$ émmé gó yàà-lí- $\mathrm{y}=\mathrm{g} \varepsilon \quad$ íí-go $=$ wo. chief $=$ Def 1 plPro dance go-Neg.Perf-1plS = Comp know-Adv = be 'The chief knows that we did not go to the dance.'
c. Ííyé dìgè nàm góó góò- $\mathrm{d} \varepsilon$ è-w $=\mathrm{g} \varepsilon \quad$ í́ $\varepsilon 0=$ wo. today evening.L sun.L dance dance-Impf-2sgS = Coomp know-Adv = be 'She knows that you will dance tonight.'

Interestingly, if the verb 'know' is in the negative, the question particle /ma/ is used in place of the $/ \mathrm{g} \varepsilon /$ complementizer. In this construction, there is no difference between 'not know that' and 'not know if':
(xx) Jáá wómə fýyaa $=$ be-m ma ínnè. meal 3 sgPoss eat.Perf=be.Perf-1sgS or? know.Neg 'He doesn't know that/if I ate his food.'

This construction is an embedded interrogative, discussed in section XXX. Is it possible to use $/ \mathrm{g} \varepsilon /$ ?

### 19.6.5 / śśz/ 'be clear that'

The adjectival verb /éś́/ 'be clear' is used in Tommo So constructions translating both to 'it is clear (to X ) that' and ' X is sure that'. The participant X is marked with the oblique postposition $/ \mathrm{n} \varepsilon /$, which is obligatorily preceded by the possessive clitic $/ \mathrm{mo} /$ on a pronoun. The object X of /éśś/ 'be clear' may be co-referent with the subject of the complement clause, but this is not strictly necessary.

In all cases, the complement clause precedes the main clause verb:
a. Yògó Tó-Tóyó yáà- $\mathrm{d} \varepsilon ̀-\mathrm{m}=\mathrm{g} \varepsilon \quad$ ḿmっ $=\mathrm{n} \varepsilon \quad$ ع́saa= wo. tomorrow Tongo-Tongo go-Impf-1sgS = Comp 1sgPoss = Obl be.clear.Perf= be 'It is clear to me/I am sure that I will go to Tongo-Tongo tomorrow.'
b. Ííýò yàa-ná jé-dè-w $=\mathrm{g} \varepsilon \quad$ ḿmo $=\mathrm{n} \varepsilon \quad$ ésaa $=\mathrm{w} 0$.
this.year woman-HumSg take-Impf-2sgS $=$ Comp 1sgPoss $=\mathrm{Obl}$
be.clear.Perf $=$ be
'It is clear to me/I am sure that you will get married this year.'
c. Ú ánìgè Mótì $=\mathrm{n} \varepsilon$ gàáa $=\mathrm{w} \nu=\mathrm{g} \varepsilon \quad$ úw $=\mathrm{n} \varepsilon$

$$
\text { 2sgPro friend.HL Mopti }=\mathrm{Obl} \text { leave. } \mathrm{Perf}=\mathrm{be}=\mathrm{Comp} 2 \mathrm{sgPoss}=\mathrm{Obl}
$$

ع́saa= wo.
be.clear.Perf= be
'It is clear to you/you are sure that your friend has left Mopti.'

Get negative examples and past tense examples.

### 19.7 Complement with a null complementizer

The last section showed fully inflected complement clauses marked with complementizer $/ \mathrm{g} \varepsilon /$. A few verbs can actually take complement clauses without any overt complementizer at all. There are a number of ways these sentences can be put together. With /àdùbú $\mathrm{X}=\mathrm{m} \nu=\mathrm{n} \varepsilon /$ 'hope that' (literally 'in X's thought') and /íí-go wo/ 'know that', an unmarked complement clause follows the main clause. With /mùlú-go wo/ 'it seems that', the unmarked complement clause precedes this main clause expression. With /ìjè-lé/
'maybe' (literally 'it is not standing'), this word is inserted as an adverb into what would be the complement clause but is instead the main clause. Two causation clauses also figure. 'Because of' shows an unmarked clause (the cause, in this case) preceded by either /kó diyz/ 'because of that' or /pàské/ 'because' (from French parce que); this whole complex follows the main clause (the result). Finally, /tílày/ 'obligatory' is followed by an unmarked complement clause.

### 19.7.1 /àdùbú $\mathrm{X}=\mathrm{mo}=\mathrm{n} \varepsilon /$ 'hope that'

In section 19.5.1, we saw a construction with /àmbà bòó/ 'call god' that is used to mean 'hope' in Tommo So. That expression took a relative clause as its complement clause, always following inflected /bòó/. Here we see another 'hope' expression, though this time not bi-clausal. In that sense, perhaps this expression does not belong in this chapter on complement clauses, but since it can express the same idea as many of these bi-clausal constructions, I include it here for completeness's sake. The expression in question is /àdùbú $\mathrm{X}=\mathrm{m} 0=\mathrm{n} \varepsilon$ /, literally, 'in X 's thought'. This adverbial construction is used at the beginning of the sentence and is followed by what it is that is hoped for, which is expressed by a main clause. For example:
a. Àdùbú $\mathfrak{m} m ə=n \varepsilon \quad$ núyó núyò-dè-w. thought 1 sgPoss $=$ Obl song sing-Impf- 2 sgS 'I hope that you will sing.'
b. Àdùbú $\mathfrak{m ́ m o}=n \varepsilon$ jìmé-lè-w. thought 1 sgPoss $=$ Obl be.sick-Neg.Impf-2sgS 'I hope that you are well.'

## Get examples with other persons and other tenses

This expression can also be used to mean 'think that', which indicates that the speaker is perhaps more certain of what they hope than they would be in the /àmbà bòó/ 'hope that' expression, where they literally must ask god for what it is that they desire. Verify the difference between the two expressions with speakers.
19.7.2 /íí-go wo/ 'know that'

We have already seen, in section 19.6.4, that 'know that' can take a complement clause with the $/ \mathrm{g} \varepsilon /$ complementizer. However, this appears to only be the case when the
complement clause precedes the main clause verb. It is also possible to place the complement clause after /íi-go wo/, in which case no complementizer is used. For instance:
a. Ú íí-go $=w o-w \quad$ émmé ú ánìgè $=\mathrm{mbe}=\mathrm{y}$. 2 sgPro know-Adv $=$ be- 2 sgS 1 plPro 2 sg Pro friend. $\mathrm{HL}=\mathrm{Pl}=$ Cop. 1 plS 'You know that we are your friends.'
b. Íí-go = wo-m àn-ná èné wómっ=mbe gèlí-yé-gú $\mathrm{s} \varepsilon$. know-Adv $=$ be- 1 sgS man-HumSg goat 3 sgPoss $=\mathrm{Pl}$ guard $-\mathrm{MP}-\mathrm{Ppl}$ have 'I know that the man is watching his goats.'

One possible explanation for this lack of complementizer when the phrases are reversed is that the $/ \mathrm{g} \varepsilon /$ complementizer cannot be sentence-final. All of the examples that include the $/ \mathrm{g} \varepsilon /$ complementizer in section 19.6 show the complement clause in pre-verbal position, and now here where the two clauses are reversed, the complementizer disappears.

We see an interesting phenomenon of object marking the embedded pronominal subject in sentences like (xxa). The pattern appears to be that non- 1 pl pronominal subjects may be optionally (but preferably) marked with an object marker when the complement clause follows the main verb. The $1 \mathrm{pl} /$ émmé/ may not be marked. The following six sentences lay out the pattern:
(xx)

$$
\begin{aligned}
& \text { a. Ú } \quad \text { í́-go }=\text { wo-w } \quad \text { mí }=\text { ǹ } \quad \text { ú áí= j̀. } \\
& \text { 2sgPro know-Adv }=\text { be-2 } 2 \operatorname{sgS} 1 \operatorname{sgPro}=\text { Obj } 2 \operatorname{sgPro} \text { friend. } \mathrm{H}=\text { Cop } \\
& \text { 'You know that I am your friend.' }
\end{aligned}
$$

b. Mí íí-go = wo-m $\quad$ ú( $=$ j̀ $) \quad$ mí áí $=\grave{\mathrm{n}}$.

1 sgPro know-Adv $=$ be- $1 \mathrm{sgS} 2 \operatorname{sg} \operatorname{Pro}(=\mathrm{Obj}) 1$ sgPro friend $. \mathrm{H}=\mathrm{Cop}$ 'I know that you are my friend.'
c. Mí íí-go = wo-m wó= j̀ mí áí=j̀.

1 sgPro know-Adv $=$ be- 1 sgS 3 sgPro $=O b j \quad 1$ sgPro friend $. ~ H=C o p$ 'I know that he is my friend.'
d. (See xxa)
e. Mí íí-go = wo-m é=j̀̀ mí áí $=\mathrm{mbe}=\mathrm{y}$.

1 sgPro know-Adv $=$ be- $1 \mathrm{sgS} \quad 2 \mathrm{plPro}=\mathrm{Obj} \quad 1 \mathrm{sgPro}$ friend $. \mathrm{H}=\mathrm{Pl}=\mathrm{Cop} .2 \mathrm{plS}$
'I know that you guys are my friend.'
f. Mí í1́-go = wo-m bé $=\mathfrak{\mathrm { n }} \quad \mathrm{mí} \quad$ áí $=\mathrm{mbe}=$ j̀.

1 sgPro know-Adv=be-1sgS 3 plPro $=\mathrm{Obj} \quad 1$ sgPro friend $. \mathrm{H}=\mathrm{Pl}=\mathrm{Cop}$ 'I know that they are my friends.'

It is hard to imagine why the 1 pl pronoun does not participate in the same pattern as all the others. In terms of form, /émmé/ is the only disyllabic pronoun, so it could have to do with prosodic weight, though this too begs a deeper explanation; /émmé/ can take object marking in other contexts (see, for example, (xx)), so why not in this case? This is a question that requires further research.

Double check all of this, check for optionality, check with non-copula constructions, check when pre-verbal.

### 19.7.3 /mùlú-go wo/ 'it seems that'

The argument given above that the $/ \mathrm{g} \varepsilon /$ complementizer disappears in sentence-final position is called into question by 'it seems that' constructions. Here, the main clause predicate /mùlú-go wo/ 'it seems that' is in sentence-final position, preceded by the complement clause, and still the complement clause is bare. Consider:
a. Góó gó̀̀-dìn mùlú-go = wo.
dance dance-Impf.3plS seem-Adv=be
'It seems like they're dancing.'
b. Sòś díyè-go sóò-dìn ḿmo $=\mathrm{n} \varepsilon \quad$ mùlú-go $=$ wo.
speech big-Adv speak-Impf.3plS 1 sgPoss $=$ Obl seem-Adv $=$ be
'It seems to me that they talk a lot.'

We can see in (xxb) that the perceiver is marked with an oblique postposition, just like in 'be clear that' expressions (section 19.6.5) and 'be important that' expressions (section 19.5.4).

Get examples with other persons and tenses
19.7.4 ìnè--1દ́/ 'maybe'

The word for 'maybe', ìnè-lé/, literally means 'it is not standing' (see section XXX). While this makes it technically an inflected verb, capable of forming a clause, there is some question as to whether this is the correct synchronic analysis or whether it currently just functions as an adverb. Some examples show /ìjè-lદ́/ sentence-initially, followed by a regular inflected phrase, much like the 'know that' expressions seen in section 19.7.2 above. For example:
(xx)
a. Ìyè-lé gíré=ne jáá f́yaa=wo ma.
stand-Neg front $=$ Obl meal eat. $\operatorname{Perf}=$ be or?
'Maybe he already ate.'
b. Ìyè-lé yògó Bàmàkó yáà-dè-m ma.
stand-Neg tomorrow Bamako go-Impf-1sgS or?
'Maybe I will go to Bamako tomorrow.'
c. Ìnè-lé ííyé Kàdííjá yéllè ma.
stand-Neg today Kadija come.Impf or?
'Maybe Kadija will come today.'

As these examples show, the clause following /ì $\grave{\varepsilon}-1 \bar{\varepsilon} /$ 'maybe' is always marked with the question particle $/ \mathrm{ma}$ /, which in this case expresses uncertainty.

However, it is harder to conceive of the uncertain clause as being the complement of ìj̀ $\varepsilon$ - $\varepsilon \varepsilon /$ when /ìjè-l $\varepsilon$ / is embedded within it:
( xx ) Úlùm $=\mathrm{g} \varepsilon=\mathrm{mbe}$ ìjè-lદ́ kìlèmó kíĺ́mó-gú $\mathrm{s} \varepsilon-\varepsilon^{\mathrm{n}} \quad \mathrm{ma} .{ }^{44}$
children $=\mathrm{Def}=\mathrm{Pl}$ stand-Neg play play-Ppl have-3plS or?
'Maybe the children are playing.'

Our theory of /ìǹ̀-lદ́/ as the main clause that takes an uncertain complement clause may be salvaged in ( xx ) if we consider 'children' to have moved into a topic position.

## Can /ìnè-ľ́/ go in other positions?

[^36]
### 19.7.5 /kó diye/ and /pàské/ 'because'

Tommo So has two conjunctions meaning 'because', native /kó diyz/ ('because of that (DD)'), and French loanword /pàské/ (from parce que). The two require different configurations of the two phrases involved. With /kó diye/, the cause must be listed first, followed by /kó diyz/ (where discourse definite /kó/ makes reference to the previous clause), followed by the consequence. For instance:
a. Dèmmí-yaa =ỳ, kó diye píyé-gú $\mathrm{s} \varepsilon$. fall-MP.Perf $=$ Cop, that.DD than cry-Ppl have 'He is crying because he fell down.'
b. Wó délé wó = j̀ bèndè, kó diye píyé-gú se. 3sgPro brother.H 3 sgPro $=O b j$ hit.PerfL that.DD than cry-Ppl have 'He is crying because his brother hit him.'

## More diversified examples.

The examples in (xx) contain two complete phrases strung together to show both the cause (falling down, brother hitting) and the consequence (crying).

With the French loanword /pàské/ 'because', the order must be reversed; along with the French conjunction came the French clausal order wherein the consequence is stated first followed by the reason, as in:
a. Tó-Tóyó yǎy bèé-lè-m, pàské òdú $=\mathrm{g} \varepsilon$ síyé $=l \varepsilon$.

Tongo-Tongo go.U be.able-Neg.Impf-1sgS because road=Def good=Neg.Cop 'I can't go to Tongo-Tongo because the roads are not good.'
b. Mí áí ííyé dìgè nàm góá yèlé-lè, pàské

1sgPro friend.H today evening.L sun.L dance come-Neg.Impf because gìnc̀-ý = báà bíré bírè-dè.
house-Dim = Loc work work-Impf
'My friend is not coming to the dance tonight because she has to work at home.'

In these examples, the consequence (inability to go to Tongo-Tongo, not coming to the dance) comes first, followed by the cause or the explanation (bad roads, housework). It is unclear whether a structure of this sort existed before the French language exerted its influence on the language.

Does everyone use this expression now or is it just younger people/people who speak French?

### 19.7.6 /tílày/ 'necessary that'

A final construction in which a bare complement clause is used is with /tilày/ 'certainly'. Like /àdùbú $\mathrm{X}=\mathrm{m} \rho=\mathrm{n} \varepsilon$ / discussed in section 19.7.1, this is not necessarily a biclausal construction. /tílày/ may simply be a sentence-initial adverb or other element that then imposes a meaning of certainty or necessity on the following clause. As a noun, it means 'duty' or 'obligation', and it is borrowed from XXX. Examples include:
( xx ) a. Tílày Dúmásá yáà-dè-m.
obligation Douentza go-Impf-1sgS
'It is obligatory that I go to Douentza.'
b. Tílày àná míyè-dè.
obligation rain fall-Impf
'It is certainly going to rain.'

## 19.8 /-ee/ complements

Many of the verbs we have already seen in the sections above can take complement clauses wherein the verb takes the final vowel /-ee/. This is highly reminiscent of verb chains (non-perfective), though in some of the constructions to be considered below, the tone on the verb suggests that another explanation may be necessary.

The expressions that can take /-ee/ complements are /m̀̀ź/ 'want', /nííí-yé/ 'be afraid of', /dàgá/ 'be good' (used in an expression meaning 'should'), and /tílày/ 'be necessary that'.

### 19.8.1 /m̀bé/ 'want'

The sections above described specific aspects and interpretations of /mbé/ 'want/like' that allowed for infinitival (section 19.2.2.), gerundive compound (section 19.3.2), or denominal (section 19.4.1) complement clauses. Nonetheless, the most common complement clause type for /m̀b $\varepsilon$ / 'want' is one in which the verb is marked with a final vowel /-ee/. This is seen on arguably the most common aspectual use of 'want', the present imperfect:
( xx$)_{\text {( }}$ a. Kìndíyé $=\mathrm{n} \varepsilon$ dànní-yéé m̀̀ $\varepsilon$ - $\mathrm{go}=\mathrm{wo}-\mathrm{m}$. shade $=$ Obl sit-MP.NF want-Adv $=$ be-1sgS
'I want to sit in the shade.'
b. Núyó ú núyéé m̀̀bé-go =wo-m. song 2 sgPro sing.NF want-Adv $=$ be- 1 sgS 'I want you to sing.'
c. Mí yèlé m̀ mbé $-g o=w 0-$ èn $^{n}$.

1 sgPro come.NF want-Adv = be-3plS
'They want me to come.'

As the examples above indicate, the subjects in the main clause and complement clause can either be co-referent (xxa) or different (xxb-c). If the subject is different, an independent pronoun must immediately precede the verb marked with /-ee/ in the complement clause, since subject marking is not possible on a non-final verb in a chain. This is exactly as we saw in section XXX.

The /-ee/ complement clause can also be used in the imperfect negative:
(xx)
a. Yè-ndéé nàmà-lé-m.
see-Fact.NF want-Neg-1sgS
'I don't want to watch.'
b. Yàéé m̀bé-lé-m.
go.NF want-Neg-1sgS
'I don't want to go.'

There is some indication, however, that the tone of the verb stem becomes $\{\mathrm{LH}\}$ with the addition of /-ee/, which does not happen in verb chains. To illustrate, compare the /-ee/marked verbs in the following two examples:

```
a. Mí èbéé m̀bé-go = wo-m.
1 sgPro buy.NF.LH want-Adv = be-1sgS
'I want to buy [it].'
```

b. Pédu $=\mathrm{g} \varepsilon$ ébee ámíru $=\mathrm{g} \varepsilon=\mathrm{j}$ óbò-dè-m.
sheep $=$ Def buy.NF chief $=\operatorname{Def}=$ Obj give-Impf-1sgS

> 'I will buy the sheep and give it to the chief.'

In the complement clause in (xxa), we see the verb stem / $\varepsilon$ bé / with a $\{\mathrm{LH}\}$ overlay. In the chain verb in (xxb), it retains its lexical tone. LOOK INTO THIS AND FIGURE OUT WHY.

In the past negative, infinitival complements and /-ee/ complements are interchangeable, as shown by the following examples:
a. Wó góó gòéé/gò̀́-dim m̀bé-lé-go $=$ be.

3sgPro dance dance.NF/dance-Inf want-Neg-Adv=be.Perf 'She didn't want to dance.'
b. Wó yè-ndéé/yè-ndé-dim nàmà-lé-go = be.

3sgPro see-Fact.NF/see-Fact-Inf want-Neg-Adv = be.Perf
'She didn't want to watch.'

As these examples show, this is true for both morphological forms of the past negative, /m̀bé-lદ́/ and /nàmà-lé/, which are themselves interchangeable.

Different subjects?

Past tense?
(xx) a. Yè-ndéé námá-go = wo-m.
see-Fact.NF want-Adv $=$ be- 1 sgS
'I wanted to look.'
What's with sáá = wo-m? And how is this past?
19.8.2 /níní-yé/ 'be afraid to’

Section 19.2.3 discussed 'be afraid to' clauses in which the complement took the form of an infinitive. In this construction, the infinitive is interchangeable with a verb marked with /-ee/:
(xx)
a. Dúú $\mathfrak{m ́ m o}=n \varepsilon$ dòéé/dòó-dim níní-yaa = wo.
side 1 sgPoss $=$ Obl arrive. $\mathrm{NF} /$ arrive-Inf be.afraid-MP.Perf $=$ be
'He is afraid to get close to me.'
b. Tòmmò Sò Tommo.L speech speak.NF/speak-Inf be.afraid-MP-Neg.Perf-1sgS 'I am not afraid to speak Tommo So.'

These /-ee/ verbs appear to take the lexical tone of the verb stem, which is expected of nonfinal verbs in a chain. Whether this makes them a different construction from the /-ee/ verbs with 'want' is not yet clear.

For /níní-yé/ 'be afraid' with a full clause complement, see section 19.9.1.

### 19.8.3 /dàgá/ 'be good’ ('should’)

Sort out examples on page $24^{\prime}$
-should (not)
-must Look into this
-necessary that (L-toned)

### 19.9 Chained complements

It is conceivable that the /-ee/ complement clauses seen above ought to be considered chained complements along with those in this section. However, the fact that the complements above are always marked with /-ee/ and never /-aa/, regardless of the aspect of the main clause, suggests that we should treat the two forms separately. All of the complement clauses that follow in this section follow the usual rules of verb chaining laid out in Chapter 17. The verbs in question are /níní-yé/ 'be afraid' (in the 'be afraid that' construction), /gè se/ 'think that' (literally 'say have'), /bàrá/ 'help', 'in order to' constructions, /jè/ 'finish', and the past tense of 'be able to' with stem /bèlé/.

### 19.9.1 /níyí-yé/ 'be afraid that'

All of the other uses of /níyí-yé/ that we have seen thus far have involved coreference between the subject of the complement clause and the subject of the main clause, leading to an interpretation of 'be afraid to do (sth)'. If a speaker wishes to say 'be afraid that', the complement clause involves the quotative verb/gè/ 'say' with a yes-no question embedded underneath it, and this /gè/ is then chained with /níyí-y $\varepsilon$ / 'be afraid'. Consider the following examples:
a. Wó= j̀ béndè-dè-m (ma) gàà níní-yaa=wo.
$3 \mathrm{sgPro}=$ Obj hit-Impf-1sgS (or?) say.Perf be.afraid-MP.Perf $=$ be 'He is afraid that I will hit him.'
b. Dámmá $=\mathrm{g} \varepsilon$ ǹdè- $\mathrm{m}=\mathrm{g} \varepsilon$ àná yèlé-lè (ma) gàà
village $=$ Def person-HumPl.L $=$ Def rain come-Neg.Impf (or?) say.Perf níyí-yaa = wo- en $^{\text {n }}$.
be.afraid-MP.Perf=be-3plS
'The villagers are afraid that the rains won't come.'

We see that the quotative complement of /g $\grave{/}$ is optionally marked with the question particle $/ \mathrm{ma} /$. This /gè/ then is put in the perfect chain form which links it to the main clause verb /níyí-yé/ ‘be afraid’.

Note that it is also possible to leave out/g $\grave{\varepsilon} /$ when the question particle is present:

Mí=ỳ béndè-dè ma níyí-yaa = wo-m.
$1 \mathrm{sgPro}=$ Obj hit-Impf or? be.afraid-MP.Perf=be-1sgS
'I am afraid that he will hit me.'

What factors contribute to whether or not/ge/ is present? Is ma always optional with / $\mathrm{g} \varepsilon /$ ? Can/wa/ ever be used?
19.9.2 /gè se/ 'think that'

Another unusual complement clause expression containing /gè/ 'say' translates to 'think that'. The complement of $/ \mathrm{g} \grave{\varepsilon} /$ is the clause that it thought of, and as a complement of $/ \mathrm{g} \grave{\varepsilon} /$, it need not take any sort of complementizer. /g $\grave{\varepsilon} /$ is then put in the perfective chain form, which is followed by the main clause verb/sz/ 'have'. It is also possible to consider this to be /g $\grave{/} /$ taking the auxiliary /se/ instead of /wo/, and 'saying' is interpreted as 'thinking'. A piece of evidence in favor of the auxiliary story is that the tonal behavior of /sz/ following /gàà/ is what we see with /be/ 'was' following /yàà/ 'saw'—it appears that the auxiliary cliticizes to this perfect form and the H tone from the verb stem is shifted onto it. Nonetheless, it is not a logical necessity that/se/ be an auxiliary to cliticize, so the question remains open as to how best ot interpret this construction.

The following examples illustrate the form in question:
a. Yéllè gàà = sé-m.
come.Impf say.Perf=have-1sgS
'I think that he's coming.'
b. Émmé ú áí=ỳ gàà $=s \varepsilon ́=b e-y$.

1plPro 2 sgPro friend. $\mathrm{H}=$ Cop say $. \operatorname{Perf}=$ have $=$ be. $\cdot \operatorname{Perf}-1 \mathrm{plS}$ 'We thought that she's your friend.'
c. Mí úwaa yèláa gàà $=s \varepsilon ́=b e-m$.

1sgPro 2 sgQuot come.Perf say.Perf=have = be.Perf-1sgS
'I thought that you had come.'

The effect of /g $\grave{/} /$ on the embedded clause is clear in (xxc), where the subject of this clause is marked with the quotative particle $/ \mathrm{wa} /$, just as it would be in a regular quotative complement; why in this case the verb is simply chained with /gè/ rather than being inflected is not clear.

Look into why this construction means 'think that'

### 19.9.3 /bàrá/ 'help'

We saw in section 19.3.6 that it is sometimes possible to use gerundive complements with /bàrá/ 'help'. WHEN? Most commonly, though, the verb of the complement simply forms a verb chain with main clause /bàrá/:
(xx)
a. Nàá $=\mathrm{g} \varepsilon$ mí=ỳ kómmáá bàráa $=\mathrm{w} 0$.
cow $=$ Def $1 \mathrm{sgPro}=$ Obj attach.Perf help.Perf $=$ be
'He helped me tie up the cow.'
b. Ámádu ú=ỳ gìné úwo údáá bàráa=wo.

Amadou $2 \mathrm{sgPro}=\mathrm{Obj}$ house 2 sgPoss build.Perf help.Perf=be
'Amadou helped you build your house.'
c. Mí báá mí=ǹ ígé dènnéé bàré-lè.

1sgPro father.H 1sgPro = Obj husband look.for.NF help-Neg.Impf 'My father will not help me find a husband.'

We see in these examples that the verb in the complement clause, which forms the non-final verb in the chain, can be either perfective (xxa-b) or imperfect (xxc), depending on the
context. Also, the beneficiary of the help is marked with an object marker and typically precedes the action with which he or she was helped (or not helped, in the case of (xxc)).

### 19.9.4 /jè/ ‘finish'

To express that one finishes an action, the action in question is chained together with the subminimal verb/jè/ 'take'. This final verb is then inflected for whatever aspect is required of the whole phrase:
a. Mí jáá fyyáá jè-m.

1sgPro meal eat.Perf take.PerfL-1sgS
'I have finished eating.'
b. Mí jáá fyyáá jàà $=$ bé-m.

1sgPro meal eat.Perf finish.Perf= be.Perf-1sgS
'I had finished eating.'
c. Mí gíré úwo $=n \varepsilon$ jáá fryéé jé-dè-m.

1 sgPro front 2 sgPoss $=$ Obl meal eat.NF take-Impf-1sgS
'I will finish eating before you.'

Once again, we see the non-final verb inflecting for aspect as the main verb requires.
For the opposite frame, 'begin', see section 19.10.3.
19.9.5 /bèlé/ 'was able to'

The stem form for the past tense of 'be able to' is /bèlé/, homophonous with 'find'. We first saw ability constructions introduced in section 19.4.2, where the complement clause has its verb marked with a final vowel /-u/. This only applies to those sentences in which the main clause verb is in the imperfect. When it is in the perfect, the verb of the complement clause is chained with 'be able to', as in:
a. Tímé $=g \varepsilon$ dàáá bèlè-lí. tree $=$ Def kill.Perf be.able-Neg.Perf
'He could not cut down the tree.'
b. Yáá ú= ̀̀ yè-ndé-nú yèláá bèlè-lí-m. yesterday $2 \mathrm{sgPro}=\mathrm{Obj}$ see-Fact-Ppl come.Perf be.able-Neg.Perf-1sgS

> 'I could not come to see you yesterday.'

Get the affirmative past as well.

### 19.10 Participial complements

The last consistent pattern of complement clauses we find in the data are those clauses in which the verb is marked with a participial suffix, /-nú/ or /-gú/. The verbs that take this form of the complement clause are /y $\overline{\text { / } / ~ ' s e e ', ~ / ~} \varepsilon$ ǵg/ 'hear', and /témbé/ 'find' (in direct perception constructions), potentially /tóló/ 'begin' (though the vowel never surfaces), and most purposive constructions with verbs of motion.

### 19.10.1 /yè/ 'see'

We saw /y ह̀/ 'see' before in section 19.6.2 taking a/ge/ complementizer on its complement clause. This was the construction used when the perception was indirect, translating to English 'see that'. When the complement clause takes a participial suffix on its verb, it indicates direct perception, that the subject of the main clause sees somebody doing the action of the complement clause. For example:

```
    a. Ú númbó-gú yàà = bé-m.
    2sgPro fall-Ppl see.Perf= be.Perf-1sgS
    'I saw you fall.'
    b. Úlùm \(=\mathrm{g} \varepsilon\) góś gòó-gú bé wó-gú yàà \(=\) bé-m.
    children \(=\) Def dance dance-Ppl 3plPro be-Ppl see.Perf=be.Perf-1sgS
    'I saw the children dancing.'
```

Since the participial form of the verb cannot take subject agreement, an independent pronoun must be placed in front of it to indicate the subject. In (xxb), where the complement clause is in the progressive, two participial forms are present. The first, on /gò̀/ 'dance', is the progressive particle, which must take an auxiliary verb, in this case /wo/ 'be'. This auxiliary is the main verb of the complement clause, and so in order for it to combine with /yè/ 'see', it too must take a participial suffix and the 3 pl subject must be marked before it with the independent pronoun /bé/.
19.10.2 / $\varepsilon$ ǵź/ 'hear'

The pattern for / $\varepsilon$ ǵz/ 'hear' is exactly identical to that of /yè/ 'see'. Examples include:

chief $=$ Def village $=\operatorname{Def}=$ Obl speech speak-Ppl hear.Perf $=$ be.Perf- 1 sgS 'I heard the chief speak in the village.'
b. XXX

However, when you hear somebody say something, /gè/ does not take the participial suffix. Instead, it is chained with / $\dot{\varepsilon} g \dot{\varepsilon} /$. Check this and maybe move it to the last section.
(xx) Bàmàkó dùlí-yéé yáà-dè-w ú gàà égaa= be-m.

Bamako go.back-MP.NF go-Impf-2sgS 2sgPro say.Perf hear.Perf = be.Perf1 sgS
'I heard you say that you are going back to Bamako.'

Whether this is the only possible way to connect /gè/ 'say' and /ég' $\varepsilon$ / 'hear' is not clear.
19.10.3 /témbé/ ‘find’

Like /y /̀ 'see' and / $\varepsilon$ g $\varepsilon$ / 'hear', /t́́mbé/ 'find' when used in the direct perception frame 'find (sb) doing (sth)' takes a participial suffix on the verb of its complement clause. For example:
(xx) Mòtó ḿmo gùynó-gú ú wó-gú ú=ỳ tèmbè-m. moto 1 sgPoss steal-Ppl 2 sgPro be-Ppl $2 \mathrm{sgPro}=\mathrm{Obj}$ find.PerfL-1sgS 'I found you in the process of stealing my motorcycle.'

For indirect perception, see section 19.11.3.

### 19.10.4 /tóló/ 'begin'

The complement clause of the verb /tólo/ 'begin' is ambiguously marked. On the surface, it generally appears as though the verb stem with lexical tone and vocalism is marked with a suffix /-n/. However, because the following word begins in an alveolar stop,
it is plausible that indeed this is the same /-nú/ participial suffix seen above with vowel syncope. Ask speakers about this. I assume this underlying form in the examples below:
a. Mí Tòmmò Sò

1sgPro Tommo.L speech study-Ppl begin.Perf= be-1sgS
'I have started studying Tommo So.'
b. Píyé-nú tòlò-lí, nìměm kay. cry-Ppl begin-Neg.Perf just.now Top
'As of right now, she has not yet begun to cry.'
c. Àná mìyé-nú tóllè.
rain fall-Ppl begin.Impf
'It will start to rain.'

In a few unusual examples, there is no participial suffix. Instead, the verb seems to take the final vowel /-ee/ with $\{\mathrm{LH}\}$ tone, like that seen with 'want'. For instance:

Wàkàdù gìnc̀-ý mí yóè $=\mathrm{g} \varepsilon=\mathrm{le} \quad$ Sámbá pìyéé time.L house-Dim 1sgPro enter.Perf.Rel=Def=Assoc Samba cry.NF tólaa $=$ be.
begin.Perf= be.Perf
'When I entered the house, Samba had already started to cry.'

Check this form, is it right? If so, move it to the /-ee/ section and cross-reference.
19.10.5 'in order to'

Perhaps the most common use of participial suffixes on the verb of a complement clause comes from purposive constructions, often though not obligatorily with verbs of motion. The complement clause can either precede or the follow the main verb. In this construction, the participial suffix is restricted to /-nú/;/-gú/ is not possible.
a. Bílu $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ wáànì-y $\varepsilon$ - $\mathrm{d} \varepsilon$, dàlá $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon$ úló-nú.
ladder $=\operatorname{Def}=$ Obl put.up-MP-Impf roof $=\operatorname{Def}=$ Obl go.up-Ppl
'He will put up the ladder to go up on the roof.'
b. Ámíru $=g \varepsilon=$ le sòó sóó-nú yèlè-y.
chief $=$ Def $=$ Assoc speak speak-Ppl come.PerfL-1plS
'We have come to speak with the chief.'
c. Dámmá wó yàà, yàa-ná $=\mathrm{g} \varepsilon$ wó òlú $=$ báà $\varepsilon$ é ${ }^{n}$ kébénú village 3 sgPro go.Perf woman $-\mathrm{HumSg}=$ Def 3 sgPro field $=$ Loc ash gatherPpl yàz. go.PerfL
'She [the co-wife] went to the village, and the woman [ $\neq$ the co-wife] went to the field to gather soda ash (from burning millet stalks).,

In example (xxa), the complement clause could precede the main clause with no change in meaning.

Other constructions that can be used to express the purposive meaning include a simple chain verb construction (in which case it is the purpose that follows what would be the main verb in ( xx ) above, since in terms of linear order the latter must be accomplished in order for the purpose to be achieved), a gerundive compound complement (rare), and the use of /g̀̀/ 'say' to express intent. This latter is discussed in section 19.1.6.

Gerundive compound page $29^{\prime}$, is this more widespread?

### 19.11 Other complement constructions

This final section discusses a handful of cases that do not fit in with the rest of the patterns shown in this chapter. These are as follows: section 19.11.1 discusses the verb /gàá/ 'be about to' (used for 'almost'), which appears to take a verb stem marked with an object marker / $\mathfrak{\mathrm { y }} /$ as its complement. Section 19.11.2 treats a past negative form of /m̀bé/ 'want' (with suppletive stem /bè/), which places the verb of its complement clause into a bare stem form. Section 19.11.3 discusses complement clauses of the verb /témbé/ 'find', which involve the logical verb of the complement clause chained with a seemingly unsuffixed imperfect stem /kánà/ preceded by an independent pronoun. Finally, section 19.11.4 lays out a clear relative clause complement that this time has an overt head /àyǎy/ 'way', used in an expression meaning 'such that'.

### 19.11.1 /gàa/ 'be about to', 'almost'

Like /tóló/ 'begin' on the surface, the complement of /gàá/ 'be about to' generally sees its verb marked with a nasal that assimilates to its velar place of articulation. It is possible that this is again underlyingly the participial suffix /-nú/, though why the vowel would syncopate in this case in which the verb does not begin with a coronoal and not in the many unambiguous cases of the participial suffix is not clear. One thing we see, though, is that often the final vowel of the stem is fronted before this nasal, which would not be expected if it were simply a velar nasal. This leads me to believe that this nasal is actually underlyingly the palatal object clitic $/=\mathrm{j} /$, which assimilates in place to the following verb. I will assume this analysis in the examples that follow:
(xx) a. Sámbá pìyéé tóĺ $\varepsilon=$ ỳ gáà-dè.

Samba cry.NF start = Obj almost-Impf
'Samba has almost started to cry.'
b. Nàá $=g \varepsilon$ nùmbé $=$ ỳ gàá-gú wó wó-gú yàà $=$ bé-m. cow $=$ Def fall $=$ Obj almost-Ppl 3 sgPro be-Ppl see.Perf=be.Perf-1sgS 'I saw the cow about to fall.'
c. Nǎm túmmé=j̀ gáà-dè.
sun rise $=$ Obj almost-Impf 'The sun is about to rise.'

Try to identify what the nasal is with speakers.
19.11.2 /bè-lí/ 'did not want'

A suppletive past negative form of the stem /m̀̀ź/ 'want' is /bè-lí/ 'did not want'. (We saw additional forms of the past negative in the preceding sections that do not take complement clauses like the ones seen here.) With this form of the past negative, the verb in the complement clause is simply an unsuffixed stem. For example:
a. Yè-ndé bè-lí-m.
see-Fact want-Neg.Perf-1sgS
'I didn't want to watch.'
b. Nǎm gòó bè-lí.
sun go.out want-Neg.Perf
'The sun didn't want to come out.'
c. Wó ádúbá bè-lí.

3sgPro think want-Neg.Perf
'She didn't want to think.'

Check the tone of these forms and also for any semantic differences between this and other negative want.

### 19.11.3 /t $\varepsilon$ mbé/ 'find that'

Unlike the other verbs of perception /y $\grave{\varepsilon} /$ 'see' and / $\varepsilon$ ǵg/ 'hear', the more abstract /témbél 'find' in indirect perception expressions ('find that') takes an unusual complement clause construction in which the logical verb is chained with /káná/ 'do’. This /káná/ appears to take the form of an affirmative imperfect stem with a $\{\mathrm{HL}\}$ overlay but no suffix. Since it cannot be inflected for subject, the subject of the complement clause is marked before it with an independent pronoun. For example:
a. Mòtó ḿmo gùynáá ú kánà tèmbè-m. moto 1 sgPoss steal.Perf 2 sg Pro do.Impf find.PerfL-1sgS 'I found that you stole my motorcycle.'
b. Úlùm $=\mathrm{g} \varepsilon$ tòndòó $=\mathrm{g} \varepsilon$ jògáá bé kánà tèmbè-m. children $=$ Def water.jar $=$ Def break.Perf 3plPro do.Impf find.PerfL-1sgS 'I found that the children broke the water jar.'

Example (xxa) is the indirect perception equivalent of example ( xx ) in section 19.10.3 above.

## Can this take $/ \mathrm{g} \varepsilon /$ complementizer? Is that really an imperfect stem?

### 19.11.4 /ànǎy/ 'way' ('such that' or 'so that' constructions)

In 'such that' expressions (French pour que), the complement clause is made up of a relative clause with a tone-lowered head /ànǎy/ 'way', generally followed by the similarity clitic /gonu/. This relative clause complement structure marks out the desired result (the phrase marked by 'such that' or 'so that' in English) and it can either precede or follow the main clause:
 money $1 \mathrm{sgPro}=$ Obj give-Impf way.L meal 1sgPro buy-Impf.Rel 'He will give me money so that I will [go] buy food.'
b. Àná- $\mathrm{m}=\mathrm{g} \varepsilon$ gìn $\varepsilon=\mathrm{g} \varepsilon$ yégèrè-dìn àyày dàlá $=\mathrm{g} \varepsilon$ wó man- $\mathrm{HumPl}=$ Def house $=$ Def prepare-Impf.3pIS way.L roof $=$ Def 3 sgPro nùmbé-lè = gonu.
fall-Neg.Impf.Rel = like
'The men are repairing the house so that the roof doesn't fall down.'
c. Àyày ú yèy-yé-lè=gonu ú=ỳ béndè-dè. way.L 2 sgPro sleep-MP-Neg.Impf.Rel=like 2 sgPro $=$ Obj hit-Impf 'He will hit you so that you don't fall asleep.'

It is unclear why the complement clause in (xxa) is not followed by the similary clitic /gonu/ seeing as all other examples contain this.

## Chapter 20 Anaphora

This chapter deals with all manner of antecedent-anaphora constructions in Tommo So. It begins in section 20.1 with a discussion of reflexives in both object and possessor roles. Section 20.2 addresses the reciprocal /túmòm/, while section 20.3 covers the different configurations in which we find the logophoric pronouns /ǹdémó/ (sg) and /ǹdémbé/ (pl).

### 20.1 Reflexives

The general form of the reflexive in Tommo So is a construction involving /kúú/ 'head' possessed by a pronoun co-referent with the antecedent. This form can also be used as a possessor, curiously with no tone lowering. Other ways of indicating reflexivity in possession are adverbial. This section also discusses the emphatic use of the reflexive ("I will do it myself"), which also falls under the 'head' form of the reflexive in Tommo So. Note that the reflexive meaning can be very close a logophoric one (co-indexing an anaphor and its antecedent), and often in texts we see the logophor used instead. I know of no textual examples of 'head' reflexives despite the fact that multiple speakers offer them as the basic reflexive form in elicitation.
20.1.1 Reflexives with /kúú/ 'head'

The basic reflexive pronouns in Tommo So are made up of /kúú/ 'head', which is followed by an alienable pronominal possessor co-referent with the antecedent. These are summarized below:

| (xx) | 1sg | kúú ḿmo | 1 pl | kúú émme |
| :---: | :---: | :---: | :---: | :---: |
|  | 2 sg | kúúúwo | 2 pl | kúú éwe |
|  | 3 sg | kúú wómo | 3 pl | kúú béme |

I will call these forms "reflexive pronouns", even though syntactically speaking they are fully nominal. These "pronouns" can be placed into whatever frame required by the sentence and can take a host of postpositions depending on the context.

### 20.1.1.1 Direct object reflexives

Direct object reflexives, in which the direct object of the verb and the subject of it are co-indexed, are formed by placing an object clitic $/=\mathrm{j} /$ after the reflexive pronoun, which is placed in the regular pre-verbal object position:

knife $=$ Assoc head 1 sgPoss $=$ Obj cut.PerfL-1sgS
'I cut myself with a knife.'
b. Íí= $\varepsilon \varepsilon$ kì-kìndè $\quad$ ỳ̀-ndú $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ kúú wóm $\nu=\mathrm{j} \quad$ yè. child $=$ Def Red-soul.L see-Fact.Nom $=$ Def $=$ Obl head 3 sgPoss $=$ Obj see.PerfL 'The child saw himself in the mirror.'

This reflexive object can even be placed in embedded clause, either co-indexed with the matrix subject or a subject internal to that clause, as in the following pair of sentences:

> a. Sáná pólu=le kúú wóm॰ $=$ ỳ $\quad$ kèdè gì.
> Sana knife $=$ Assoc head 3 sgPoss $=$ Obj cut.PerfL say.PerfL 'Sana said that he cut himself with a knife.'
> b. Sáná íí= ge pólu=le kúú wómっ $=$ ỳ $\quad$ kèdè $\quad$ gì.
> Sana child = Def knife $=$ Assoc head 3 sgPoss $=$ Obj cut.PerfL say.PerfL
> 'Sana said that the child cut himself.'

From this we may conclude that the reflexive pronoun must be bound by whatever noun in the sentence precedes it (Sana in (xxa) and the child in (xxb)), but consultants tell me that /íi $=\mathrm{g} \varepsilon$ / 'the child' is optional in ( xxb ), meaning that the reflexive pronoun may be bound by a non-overt antecedent.

To make it utterly clear that it is the speaker (the subject of the matrix clause) that is the antecedent of the reflexive, a logophoric pronoun may be used as the possessor of /kúú/ 'head' in place of the 3sg:

$$
\begin{equation*}
\text { Sáná pólu }=\text { le } \quad \text { kúú ǹdé } m=m จ=\grave{\mathrm{n}} \quad \text { kèdè-m } \tag{xx}
\end{equation*}
$$

gì.

Sana $k n i f e=$ Assoc head LogSg $=$ Poss $=$ Obj cut.PerfL-1sgS say.PerfL 'Sana said that he cut himself with a knife.'

This sentence unambiguously picks out Sana as the antecedent of the reflexive in the embedded clause.

### 20.1.1.2 Indirect object reflexives

While direct object reflexives take the object clitic / $=\grave{\mathrm{j}} /$, indirect object reflexives take postpositions.
recheck examples on page $31^{\prime}$

Often, the usual way to express a reflexive dative or benefactive is no different than any other pronoun; the first round is ambiguous:
(xx) Sòw kàndá béme $\varepsilon$ baa $=w o-\varepsilon^{n}$.
clothes.L new 3plPoss buy.Perf=be-3plS
'They bought new clothes for them(selves).'

In the example above /béme/ could either be co-indexed with the antecedent (the subject) or it could refer to some other plural entity in the discourse. To clarify that the reflexive meaning was intended to someone who misunderstands, one can continue either:
a. Béme ébaa-dìn.

3plPoss buy.Perf-Impf
'They bought [it] for themselves.'
b. Kúú bém $\varepsilon=m \imath=$ ỳ.
head 3 plPoss $=$ Poss $=\mathrm{Obj}$
'It was for themselves.'

The second clarification looks like a canonical reflexive pronoun, but the first seems no better than the original ambiguous utterance. Is the secret in the verb form?

## MORE DATA

### 20.1.1.3 Reflexive possessors

Though rare, the 'head' reflexive expression can be used as a possessor. What is interesting is that in this case, it precedes the possessed noun, as a nominal possessor is expected to do, but it does not appear to induce tone lowering. For instance:
(xx)
a. Sáná kúú wómo pédu=j̀ dònè.

Sana head 3sgPoss sheep $=$ Obj sell.PerfL
'Sana sold his own sheep.'
b. example

Check that the tone lowering facts are true, and for that matter, non-reflexive uses of possessors like this (his cow's horns, my wife's house, etc.)

Another interesting point to note in (xxa) is the use of the object marker on /pédu/ 'sheep'. Non-human objects are typically not object-marked unless they are focused, so it appears that this reflexive possessor brings along with it focus on whatever it possesses. This is not surprising if we think of the reflexive possessor as picking out something belonging to just one very specific person in contrast to all of the other 3pl groups in the world.

Usually, the meaning of 'one's own' is picked out using an adverb meaning 'precisely' instead of using the reflexive as a possessor. See section XXX below.

### 20.1.1.4 Emphatic reflexives

Emphatic reflexives are used to emphasize that the subject of the sentence has achieved something his or herself; it thus emphasizes the rule of the subject and excludes any other possible help. The 'head' reflexive is also used to this end, coordinated with the subject (either a full noun or an independent pronoun) using the associative postposition:
a. Gíyé $=\mathrm{g} \varepsilon \quad$ émmé $=l \mathrm{l} \quad$ kúú émm $\varepsilon=\mathrm{le}$ émmé gíyè-dè. harvest $=$ Def 1 plPro $=$ Assoc head 1 plPoss $=$ Assoc 1plPro harvest-Impf 'We are going to carry out the harvest ourselves.'
b. Úlùm $=\mathrm{g} \varepsilon$ tòndòó $=\mathrm{g} \varepsilon$ bé $=\mathrm{le}$ kúú bém $\varepsilon=\mathrm{le}$ úlóndú
children $=$ Def water.jar $=$ Def 3 plPro $=$ Assoc head 3plPoss $=$ Assoc put.up. $U$ bèé-nnè.
be.able-Neg.Impf.3plS
'The children are unable to lift up the water jar by themselves.'
c. Ámíru $=\mathrm{g} \varepsilon$ Dúmásá íí $\quad$ wómっ $=$ ỳ tùyò-lí. Wó $=$ le kúú

$$
\text { chief }=\text { Def Douentza child } 3 \text { sgPoss }=\text { Obj send-Neg.Perf } 3 \mathrm{sgPro}=\text { Assoc }
$$

head
wómo $=$ le wó yà̀̀.
3 sgPoss $=$ Assoc 3 sgPro go.PerfL
'The chief didn't send his son to Douentza; he went himself.'

Notice that with the emphatic reflexive, the subject can either be focused or unfocused. In (xxa) and (xxc), we can tell that the subject is focused because there is no subject marking on the verb, and instead an independent pronoun indicating the subject is placed before it. Of course, 3 sg agreement is usually not marked on the verb, but unless the subject is focused, the independent pronoun /wó/ does not appear before it. In (xxb), on the other hand, the subject is left unfocused, which we can see by the 3 pl subject marking on the verb. Like we saw with the reflexive possessor in (xx) above, reflexives have a tendency to attract focus.

Another way of showing the emphatic reflexive meaning is with the adverb /túmáá/ 'alone'. This form is discussed in section XXX below.

### 20.1.2 Adverbial reflexive strategies

Apart from the /kúú/ 'head' constructions, the reflexive meaning can at times be expressed through the use of adverbials. These are not reflexive anaphora proper because they do not fall into the binding relations required of reflexive pronouns. Check this statement. Two kinds of traditionally reflexive constructions take adverbs. The first is reflexive possession. Above we saw that /kúú $\mathrm{X}=\mathrm{mo}$ / 'self's' can stand in as a possessor. However, it is also possible to use the non-reflexive possessor and follow the possessive NP with either the adverb /téé-ni/ 'precisely' or /t̀̀én-tò ${ }^{n} /$ ' $X X X$ ', with the latter found mainly with kinship terms. These adverbs provide a kind of focused interpretation to the possessor, that the possessed noun belongs to that individual and no other. For example:
a. Sáná wó báá tòén"-t̀̀̀ ${ }^{n}$ bèndè.

Sana 3sgPro father.H exactly hit.PerfL
'Sana hit his own father.'
b. Sáná wó báá=j̀̀ téé-ni bèndè.

Sana 3sgPro father. $\mathrm{H}=\mathrm{Obj}$ precisely-Adv hit.PerfL
'Sana hit his own father.'
c. Mí=le mí ánìgè = le gìné émme téé-ni

1 sgPro $=$ Assoc 1 sgPro friend $. \mathrm{HL}=$ Assoc house 1 plPoss precisely-Adv údáá-dè-y.
build.Perf-Impf-1plS
'My friend and I built our very own house.'

Examples (xxa-b) show that on kinship terms, the adverbs /tò $\varepsilon^{n}-t \mathfrak{y} \grave{\varepsilon}^{n} /$ and /téé-ni/ can be used interchangeably. Notice, however, that the former, shown in (xxa), blocks the human object taking the object clitic /=ỳ/; /téé-ni/ 'precisely' does not have this blocking effect.

Example with another person in an embedded clause (32'), does /téé-ni/ work the same way?
Can /t̀̀ $\hat{\varepsilon}^{n-t \grave{~}}{ }^{n} /$ be used with non-kinship terms?
The other reflexive situation in which an adverb can be used in place of a true reflexive is in emphatic reflexive constructions. We saw above that a conjoined phrase coordinating the subject and a reflexive pronoun could be used to this end, but another possibility is to simply place /túmáá/ 'alone' after an independent pronoun indicating the subject:
(xx)
a. Dámmá $=\mathrm{g} \varepsilon$ ànà- $\mathrm{m}=\mathrm{g} \varepsilon \quad$ mí $=\mathrm{y}$ bárà-dìn gì- ${ }^{\text {n }}$
village $=$ Def man-HumSg.L $=$ Def 1 sgPro $=$ Obj help-Impf.3plS say.PerfL-
3plS
mè gìné ḿmo mí túmáá ùdè-m.
but house 1 sgPoss 1 sgPro alone build.PerfL-1sgS
'The village men said that they would help me, but I built my house myself.'
b. Mí báá wó túmáá wòlú wàléé bèé-lè.

1sgPro father.H 3sgPro alone farming farm.NF be.able-Neg.Impf 'My father is unable to farm his fields himself.'

Notice that this independent pronoun marked with /túmáá/ does not take the place of subject agreement on the verb; it is simply co-referent with the subject.

Other questions: is this /úwo/ construction actually reflexive or is it benefactive? Can you /úwo/ something for someone else? (33')

### 20.2 Reciprocals

Typically, reciprocals are expressed in Tommo So by the word /túmòm/, presumably derived at some level from the word for 'one' /túmó/. Its unusual HL tone pattern could derive historically from /túmó/ with the L-toned object marked / = j̀/, but this is pure speculation. /túmòm/ fills in the object slot of the verb and is fixed in form. Unlike in Jamsay (Heath 2008), there is no difference between a singular reciprocal (used for two entities) and a plural reciprocal (used for three or more entities). Another possible diachronic explanation of the form /túmə̀m/ is to treat the final $/ \mathrm{m} /$ as being the human plural suffix $/-\mathrm{m} /$, thus making all reciprocals morphologically plural. Is there a different reciprocal for inanimates?

The reciprocal can be used when there is simply a morphologically plural subject (either pronominal or non-pronominal) or when there are conjoined subjects:
(xx)
a. Émmé ódu $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ túmòm yè-y.

1 plPro road= Def=Obl Recip see.PerfL-1plS
'We saw each other on the road.'
b. Nìměm émmé túmòm nánní-yáá dímb $\grave{=}=\mathrm{g} \varepsilon \quad$ wó $=\mathrm{y}$.
just.now 1plPro Recip chase-MP.Perf follow.Perf.Rel $=$ Def $3 \mathrm{sgPro}=\mathrm{Obj}$
'Now it is such that we chase and follow each other.' [Text 3]
c. Àná-m pélu túmòm yàà $=$ bí- $\varepsilon^{\text {n }}$.
man-HumPl ten Recip see.Perf=be.Perf-3plS
'The ten men saw each other.'
d. Sáná $=$ le $\quad$ Séydú $=$ le túmòm yàà $=$ bí- $\varepsilon^{\text {n }}$.

Sana=Assoc Seydou=Assoc Recip see.Perf=be.Perf-3plS
'Sana and Seydou saw each other.'

It is also possible to mark the reciprocal with postpositions. Get more examples. "we threw stones at each other", etc. Why the /le/ in the following example?
(xx)
a. Túmòm=le áwí-yaa=bi- $\varepsilon^{\mathrm{n}}$.

Recip $=$ Assoc wrestle-MP.Perf $=$ be.Perf-3plS
'They wrestled with each other.'

### 20.3 Logophoric pronouns

Tommo So, like the other Dogon languages, makes wide use of logophoric pronouns, which are typically used in quotative constructions or other constructions where the speaker reports the words or feelings of another. The use of the logophoric within the embedded clause co-indexes that participant to the subject of the main clause verb and crucially distinguishes the subject from the speaker (who is reporting what another has said or felt); of course, if the subject of the main clause is 1 sg , then the logophor is co-indexed with the speaker.

The form of the logophoric pronouns (/ǹdèmó/ (logophoric singular) and /ǹdèmbé/ (logophoric plural)) appears to be historically related to the word for person /ǹd $/$ /, presumably with a possessive clitic $/ \mathrm{mo} /$. The vowel of $/ \mathrm{mo} /$ has been syncopated diachronically before the plural clitic $/ \mathrm{mbe} /$; it does not seem to form part of the synchronic form of the plural. Since 'person' is underlyingly /ǹď̌/, the tone on /ǹdèmó/ reflects the shifting of the H from the light syllable onto the historical clitic to alleviate tone crowding.

### 20.3.1 Logophors as subjects and objects

Let us consider some examples of the logophoric pronoun used as the subject in quotative contexts:
a. Àn-ná $=\mathrm{g} \varepsilon$ dámmá ǹdèmó gòáá yèláa $=\mathrm{wo}-\mathrm{m} \quad$ gì. man-HumSg = Def village LogSg leave.Perf come.Perf=be-1sgS say.PerfL 'The man $_{\mathrm{i}}$ said that he ${ }_{\mathrm{i}}$ came back to the village.'
b. Sáná ǹ̀dèmó Séydú=ỳ̀ dáà-dè-m gì.

Sana LogSg Seydou=Obj kill-Impf-1sgS say.PerfL
'Sana $\mathrm{a}_{\mathrm{i}}$ said that he $\mathrm{e}_{\mathrm{i}}$ would kill Seydou.'
c. É wó=ỳ ǹdèmó wó=le pádáá dámmá yàè-m wa.
eh 3 sgPro $=\mathrm{Obj} \operatorname{LogSg} 3 \mathrm{sgPro}=$ Assoc leave.Perf village go.PerfL-1sgS
Quot
'[She said] "Eh! I left him here with her and went to the village.""

In all cases, the embedded subject co-indexed with the main clause subject is shown with the logophoric pronoun /ndèmó/. We can tell from the subject marking in the embedded clause that the logophoric pronoun stands in as a replacement for the 1 sg or 1 pl in a context where that subject is linked to (always) a third person subject of a higher clause; the logophoric pronouns are never co-indexed with first or second person, where deixis makes the reference clear. Example (xxc) also shows a mix of logophoric and regular 3sg pronouns, where the logophor sets up the contrast between those co-indexed with the subject and those that refer to other people.

The logophoric pronoun can also be used as an object in an embedded clause:
(xx)
a. Sáná Séydú wa ǹdèmó=ỳ dáà-dè-N gì.

Sana Seydou Quot LogSg=Obj kill-Impf-N say.PerfL
'Sana ${ }_{i}$ said that Seydou would kill him ${ }_{\mathrm{i}}$.'
b. Nǎm wa yàa-ná sè-lé wa, wó túmáá = j̀, wó
sun Quot woman-Humsg have-Neg Quot 3sgPro only=Cop 3sgPro
ǹdèmbé = へ̀ èlè-ndì-yè-lí wa.
LogPl = Obj be.good-Fact-MP-Neg.Perf Quot
'They ${ }_{i}$ said that the sun does not have a wife, that he is the only [one], and that that does not please them ${ }_{i}$.'

It is interesting to note that here the logophoric pronoun is able to skip over the more immediate argument (Seydou) to co-index with its intended antecedent Sana. Could these sentences have other interpretations?

This co-indexation with the highest argument can be seen in other cases of doublyembedded clauses. Consider:
(xx)
a. Sáná úwa ǹdèmó nùmbáa = wo yàà = bé gì.

Sana 2 sgQuot $\operatorname{LogSg}$ fall.Perf = be see.Perf=be.Perf say.PerfL
'Sana said that you saw that he $\mathrm{he}_{\mathrm{i}}$ fell.'
b. Example

Once again, we see that the logophoric pronoun skips over the immediately higher subject /ú/ 'you' to co-index with the highest subject, Sana.

### 20.3.2 Logophors as possessors

Logophoric pronouns may also be used as possessors. As elsewhere, we see a difference between alienable and inalienable possession, with the morphological forms of the logophors in each construction cementing their grammatical category as pronouns. This is evidenced by the fact that in inalienable possessive constructions, the logophoric pronoun precedes the possessed noun and imposes either the $\{\mathrm{H}\}$ or $\{\mathrm{HL}\}$ tonal overlays associated with inalienable pronominal possession. In alienable possessive constructions, the logophoric pronoun follows the possessed noun and is marked with the possessive clitic $/ \mathrm{mo}$. This results in a vowel syncope and a tone change in the logophoric singular, illustrated below:
(xx) ǹdèmó + mっ $\rightarrow$ ǹdémmっ

The H tone on the final vowel is realized on the preceding vowel when that vowel syncopates. I argue that this form must be lexicalized as the logophoric possessive pronoun, since in no other case in the language does a tone shift leftwards when a clitic is added.
Alienable possessive pronouns have no effect on the tone of the possessed noun.
The following examples show the logophoric pronoun used as an inalienable possessor:
(xx) a. Sáná ǹdèmó báá wó yàà-nà nèy-yém jàá=wo gì.

Sana LogSg father.H 3sgPro woman-HumSg.L two-Ord take.Perf=be say.PerfL
'Sana ${ }_{i}$ said that his father took a second wife.' $^{\text {f }}$
b. Sáná ǹdèmó $=$ le ǹdèmó ánìgè $=l$ le Mótí yáà-dìn gì.

Sana LogSg = Assoc LogSg friend.HL=Assoc Mopti go-Impf.3plS say.PerfL
'Sana ${ }_{i}$ said that he ${ }_{i}$ and his ${ }_{i}$ friend were going to Mopti.'
(notebook says gi-E)

In (xxa), the possessed noun /báá/ 'father' takes a $\{\mathrm{H}\}$ overlay because it is less than three moras in length. In (xxb), /ànìgé/ 'friend' takes a \{HL\} because it is three moras. Note that as with subject and object anaphors above, it is not strictly necessary to use logophoric pronouns. Consultants also offer normal third person pronouns for the same meaning.

The examples below illustrate the logophoric pronoun's use as an alienable possessor:

Sana 2 sgQuot house LogSgPoss $=$ Obl come.Perf= be.Perf say.PerfL 'Sana ${ }_{i}$ said that you came to his ${ }_{i}$ house.'
b. Nòó í́ ǹdémmo $=\mathrm{g} \varepsilon \quad \operatorname{mìy} \grave{\varepsilon}=\mathrm{g} \varepsilon=\mathrm{l} \varepsilon \quad \mathrm{ma}$ wa. this child LogSgPoss $=$ Def voice $. \mathrm{L}=$ Def $=$ Neg.Cop or? Quot '[The woman ${ }_{i}$ asked if $]$ this is this not her ${ }_{i}$ child's voice?'
c. Kìdè kó hákílé ǹdèmbé = mo yèlè wa... thing.L that.DD mind $\operatorname{LogPl}=$ Poss come.PerfL Quot 'They ${ }_{\mathrm{i}}$ said that that thing (idea) came to their $\mathrm{r}_{\mathrm{i}}$ mind...'

What is interesting is that the example in (xxa) can see its singular logophoric pronoun replaced with a plural pronoun and it can still be co-indexed with the singular subject Sana. In this case, the plural pronoun indicates a group of people including the co-indexed subject:
 Sana 2 sgQuot house $\log \mathrm{Pl}=$ Poss = Obl come.Perf=be.Perf say.PerfL 'Sana ${ }_{i}$ said that you came to their ${ }_{\mathrm{i}}$ house.'

### 20.3.3 Logophoric pronouns in relative clauses

It is also possible for a subject to co-index with a logophoric pronoun in a relative clause, as in:
a. Nàà ǹdèmó sémaa $=\mathrm{be}=\mathrm{g} \varepsilon \quad$ pò-póó $=\mathrm{g} \varepsilon$ yém bè-lí
cow.L LogSg slaughter.Perf=be.Perf=Def Red-fat=Def like.that be.Perf-Neg gì.
say.PerfL
${ }^{\prime} \mathrm{He}_{\mathrm{i}}$ said that the cow he $\mathrm{e}_{\mathrm{i}}$ slaughtered was fat like that.'
b. Dámmá ǹdè- $\mathrm{m}=\mathrm{g} \varepsilon$ tàràà dàáa ǹdèmó pádè $=\mathrm{g} \varepsilon$
village person-HumPl=Def hyena kill.Perf LogSg leave.Perf.Rel=Def
yàà $=$ bí- $\varepsilon^{n}$ gì.
see.Perf= be.Perf-3plS say.PerfL
'He ${ }_{\mathrm{i}}$ said that the villagers found the hyena he $\mathrm{i}_{\mathrm{i}}$ had killed and left.'

Again, in both cases, the regular $3 \mathrm{sg} /$ wó/ could also be used; in this case, the reference would simply be ambiguous between a co-indexed interpretation and one in which the pronoun represents a different person.

Look into restrictions on anaphora
-causatives
-coordination
-topics
-possessor (his dog bit him)
-embedded clauses

## Chapter $21 \quad$ Grammatical pragmatics

This chapter addresses a range of topics unified under the heading "grammatical pragmatics". This includes topic marking in section 21.1, 'also' in section 21.2 presentential discourse markers in section 21.3, pragmatic adverbials in section 21.4, emphatics in section 21.5 , backchanneling in section 21.6, and finally, an overview of Tommo So greetings in section 21.7.

### 21.1 Topic

Topicalization is very frequent in Tommo So discourse. Topics are pre-clausal and can either be bare or marked with an explicit topicalizer. Bare topics are identifiable when they are not the subject, since they are typically followed by a resumptive pronoun later in the clause. Since subjects are generally at the beginning of a clause anyway, it is very difficult to distinguish a bare subject topic from a simple subject. Perhaps for this reason, topicalizers are especially frequent after subjects.

There is a range of topicalizers in Tommo So, which I have attempted to lay out below in the order of decreasing perceived frequency. Different speakers may use different topicalizers to different extents; for instance, almost all of the cases of /nez/ as topicalizer come from a single speaker, MM. I discuss each topicalization strategy in turn below.

### 21.1.1 Bare topics

Bare topics are those topics placed in pre-clausal position with no topic marker. They are separated intonationally from the rest of the clause (indicated by a comma) and are typically followed by a resumptive pronoun. Even a subject topic can be followed by a resumptive pronoun, even though subjects are not usually marked with an independent pronoun:

$$
\begin{array}{lllll}
\text { a. } & \text { Móólu }=\text { mo jàw, wó }=1 \varepsilon & \text { Kándá ògó } \quad \text { yòé-lè }=\text { g } \varepsilon & \text { jàw? }  \tag{xx}\\
& \text { Mori }=\text { Poss } & \text { fight. } L & 3 \operatorname{sgPro}=\text { also } & \text { Kanda }
\end{array}
$$

‘The Mori war, was that also a war about Kanda not becoming Hogon?' [Text 1]
b. Dèyènè Dúú bè̀̀-nè=ge, Kóíró, Ànjú ògò gìnè=nè Deyєne Duu person.from-HumSg = Def Koiro Anji Hogon.L
house. $\mathrm{L}=\mathrm{Obl}$
wó gìy"غ̀.
3sgPro beg.PerfL
'The person from Deyene Duu, Koiro, he [went and] begged at the chief of Anji's
house.'
c. Dámmá wó yàà, yàa-ná $=g \varepsilon$, wó òlú $=$ báà $\varepsilon$ én ${ }^{n}$ kébé-nú village 3 sgPro go.Perf woman-HumSg = Def 3sgPro field = Loc ash gatherPpl
yà̀.
go.PerfL
'She [the co-wife] went to the village, and the woman, she went to the fields to gather soda ash (from burning millet stalks).'

In both (xxa) and (xxb), we see bare subject topics followed by a resumptive pronoun (3sg in both cases).

Generally, bare topics are not very common. Nonetheless, one place in which we see a fair amount of such topics is in possession. A possessor is often topicalized, followed then by a resumptive possessive pronoun, as in:
a. Né $\varepsilon$ súgó $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ bèlù gírí-n $\varepsilon=\mathrm{g} \varepsilon, \quad$ íí $\quad$ wóm $\bigcirc=\mathrm{g} \varepsilon$
now $\operatorname{sug} \boldsymbol{}=\mathrm{Def}=\mathrm{Obl}$ animal.L herd. Nom-HumSg $=$ Def child 3 sgPoss $=\mathrm{Def}$
kèmmè póó $=\mathrm{n} \varepsilon$ ém jòò-ndì = yo...
gourd.L fat $=$ Obl milk fill-Fact.PerfL $=$ if
'Now, in the sugo (a kind of funeral dance), a goat herder, when his child had filled a big gourd with milk...’ [Text 4]
b. Yàa-ná ${ }_{\mathrm{i}}=\mathrm{g} \varepsilon$, $\quad$ wó $_{\mathrm{i}} \quad\left[\right.$ ígè yàà-nà $\left.{ }_{\mathrm{k}}\right]=\mathrm{g} \varepsilon$ íí $\quad$ wóm $_{\mathrm{k}}=\mathrm{g} \varepsilon$ woman-HumSg $=$ Def 3 sgPro co-wife.HL $=$ Def child 3 sgPoss $=$ Def wó $_{\mathrm{i}}=$ le pádáá dámmá yàè. $3 \mathrm{sg} \operatorname{Pro}=$ Assoc leave.Perf village go.PerfL

(xxa) shows an example with alienable possession (resulting in the resumptive pronoun being post-nominal), while (xxb) shows that the same is possible with inalienable possession (with a pre-nominal possessor). (xxb) also contains two women players and pronouns making reference to them, so I have co-indexed everything in an attempt to make it easier to interpret.

It appears that object topicalization can take place without a resumptive pronoun by simply moving the object before the subject, as in:
(xx) Bènjì-yúú... nèmè ùndò $=\mathrm{g} \varepsilon$, Bèn-sàndí bàlè.

Benjiyuu dirty.L ash.L=Def Bensandi sweep.up.PerfL
'Benjiyuu's dirty ashes (Top), Bensandi swept [them] up.' ${ }^{45}$ [Text 2]

Here, the object 'Benjiyuu's dirty ashes' is moved before the subject 'Bensandi'. No resumptive pronoun is found. Is it possible?

## Non-subject topics?

### 21.1.2 /kay/ or /gay/

The most common topic marker is a particle /kay/ (or /gay/), which follows the topic and appears to be underspecified for tone (though since the topic is always followed by a phrase boundary, the topic marker is usually realized with $L$ or falling tone). This marker also forms part of the presentential discourse marker /néと kay/, which will be discussed in section 21.2.

As with the bare topics above, subjects are the most common argument to be topicalized with /kay/. Examples include:
a. Émmé kay, dòǧ̌-m
kay... úngúló-gú Màndé gòáá y $\grave{l}$ - -y .
1sgPro Top Dogon-HumPl Top get.up-Ppl Mande leave.Perf come.PerfL- 1 plS
'As for us, as for the Dogons, getting up, [we] left Mande and came [here].'
[Text 2]
b. Wó kay, súgó $=\mathrm{g} \varepsilon$ kay, ǹd $\varepsilon=\mathrm{g} \varepsilon$ bèlú nàà-nù $=\mathfrak{\mathrm { n }}=$ yo

[^37]3sgPro Top $\operatorname{sug} \rho=$ Def Top person $=$ Def animal master-HumSg.L $=$ Cop $=$ if kém yém júgò-mò-dè.
all like.that know-Caus-Impf
'As for that, as for the suga, if a person was an animal owner, [it] would let everyone know that.'

Subject topics that are marked with a topicalizer /kay/ do not need to be followed by a resumptive pronoun. In both examples here, a pronominal topic is followed by a clarificational topic, but this double topic construction is not obligatory.

When a topic is coordinated, it cannot be immediately followed by the topic marker. Instead, a pronoun intervenes between the coordinated NP and /kay/:
(xx) Néé Kàndà-sòó-yèlìm = lè èndè-kìndíyé= lè Yà-tè $\check{c}$-gòmbóló = lè now Kanda So Yelim = Assoc $\varepsilon$ nd $\varepsilon$ Kindiye = Assoc Ya T $\varepsilon \varepsilon$
lumpy.head = Assoc
èn-tààndù-ìyǎy $=$ lè $\quad$ nò $=$ mbé kày báá $\Rightarrow$ 'túmó 'náá 'túmó. ${ }^{46}$
En Taandu girl=Assoc this $=\mathrm{Pl}$ Top father one mother one
'Now, Kanda So七 Yelim, End $\varepsilon$ Kindiye, Ya T $\varepsilon \varepsilon$ the Lumpy Head, and $\varepsilon$ n
Taandu
the Girl, as for these, [they were all of] the same father and same mother.'

Check to see if it is grammatical to omit a pronoun.
In fact, at least in the elicited speech of one younger speaker, nouns are never immediately followed by /kay/; they are always immediately followed by a pronoun:
a. Yàa-ná $=g \varepsilon$
kay Bàmàkó yáà-dè.
woman-HumSg = Def Top Bamako go-Impf
'As for the woman, she is going to Bamako.'
b. Other example that's not just the same

As we saw in (xxa-b) above, though, this is not universal. In those examples, we saw the nouns 'Dogons' and 'sugo' immediately followed by the topic marker. Nonetheless, it is most often pronouns that are followed by /kay/, and so it would be easy for younger speakers to reinterpret the pattern as requiring a pronoun before the topic marker.

[^38]Roles other than the subject may be topicalized. In the following examples, we see both objects (xxa) and locative PPs (xxb) topicalized:

```
a. Éè. [Kándá \(=\mathrm{n}^{47}\) kày] ògó dàmá. yes Kanda = Obj Top Hogon taboo 'Yes. As for Kanda, [being] Hogon is a taboo [for him].'
```

b. Màndé gòáá émmé yદ̀lć-gú, Màndé= báà kay yદ̀lć-gú]

Mande leave.Perf 1plPro come-Ppl Mande=Loc Top come-Ppl 'Coming from Mande, coming from Mande, as it is...'

It is more difficult to translate locative topics like that in (xxb), especially given the fact that the clause with the topic was more or less already stated. What these two examples show, though, is that the topic marker follows any other clitics associated with the noun, be they object markers (xxa) or postpositions (xxb). Try constructing some examples with/kay/ and seeing if they are grammatical.

Often in texts, /kay/ is placed after a pronoun that refers to the general situation rather than any particular participant in the clause that follows. For instance:
a. Wó kay sàgàrà-nè dòó-dé kém yáà-dè.

3sgPro Top youth-HumSg.L arrive-Impf.Rel all go-Impf
'In that case (when they went to war), any young man that arrived [i.e. that could] would go.' [Text 2]
b. Nòó kay kó wàgàdù kém púlò-m yè̀è-nní. this Top this.DD time.L all Fulani-HumPl come-Neg.Perf.3plS 'As for this (a war that was taking place), at that time, the Fulbe hadn't come.'
[Text 2]

In the examples above, both /wó/ and /nòs/ refer back to the situation that had just been described in the text. The topicalization of this situation sets the backdrop or context for the clause that follows.

What's up with the following??

[^39]Wó ògò gòndó kày wòlú wàláa bì- n $^{n}$ kày
3sgPro Hogon.L payment Top farming farm.Perf be.Perf-3p1S Top
égáá-dê-w, wó ògò-nó $=\mathrm{g}$ è $=\mathrm{m} ̀=\grave{\mathrm{n}}$.
hear.Perf-Hab-2plS 3sgPro Hogon-HumSg = Def= Poss = Cop
'That, as for the Hogon payments, they farmed kay, do you understand, that was for the Hogon.'

### 21.1.3 /ge/

In a couple isolated cases, $/ \mathrm{g} \varepsilon /$, which appears to be the definite article, is used as a topic marker on pronouns. For example:
a. Sáná ḿmwaa wó=j̀ bèndáa = be gì mè mí=ge Sana 1 sgQuot $3 \mathrm{sg} \operatorname{Pro}=$ Obj hit.Perf=be.Perf say.PerfL but $1 \mathrm{sgPro}=$ Def mìlè-lí-m. doubt? believe?
'Sana said that I hit him, but I don't believe him'
b. Wó ánìgè? Wó $=\mathrm{g} \varepsilon$ yàa-ná bìlè-lí.

3 sg Pro friend.HL $3 \mathrm{sg} \operatorname{Pro}=$ Def woman-HumSg become-Neg.Perf 'His friend? As for him, he didn't turn into a woman.'

It is possible that this is simply a topicalizer that has developed out of the evolution from /kay/ to [gay] to [gey] to [ge]. It is one younger speaker who occasionally offers this form, and it is not seen in texts.

## Check to see if this is more widespread.

### 21.1.4 /yàà/

Another topic marker found in texts is L-toned /yàà/. This is sometimes followed by another topic marker /nєع/, which I will discuss in the next subsection. /yàà/ seems to have slightly different semantics than $/ \mathrm{kay} /$. Whereas $/ \mathrm{kay} /$ was a general topic marker, /yàà/ seems to add an emphatic or causal element to the noun it marks. Consider the following:
a. Wó yàà néé, Tó-tóyó= mo
tìg $\varepsilon=\mathrm{g} \varepsilon$
$w o ́=$ j̀

3sgPro Top now Tongo-Tongo $=$ Poss surname. $\mathrm{L}=$ Def 3 sgPro $=$ Cop 'As for that now, that is the name of Tongo-Tongo.' [Text 3]
b. Kánú ${ }^{48}$ bàlè-ḿ $=\mathrm{g} \varepsilon \quad$ yàà né́e, Bálá-kànù $=\mathrm{g} \varepsilon=\mathrm{j}$
gold sweep.up.PerfL-1sgS $=$ Def Top now Bala Kanu $=\operatorname{Def}=\mathrm{Obj}$ táyú-ndáá... transfer-Fact.Perf
'Now, [saying] "I found gold", [she] transferred [that] to Bala Kanu (a name).' [Text 3]
c. Néé Kàndà něm wó nàláá nàláá-d $\varepsilon=g \varepsilon \quad$ yàà... wó yàà, now Kanda Nem 3sgPro birth.Perf birth.Perf-Impf.Rel=Def Top 3sgPro Top Kǒm bèlè-m bòrògó $=\mathrm{g} \varepsilon=$ báà dàlìr̀̀ gàmbéé bé Koum person.from-HumPl.L valley $=\mathrm{Def}=$ Loc good.things.L some 3 plPro bèláá- $\mathrm{d} \varepsilon=\mathrm{g} \varepsilon \quad$ wó $=\mathrm{y}$. find.Perf-Impf.Rel $=$ Def $3 \mathrm{sgPro}=\mathrm{Cop}$ 'Now, as for [when] Kanda Nem was born, [and his son] was born, as for (i.e. because of) that, the people from Saoura Koum found most of the good things in the valley.'

```
[Text 3]
```

In (xxa), the text describes how the village of Tongo-Tongo came to have its name. The people of Anji lent a ladder to the founder of the village, and called him /tóyó-ò-tóyó, bílu-ò-bílu/ (/bílu/ meaning 'ladder', /tóyó/ meaning XXX). The pronoun/wó/ in (xxa) refers back to this name-calling, and the topic marker lends the causal meaning 'because of that', or 'as for that'. In (xxb), the woman's finding gold, marked out by the topic marker, led her to give the name Bala Kanu to her child (where Kanu is derived from 'gold'). Finally, in (xxc), we once again see this sort of causal topic marking, where the people of Saoura Koum were able to succeed because of the birth marked out by the topic marker.

The topic marker /yàà/ can also be a mere emphatic or contrastive marker, shown by the following exchange:
(xx) MM : Né $\varepsilon$ súgó $=\mathrm{g} \varepsilon$ nćé... yìmú kém $=\mathrm{n} \varepsilon$ kánà-dìn má $\Rightarrow \ldots$ ma ǹ nè now $\operatorname{sug} \Omega=$ Def now death all $=\mathrm{Obl}$ do-Impf.3plS or? or person.L bèlú $\quad s \varepsilon=m v=$ j̀. animal have. $\mathrm{Rel}=\mathrm{Poss}=\mathrm{Obj}$

[^40]'Now, the sugo dance, would they do it for any death or... or was it [just] for people who had animals?'

V : Ǹdè bèlú sé yáá $\Rightarrow$.
person.L animal have.Rel Top
'[For] people with animals....'

The speaker MM asks whether a particular funeral dance was danced for everyone or just people with animals, V responds with one of the options (people with animals) marked with the topic marker /yàà/, which in this case unpredictably takes H tone. It serves to emphasize or contrast this option with the respect to the other possibility.

### 21.1.5 /neq/

The last topic marker is $/ \mathrm{n} \varepsilon \varepsilon /$, which is typically used when a speaker is bringing up a new topic or steering the conversation in a new direction. With a core meaning of something like 'now', its use as a topic marker could be translated as 'turning to X '. More commonly, it is found in the presentential expression /néと kay/, 'now', where it takes H tone. In its use as a topic marker, it is typically underspecified for tone.

We find this topic marker on a much wider range of arguments, and even on some clauses. For instance, we see it marking the end of conditional clauses, as in:
a. ògó né, ǹdé sàdè = yó né, yàygéni áwà-dìn?

Hogon now person miss.PerfL = if now how catch-Impf.3plS
'[In the] Hogon-dom, now, if a person missed [a payment], how would they
catch

$$
[\text { him }] ? ’ \quad[\text { Text 2] }
$$

b. Kòmbó yáà-dìn = yo neє, ògò-nó ǹdè wó ḿbé=ỳ war go-Impf.3sgS = if now, Hogon-HumSg person.L 3sgPro like.Rel = Obj túyò-dè ma ǹdě-m=ge kém yáà-d $\varepsilon$.
send-Impf or? person-HumPl = Def all go-Impf
'Now, if they [would] go to war, would the Hogon send [only] the people he liked or would everyone go?'

In (xxa), we see /neq/ twice, once after an implied PP ('in the chiefdom', but with no postposition) and once after a conditional phrase. The sentence might be more explicitly
translated as, 'speaking now of the chiefdom, and considering the event that someone missed a payment, how would they catch him?' Both the chiefdom and the conditional clause are new topics here. In (xxb), only the conditional clause is marked with the topic marker, showing that the new information to be considered is the event of going to war.

PPs and objects can also be marked with /n $\varepsilon \varepsilon /$, as in:
 funeral inside. $\mathrm{L}=\mathrm{Obl}$ now $u$ thing what $=\mathrm{Pl}$ what $=\mathrm{Pl}$ be.right.PerfImpf
'Speaking now of funerals, what sorts of things were normally done?'[Text 4]
b. Néq́ súgó $=\mathrm{g} \varepsilon$ n $\varepsilon \varepsilon \ldots$ yìmú kém $=\mathrm{n} \varepsilon$ kánà-dìn $\quad$ má $\Rightarrow \ldots$ ma ǹdè now $\operatorname{sug} g=$ Def now death all $=$ Obl do.Hab-Hab.3plS or? or person.L bèlú $\quad \mathrm{s} \varepsilon \boldsymbol{\varepsilon}^{=} \mathrm{m} \supset=\mathrm{j}$.
animal have. $\mathrm{Rel}=\mathrm{Poss}=\mathrm{Obj}$
'Now, turning to the sugo dance, would they do it for any death or... or was it [just]
for people who had animals?'

The topic in (xxa), /gěm kòl̀̀ = nz/ 'in funerals', is a postpositional adjunct to the following phrase. In (xxb), /súgó/ is the object of the verb /gòó/ 'dance'.

This is not to say that subjects cannot be topicalized with $/ \mathrm{n} \varepsilon \varepsilon /$. We find such examples as well:

Ya T $\varepsilon \varepsilon=$ Def now 3sgPro now child find.Perf= be.Perf or? find-Neg.Perf 'Now, as for Ya Tعє... as for her... did she have a child or did she not?' [Text 3]
b. Sò̀̀ Dámmá émmé $g \varepsilon ́-\mathrm{d} \varepsilon \varepsilon^{=} \mathrm{g} \varepsilon \quad \mathrm{n} \varepsilon \varepsilon$, nònó gòáá

Soo Damma 1plPro say-Impf.Rel=Def now here leave.Perf
Dènyèné= báà dìmbé-gú yém yàè.
Deŋยn $\varepsilon=$ Loc follow-Ppl like.that go.Perf
'Now, turning to [the person] we call Sos Damma, [he] left here, and went like that, via Deŋnne.'

The example in (xxa) shows the double topic construction of a full noun and a corresponding pronoun seen in section 21.1.2. The subject of (xxb) is a headless relative clause, with the null head being interpreted as 'person'.

## 21.2 'Also' and 'even' maybe move to the chapter on coordination

This section describes two somewhat semantically related expressions, 'also' and 'even'. 'Also' is indicated by a clitic / $/ \varepsilon /$, while 'even' is expressed by a pre-sentential word /hálè/.

### 21.2.1 /le/ 'also'

Like most clitics, $/ / \varepsilon /$ is underspecified for tone. To apply to a pronominal subject, an independent pronoun must be used to host it, as in:
a. Mí ánìgè Dúmásá yáà-d $\grave{\text { e }}$, mí $=1 \varepsilon$ yáà-d $\varepsilon-m$.

1 sgPro friend.HL Douentza go-Impf $1 \mathrm{sgPro}=$ also go-Impf-1sgS 'My friend is going to Douentza, and I'm going too.'
b. Émmé $=l \varepsilon$ íyèlè yèné gòáá yèláá Kóndágá $=n \varepsilon$ dànní-yáá...
$1 \mathrm{plPro}=$ also again there leave.Perf come.Perf Kontaka = Obl sit-MP.Perf 'We too, [we] left there again and came and settled in Kontaka...' [Text 2]
 Deyen $\varepsilon=$ Poss this $=$ also 3 sgPro $=$ also 3 sgPro $=$ also Hogon.L war $=$ Cop 'That one for Dejene as well, that too, that too was a Hogon war.'

A subject marked with /lq/ 'also' remains in situ.
This clitic can also be added to adjuncts and PPs as well; 'also' follows any other clitics on the noun:
a. Néé kay Dèyèné= $\mathrm{m} \supset=\mathrm{g} \varepsilon=1 \varepsilon \quad$ Kàndà-túgéru ògó $=\mathrm{g} \varepsilon$ wó now Top Deŋєn $\varepsilon=$ Poss $=$ Def $=$ also Kanda Tugeru Hogon $=$ Def 3sgPro yóò-dè-N gì... enter-Impf-1sgS say.PerfL
'Now, for Deyene (that war) as well, Kanda Tugeru said, "I will become chief".'
b. Kı̀ró $=l e \quad$ jáá $\quad$ sírè- d è- $\mathrm{m}, \quad$ bármá $=l e=l \varepsilon \quad$ jáá $\quad$ sírè- d è-m. calabash $=$ Assoc meal cook-Impf-1sgS pot $=$ Assoc $=$ also meal cook-Impf1sgS 'I cook with a calabash and with a pot too.'

Example (xxa) can be interpreted in two ways. First, the /mo/ could be describing the village of Deŋfne, giving the phrase the meaning 'for the village of Deŋene as well'. More likely, though, the phrase /Dè $y \varepsilon ̀ n \varepsilon ́=m っ /$ is a headless relative clause meaning 'that of Deyene', referring to a war. This leaves no overt postposition or anything to make the phrase into an adjunct, and yet it is clearly functioning as one in this example, since KàndàTúgéru is the subject of the main clause.

For ( xxb ), when both nouns being discussed ( X and also Y ) are in the same sentence, consultants will generally first offer a conjoined construction with /kém/ 'all' that allows both to be included in the same clause:

$$
\begin{equation*}
\text { Kòró=le bármá=le kém jáá } \quad \text { sírè-dè-m. } \tag{xx}
\end{equation*}
$$

calabash $=$ Assoc pot $=$ Assoc all meal cook-Impf-1sgS
'I cook with both a calabash and a pot.'

This can be seen as more of a 'both' construction, as I have translated it above. When asked how they would use the clitic $/ l \varepsilon /$, the example in (xxb) is their response.

Direct objects of the verb can also be marked with $/ \mathrm{l} /$. When the object is a full (non-human) noun, the clitic straightforwardly follows the noun. If it is pronominal, however, the 'also' clitic follows the object clitic / $\mathrm{y} /$. This is illustrated by the following:
a. $\varepsilon$ ĺć-kèlè dón-dè-m me núm=le dón-dè-m.
peanuts sell-Impf-1sgS but beans = also sell-Impf-1sgS
'I sell peanuts, but I also sell beans.'
b. Sáná $=\mathfrak{n}$ nàmá òbí-w $=y o, \quad \quad m i ́=\grave{n}=1 \varepsilon \quad$ óbó.

Sana $=\mathrm{Obj}$ meat give.PerfL-2sgS $=$ if $1 \mathrm{sgPro}=\mathrm{Obj}=$ Assoc give.Imper 'If you give Sana meat, give some to me too!'

In (xxa), 'also' directly follows the direct object /núm/ 'beans'. In (xxb), since the 1sg pronoun /mí/ is human, it must be followed by the object clitic $/ \mathbf{\mathrm { j }} /$ when functioning as a direct object, and only then can the clitic $/ l \varepsilon /$ 'also' be added.

If one wants to add the meaning of 'also' to a verb, the clitic must be added to the object of that verb; the verb itself cannot be host to the clitic. For example:
a. Yàa-ná $=\mathrm{g} \varepsilon$ jáá síré-gú $\mathrm{s} \varepsilon$, bándáy-kálá $=\mathrm{g} \varepsilon=1 \varepsilon$ sémbé-gú $\mathrm{s} \varepsilon$. woman-HumSg $=$ Def meal cook-Ppl have courtyard $=$ Def $=$ also cook-Ppl have
'The woman cooks and also sweeps the courtyard.'
b. Mí náì-nè jángú jàngá-gú $s \varepsilon$ wòl=lé wálà-dè.

1sgPro sibling-HumSg.HL studies study-Ppl have farming = also farm-Impf 'My brother studies and also farms.'

The intended meaning of both examples is to highlight that the subject performs the action of the second clause in addition to the action of the first clause; this is achieved by marking the direct object of the second clause with 'also'. Because the verbs differ between the two clauses, this construction cannot be confused as highlighting the object itself (i.e. *'she cooks meals and also the courtyard'). Note the vowel syncope in (xxb) on /wòlú/ 'farming' and the subsequent shift of the H tone onto the clitic.

### 21.2.2 /hálè/ 'even'

We have seen the word /hálè/ before in section XXX with a temporal meaning 'until' and in section XXX used in conditional constructions. It can also be placed at the beginning of sentences to give the English meaning of 'even' (French même), with nouns ('even X') or even with verbs ('even X-ed'). Regardless of whether it is a noun or a verb that is targeted, /hálè/ is always placed at the beginning of the sentence. The difference is made by the fact that nouns targeted by /hálè/ will also carry the 'also' clitic, while in a phrase where /hálè/ targets the verb, the object noun is not marked with /l $\varepsilon$. Consider first noun constructions ('even X'):
a. Hálè úlùm gàà-lè-ý $=\mathrm{g} \varepsilon=\mathrm{mbe}=1 \varepsilon$ òlú yáà-dìn. even children big-Neg-Dim $=\operatorname{Def}=\mathrm{Pl}=$ also field go-Impf.3plS
'Even the little children go to the fields.'
b. Hálè àná- $\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{mbe}=1 \varepsilon \quad$ tàráá níyì-yè-dìn.
even man- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Pl}=$ also hyena be.afraid-MP-Impf.3plS
'Even the men are afraid of hyenas.'

In both examples here, the subject noun is marked with the clitic $/ l \varepsilon /$ 'also'. This indicates that the meaning of /hálè/ applies to them alone.

Contrast this with the following, where /hálè/ targets the verb or the whole VP:

# a. Hálè ǹd $\check{-1}-\mathrm{m}=\mathrm{g} \varepsilon=\mathrm{mbe}=\mathrm{j} \quad$ pòò-ndò-lí. <br> even person-HumPl $=\mathrm{Def}=\mathrm{Pl}=$ Obj greet-Fact-Neg.Perf <br> 'She didn't even greet the people.' 

b. Hálè díí nǒy bèé-lè.
even water drink.U be.able-Neg.Impf
'He can't even drink water.'

In these examples, the 'also' clitic does not appear. Check and make sure that this isn't a product of these sentences being negative.

### 21.3 Pre-sentential discourse markers

This section deals with a variety of pre-sentential elements used in discourse. These are expressions like 'so', 'well', 'alas', that introduce the following sentence and flavor it slightly without adding much concrete meaning. They may also stand alone. The presentential discourse markers to be discussed here are /yállà/ 'maybe, wonder' (loan from Bambara), /kàà/ or /káá/, /mè/, and /dògò/ ‘but', /sàbé/ 'because’, /néع́ (kay)/ and /nìměm/ 'now', 'now then', and a collection of French loans (bon 'well', est-ce que question marker, etc.).

### 21.3.1 /yállà/ 'wonder'

The pre-sentential element /yállà/ is placed before questions, lending an air of uncertainty or wondering to the clause that follows. It is possibly borrowed from the Bambara word meaning /yala/ meaning 'maybe', which could explain its uncertainty. Examples include:
a. Yállà íí $=\mathrm{g} \varepsilon=\mathrm{n} \varepsilon \quad$ né $\varepsilon$ yà $\mathrm{g}_{\mathrm{g}} \mathrm{n} n \mathrm{k}$ kànì.
wonder child $=\operatorname{Def}=$ Obl now how do.PerL
'[She wondered] what happened to the child?'
b. Bé sélúmaa yàa-ná $=g \varepsilon$ yállà wó $=\mathrm{j}$ sǒm

3plPro ask.Perf woman-HumSg $=$ Def wonder 3 sgPro $=$ Obj horse yèlé-d $\varepsilon=\mathrm{g} \varepsilon$ jòbó yó áá gì ma wa. come-Impf.Rel = Def run.Imper enter.Imper who say.PerfL or? Quot 'They asked and the woman asked [the child] who told him that a horse was coming, to run inside.'

In both (xxa) and (xxb), the clause following /yállà/ contains a wh-question word ('how' and 'who'), and the whole sentence has an air of wondering to it.
/yállà/ is supposed to come at the beginning of the sentence one is wondering, but it appears that sometimes too many other clauses intervene between/yállà/ and the main clause, and so it must be repeated for clarity. This is seen in the following:
a. ńjé $=\mathfrak{\jmath}$ ma, yállà nǎm $w a \Rightarrow$ ííyé nìměm wó túmáá gòìllè what $=$ Cop or? wonder sun Quot today now 3sgPro only leave-Nom.L
wó gòò- $\mathrm{d} \varepsilon ̀=n \widehat{~ n ̀ d e ́ m b e ́ ~ y ~} \mathrm{z}-\mathrm{d} \grave{\varepsilon}=n$ ń,
3sgPro go.out-Impf.Rel.L = this LogProPl see-Impf.Rel. $\mathrm{L}=$ this
'Why is that, [well], if now today the sun alone, this going out of his, what it is we
see,'

Yàà-ná wó jèè, íi wó nálèè, ${ }^{49}$ wó wó gòéé woman-HumSg 3sgPro marry.NF child 3sgPro birth.NF 3sgPro 3sgPro go.out.NF
yàà-ná wó gòéé úlùm = mbe gòéé yállà ḿmo woman-HumSg 3sgPro go.out.NF children $=$ Pl go.out.NF wonder 1sgPoss ǹdémó úndu $=\mathrm{n} \varepsilon$ nàmà toó $=\mathrm{mbe}=1 \varepsilon$ dóm bílè-dè má $\operatorname{LogSg}$ forest $=\mathrm{Obl}$ meat. L be.in. $\mathrm{Rel}=\mathrm{Pl}=\mathrm{NegCop}$ seat be.possible-Impf or? wa.
Quot
'He'll marry a woman, she'll have a child, he himself will go out (shine), the wife
will go out, the children will go out, that is to say, I ask if [you] the animals who are not in the forest can sit [in that].'

[^41]The first stretch of text introduces the first /yállà/ at what is meant to be the beginning of the sentence. Then many conditional clauses follow, and clauses indicating the consequences of earlier actions, and suddenly that original /yállà/ is far removed from the final question: can the animals find a safe place to be? To bring the sense of wondering back, /yállà/ is repeated before this final question.

### 21.3.2 /káá, mè, dògò/ 'but'

This section addresses the various conjunctions Tommo So uses to mean 'but'. There are three main forms: the first, /káá/ (or /kàà/) is borrowed from Fulfulde. There is only one instance of it in a text, and younger speakers never offer it without prompting; this leads me to believe that it is falling out of usage. The one example found is the following:

Káá... émmé báá $=\mathrm{g} \varepsilon$ émmé $=\grave{\mathrm{n}}$ gàá m̀̀bè. but 1 plPro father. $\mathrm{H}=$ Def 1 plPro $=$ Obj a.lot love.PerfL
'But... our father loved us very much.'

The reason I list L-toned /kàà/ as a possible form is because this is the form given to me by a younger speaker when prompted:

$$
\begin{align*}
& \text { Yèláa }=\text { be }  \tag{xx}\\
& \text { come.Perf= be.Perf tàmà-lí. } \\
& \text { 'Sut stay-Neg.Perf } \\
& \text { 'She came but she didn't stay very long.' }
\end{align*}
$$

The difference in tone may have to do with the difference in position (pre-sentential vs. between two clauses).

The native equivalent of /káá/ is the conjunction /dògò/. We saw this in section XXX as a negative polarity item meaning 'but for'. Overall, its main meaning seems to be shifting to that of the NPI, but we can still find some examples of it being used as a conjunction. For example:
a. Mómbú $=\mathrm{g} \varepsilon$ gàà bi-غ̀ ${ }^{n}$ wa dògò dàgà-lú wa. meeting $=$ Def say.Perf be.Perf-3p1S Quot but be.good.Neg.Perf-Neg Quot 'They had spoken [at] the meeting, but [they said] [what they said] was not good.'
b. Púlò- $\mathrm{m}=\mathrm{mbe}$ ò̀̀̀̀... kòmbó= j̀ koy, ògò kòmbó... púl̀̀-m yó$\grave{\varepsilon}^{n}$ Fulani- $\mathrm{HumPl}=\mathrm{Pl}$ uh $\quad$ war $=$ Cop Emph Hogon.L war Fulani-HumPl be3plS dògò àn-sáará kòmbò àn-sáárá yદ̀lè-lí. but white.person war.L white.person come-Neg.Perf 'The Fulbe, uh... it was war! There were war[s] for the chiefdom [of the] Fulbe, but the white people's war, the white people hadn't come.'

As we can see, /dògò/ is used to link two sentences together, with the conjunction placed before the second sentence. I have no examples of /dògò/ used at the beginning of a single sentence, like the use of /káá/ in ( xx ) above.

In terms of usage, /dògò/ seems more prevalent than /kàà/, but most of the instances of the word in my data see it used as a negative polarity item. It can also be combined with a discourse definite pronoun /kó/ in more of its NPI usage to create an expression meaning 'otherwise' (French sinon):
( xx ) Íćyé dìgè nàm hákìlè káná. Kó dògò ú $=1 \varepsilon$
today evening. L sun. L care do.Imper HumSg
bílદ̀-dè-w.
become-Impf-2sgS
'Watch out tonight, otherwise you will also become a woman.'

The most common conjunction meaning 'but' is a French loan /mè/ (mais). This is particularly in use among younger speakers, who seldom use either the native /dògò/ or the Fulfulde /káá/. Examples include:
( xx ) a. Àà, ǹdémbé yàmmé mómbu $=\mathrm{g} \varepsilon$ gàà bi- ${ }^{\mathrm{n}}$. wa me, jòmó wa ah LogPl other.day meeting = Def say.Perf be.Perf-3plS Quot but hare
Quot
nòngónu gì wa de.
like.that say.PerfL Quot Emph
'[They said], ah, they had met the other day, but Hare had said like that (that it wasn't good).' [Text 6]
b. Àná mìyáa $=$ be $\quad \mathrm{m} \varepsilon$, yúú ìlè-lí. rain fall.Perf=be.Perf but millet ripen-Neg.Perf
'It rained but the millet did not yield much.'

The comma after $/ \mathrm{m} \varepsilon /$ indicates that it prosodically grouped with the first sentence, and it seems not to have its own tone.

### 21.3.3 /sàbé/ 'because'

A pre-sentential word /sàbé/ is found in just a couple of cases to mean 'because'. It seems that it could be related to a word /sáábu/ meaning 'reason'. The textual examples are as follows:
a. Sàbé jàdáá ǹdèmbé yè-ndáá kòmmó=ne nàmà tóó= $=$ mbe $=$ yó because reflect.Perf LogPl see-Fact.Perf cave $=$ Obl meat.L be.in. $\mathrm{Rel}=\mathrm{Pl}=$ if
dògò úndu $=n \varepsilon$ nàmà tóó $=m b e=$ ỳ̀ bilé-lè wa.
but forest $=$ Obl meat.L be.in. $\mathrm{Rel}=\mathrm{Pl}=$ Obj be.possible-Neg.Impf Quot
'[They said] because we thought it over, we saw that if not for the animals who are
in caves, the animals in the forest will not be able to stand it.'
b. Sàbé nǎm wó túmáá gòéé dànnìlè̀ wó dànnà-dè=nó, because sun 3sgPro alone go.out.NF burn-Nom.L 3sgPro burn-
Impf.Rel.L = this
yàa-ná wó jì yàa-ná wó dánnè, í woman-HumSg 3sgPro marry.PerfL woman-HumSg 3sgPro burn.PerfL child wó góè, íi wó góè, î́ wó dánnè, wó 3sgPro go.out.PerfL child 3sgPro go.out.PerfL child 3sgPro burn.PerfL 3sgPro wó dánnè, ǹdèmbé kém yíméé dúmò-dìn wa. 3sgPro burn.Perf.L LogPl all die.NF finish-Impf.3p1S Quot
'Because they said that he alone comes out, this burning of his, [when] he has married a woman, the woman burned, [his] child came out, [his] child came out, [his] child burned, he himself burned, [they said] all of us would end up dying.'

These are the only two examples in the data of this pre-sentential element, and both are at the beginning of the sentence; that is, these words are different than the 'because' constructions in the last chapter which linked cause and effect clauses.

## More examples?

### 21.3.4 /néé (kay)/ and /nìměm/ 'now'

The two expressions /néと́ (kay)/ and /nìměm/, both meaning roughly 'now', are extremely common pre-sententially in texts. Neither expression seems to contribute a particularly literal temporal meaning; of the two, /nìměm/ has more of a temporal flavor, but both can be used with little semantic import to the following sentence. They are simply a stylistic feature of texts, used to introduce information, much like English 'now', as in "Now, as I was saying..."

Consider first /nćq́/, which can be used with or without the topicalizer /kay/. The following are three consecutive sentences in a text, each containing this 'now' expression:

$$
\begin{align*}
& \text { Éèyó wó kày, wó jénnè }=\text { ge } \quad \text { néé kay úlùm }  \tag{xx}\\
& \text { yes } 3 \mathrm{sgPro} \text { Top } 3 \text { sgPro pick.up.Perf.Rel }=\text { Def } \\
& \text { now Top children } \\
& \text { wóm }=\text { mbe }=\text { ỳ } \quad \text { óbù }=l \varepsilon \quad \text { ma. } \\
& 3 \mathrm{sgObl}=\mathrm{Poss}=\mathrm{Pl}=\mathrm{Obj} \text { give.Perf }=\mathrm{NegCop} \mathrm{Q}
\end{align*}
$$

Néé kay Sèmmèlè tàná yé= tòò émmé yé = tòò-y. now Top Semmele Taya Exist = be.in 1plPro Exist = be.in-1plS 'Now, there is Semmele Tana and us.'

Néź sàw... Sò̀̀ Dámmá ${ }^{50}$ tòò-lé koy.
now Saw Soo Damma be.in-Neg Emph
'Now, Saw... So七 Damma is not a part of that!'

This part of the text is describing an ancestral mother to many of the surrounding villages, who apparently had found gold and named one of her children after this event. As the speaker says, she did not give what she found (the gold) to her children, among whom are the villages of Semmele Taya and us, Tongo-Tongo. If 'now' literally specified the current time, these three sentences would be terribly redundant. Instead, /née (kay)/ seems to simply be a device speakers use to introduce sentences.

Younger speakers tend to pronounce the expression as /nćé gay/. For example:
(xx) Néé gay íí=g $\varepsilon$ jòbáá yòè = yó nǎm kúndò-dè gàa. now Top child $=$ Def run enter.PerfL $=$ if fire put-Impf say.Perf

[^42]'Now, when the child runs into [there], she said she would light the fire.'

This could be because they are treating the expression as a single word, in which case a word-medial voiceless stop would be banned.
/nìměm/ is similar, though it may have a slightly more temporal interpretation; after all, the same expression can be used as a literal expression of time, with /neq/ cannot be, as in:
a. Nìměm yèlé-gú $\mathrm{s} \varepsilon-\mathrm{m}$.
just.now come-Ppl have-1sgS
'I'm just arriving now.'
b. *Néと́ yèlé-gú se-m.

As a pre-sentential element, this temporal aspect is not so obvious, but it may potentially distinguish /nìměm/ from /néé (kay)/:
a. Nìměm...òò... àn-sáárá yèláá ògò-m pádá-mú
now uh white.person come.Perf Hogon-HumPl.L leave-Caus.Nom
bày $=$ le.
day.L $=$ Assoc
'Now...uh... the white people came, at the time [they] made [us] abandon the Hogons. ${ }^{51}$ [Text 2]
b. Jáàtì... donc nìměm kay néé Mùgàà-tà yá $=\mathrm{le} \Rightarrow$ Tó-tóyó $=\mathrm{le} \Rightarrow$ exactly thus.Fr now Top now Muga Taya = Assoc Tongo-Tongo = Assoc kém Ámbá-kànù gìn $\grave{=}=\mathrm{n} \varepsilon \quad$ gòáá- $\mathrm{d} \varepsilon=$ ỳ. all Amba Kanu house.L=Obl leave.Perf-Impf=Cop 'Exactly... so... as for now, now Muga Taya and Tongo Tongo, both came from the house of Amba Kanu.' [Text 3]

In (xxa), the sentence is referring to a time already, and so the expression /nìměm/ may be referring to that time. In (xxb), we see all three of the 'now' elements in an unusual order

[^43](/nìměm kay néé/), where /kay/ seems to be topicalizing 'now', and which is then followed by another 'now' expression /n $\varepsilon$ ع́/. Nonetheless, the speaker is referring to two modern villages, Muga Taŋa and Tongo-Tongo, so it is possible again that /nìměm/ is contributing a bit of a temporal meaning.

We also see the two 'now' expressions in the other order, here without the topic marker /kay/:

$$
\begin{array}{llll}
\text { Néé nìměm kó yàà nàlí-yáá } & \text { Kèndónnó }=\text { báà yáí-né yáá } \\
\text { now now } & \text { that.DD Top birth-MP.Perf } & \text { Kendonno }=\text { Loc } & \text { go.Nom-HumSg } \tag{xx}
\end{array}
$$ go.Perf

nว̀nó wádí-né wàdáà.
here stay.Nom-HumSg stay.Perf
'Now then, with that, [a lot of kids] were born, and those that went to Kendonno went, and those that stayed here stayed.'

It is not clear in this case how much temporal meaning was intended by using /nìměm/.
Overall, careful discourse analysis will be required to work out the contexts in which speakers use these expressions and what factors influence their choice of one over the other.

### 21.3.5 French loans bon, est-ce que

Other pre-sentential words are borrowed from French. The first of these is bon, meaning 'well':
$\mathrm{wo}_{\mathrm{i}}=\mathrm{le}$ pádáá dámmá yà $\mathrm{e}_{\text {. }}$
$3 \mathrm{sgPro}=$ Assoc leave.Perf village go.PerfL
'Well, the woman ${ }_{i}$, her $\mathrm{r}_{\mathrm{i}}$ co-wife $\mathrm{e}_{\mathrm{j}}$ left her $\mathrm{r}_{\mathrm{j}}$ child with her ${ }_{i}$ and went to the village.'
b. Bon, òlù nàmá kém bé móòmbì-yì $=$ gè bé
well field.L meat all 3plPro assemble-MP.Perf.Rel=Def 3plPro
dánnì-yì $=\mathrm{g}$ è, kìd $\varepsilon$ kém yàáa $-\mathrm{m}=\mathrm{le}=\mathrm{wo}-\grave{\varepsilon}^{\mathrm{n}}, \quad$ kìd $\varepsilon$ kém
sit-MP.Perf.Rel $=$ Def thing all woman- $\mathrm{HumPl}=$ Assoc $=$ be-3plS thing all líí- ${ }^{52}=l e=$ wò - en $^{\text {n }}$.

[^44]children- $\mathrm{HumPl}=\mathrm{Assoc}=$ be-3plS
'Well, all of the wild animals got together and sat down, they were all with wives, they were all with children.'

Both of these examples come from the beginning of folk tales told by a single speaker. Though there are a couple examples of bon within the text of these stories as well, it appears to be more common as at the beginning of such narratives.

Another pre-sentential French loan that we see used by speakers who are bilingual in French is the sentence-initial question marker est-ce que, used for yes-no questions. For instance:

> a. ògó dìn $\grave{=}=\mathrm{g} \varepsilon=1 \mathrm{l} \quad$ y $\grave{\varepsilon} . .$. est-ce que ǹd $\varepsilon$-m sègú ségé-gú
> Hogon era.L = Def = Assoc umm Q.Fr person-HumPl taxes pay-Ppl
> bi- $\varepsilon^{n}$ ?
> be.Perf-3plS
> 'In the time of the Hogons, umm... did people pay taxes?'
b. Est-ce que émm $=$ báà kó yóò?
Q.Fr $\quad 1$ plPoss $=$ Loc that.DD be
'Did that exist where we are?'

It seems that for speakers used to speaking French, the use of a pre-sentential question marker becomes the natural way to pose a yes-no question, and since Tommo So does not supply such a marker natively, they simply borrow from the French.

### 21.4 Pragmatic adverbials

Do I need this section?
-frankly
-in the first place
-on the other hand
-in addition

### 21.5 Emphatics

Tommo So has two clause-final emphatic particles, native /koy/ and areal (cf. Bambara) /de/. In addition, the exclamations /jáàtì/ 'exactly' and /wàlláy/ 'by God' can give an emphatic reading.

### 21.5.1 /koy/

The native Tommo So emphatic particle is /koy/. It comes in clause-final position and serves to emphasize the preceding clause, like adding an exclamation mark in English. For instance:
a. Bé=le émmé=le [báá túmó náá túmó]=ỳ koy. ${ }^{53}$ $3 \mathrm{plPro}=$ Assoc $1 \mathrm{plPro}=$ Assoc father one mother one $=$ Cop Emph 'Them and us, [we] are [of the] same father, same mother!' [Text 2]
b. Bòy gàm-gàm dìyè nò=lé yélè-dìn koy. tomtom.L drum.type.L big.L this = Assoc come-Impf.3plS Emph 'They would come with this big drum!' [Text 2]
c. Néq́ sàw... Sòò Dámmá tòò-lé koy. now Saw So Damma be.in-Neg Emph 'Now, Saw... Soo Damma is not a part of that!'

Like most particles, /koy/ is underspecified for tone, but is typically realized as L or falling, since it comes in phrase-final position.

The textual examples of /koy/ come exclusively from the oldest speaker, over 80 years old; younger speakers use the emphatic particle /de/ common to other languages in the area.

### 21.5.2 /de/

The distribution and function of /de/ is identical to /koy/. As suggested above, there seems to be a shift in younger speakers (middle-aged and younger) to using /de/ in place of /koy/. The first example below comes from the oldest speaker, so this particle is not

[^45]confined to younger generations; instead, it is the case that/koy/ is by and large confined to the oldest generations. Ask younger speakers if they ever use /koy/.
a. Sòò dámmá $=$ le émmé $=l e \quad$ bàà íí $=\mathrm{\jmath} \quad \mathrm{le} \Rightarrow$

Sos Damma $=$ Assoc 1plPro $=$ Assoc father.$L$ child $=$ Cop Emph
'Sos Damma and us, we are paternal relatives.'
b. Àn-sáárá yèl̀̀-lí. Púlò-m yó- $\varepsilon^{n}$ de. white.person come-Neg.Perf Fulani-HumPl be-3plS Emph 'The white people hadn't come. There were Fulbe.'

When a quotation is to take an emphatic, the emphatic particle actually appears outside of the quotative particle, even though the emphatic meaning belongs to the quotation and not the act of speaking:
a. Wówa sǒm kó yéllè $=\mathrm{g} \varepsilon$ jòbó yóó wa de. 3sgQuot horse that.DD come.Impf = Def run.Imper enter.Imper Quot Emph '[She said] a horse is coming, run inside!'
b. Tààmáá ǹdémmo $=n \varepsilon$ dàgà-lú wa de. thought LogSgPoss $=$ Obl be.good-Neg.Perf Quot Emph '[Hare said], "In my opinion, it's not good!""

### 21.5.3 /jáàtì/ 'exactly'

The expression /jáàtì/ 'exactly' is a Fulfulde loanword. In Tommo So, it can only be used as a stand-alone expression or exclamation emphatically confirming what another person has said. For example:
( xx ) Jáàtì... donc nìměm kay néé Mùgàà-tà $\mathfrak{y}$ á $=\mathrm{le} \Rightarrow$ Tó-tóyó $=\mathrm{le} \Rightarrow$ exactly thus.Fr now Top now Muga Tana = Assoc Tongo Tongo = Assoc kém Ámbá-kànù gìn $\grave{=}=\mathrm{n} \varepsilon \quad$ gòáá- $\mathrm{d} \varepsilon=\mathrm{j}$. all Amba Kanu house.L=Obl leave.Perf-Impf=Cop 'Exactly... so... as for now, now Muga Taya and Tongo Tongo, both came from the house of Amba Kanu.'

This is in opposition to Jamsay, where /jáàtì/ can be used clause-finally as an emphatic (Heath 2008:678).

### 21.5.4 /wàlláy/ 'by God!'

The exclamation /wàlláy/ 'by God!' is common to many languages in Mali, originally deriving from Arabic. In Tommo So, it is used to vouch for the truth of something someone has said ("I swear!"), or similarly emphasize the truth of an utterance. We find one use of this exclamation in a text:
(xx) ...jàdáá bé yè-ndáá, wàlláy sòó $=\mathrm{g} \varepsilon$ mùlú-gó $=$ wo. reflect.Perf 3plS see-Fact.Perf by.God speech $=$ Def similar-Adv be '...[the animals in the forest] thought it over and they saw that, by God, the speech [really] was like that (i.e. it was right).'

### 21.6 Back-channeling and uptake check

Back-channeling and uptake checks are when a speaker asks a question such as "Have you understood?" to make sure that the interlocutor is following what he or she is saying. Tommo So tends to use two verbs to this end, /yè/ 'see' and / $\varepsilon g \varepsilon$ ह́/ 'hear, understand'. In my sample of texts, these uptake checks only occur in dialogues, where a speaker is clearly explaining something to one or more listeners; they are not used in folk tales, where the narrative is in a way a performance that makes less reference to the listeners.

We see these verbs in three inflections: the defocalized perfect (which in this context retains lexical tones (/yè/ with $\{\mathrm{LH}\}$ and $/ \varepsilon \varepsilon^{g} \varepsilon / /$ with $\{H\}$, instead of all $\{\mathrm{L}\}$ ), the imperfect, and the so-called perfect imperfect. All of them are affirmative and are optionally marked with /le/, which in this case appears to be a question marker. Whether this is somehow related to the negative (which tends to take the form / $1 \mathrm{~V} /$ ) is not clear, since this particle is only used in back-channeling contexts. I gloss this particle in the text as ' Q ' for 'question' (in contrast with 'or?' for the usual question particle /ma/).

The only speaker seen using these uptake checks in running speech is an old man, but this may be a sample bias, due to the fact that all of the dialogues currently recorded feature the old man as the principal speaker. First, let us look at examples with /yè/ 'see':
(xx) a. Nè̀̀... émmé dágù bé gáà, yè-ẃ le... now 1plPro small.HL 3plPro big.HL see.PerfLH-2sgS Q
'Now, we're small, they're big, you see...' [Text 2]
b. Néé kay Móólu=mo $=\mathrm{g} \varepsilon$ tà̀i- $\varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon \quad$ yè-ẃ le. now Top Mori $=$ Poss $=$ Def shoot.PerfL-3plS $=$ Def see.PerfLH-2sgS Q 'Now then, they fought the Mori war, you see.' [Text 2]

These examples are representative of all /yغ̀/ uptake checks found in the data; all of them are in the perfective.

This is contrast to uptake checks with /ég $\varepsilon$ / 'hear, understand', which can be used in all three of the aspects listed above. For example:
a. $N i ̀=m b e ́ \quad$ dáà $=l e ̂ \ldots$ dáà $=l e ̀ ~ g e ́-d i ̀ n . ~$
ع́gé-w
le.
that $=\mathrm{Pl}$ daa le daa le say-Impf.3plS hear.PerfH-2sgS Q
'Those [people say] daa le (in response to their name)... they say daa le. Do you understand?'
[Text 2]
b. ògó pèlù kúlóy tààndú-go sígé, દ́gáá-de-w le.

Hogon ten.L six three-Adv more hear.Perf-Impf-2sgS Q
'Sixty-three Hogons, do you understand?'
c. Néé Ámbá-kànù $=\mathrm{g} \varepsilon$ wó Ámbá-kànù $=\mathrm{g} \varepsilon \quad$ égè-dè-w le.
now Amba Kanu=Def 3sgPro Amba Kanu=Def hear-Impf-2sgS Q
'Now, Amba Kanu, that was Amba Kanu, do you understand?'

In (xxa), we see $/ \dot{\varepsilon} g \dot{\varepsilon} /$ in the perfective. In (xxb), it has the perfective base form suffixed with the imperfective, and in (xxc) it is the straight imperfect. The different aspects do not seem to cause an difference in the meaning of the uptake check, and would just correspond to different options like "Have you understood?" vs. "Are you following me?" in English; both serve the same purpose. While all of the examples shown hear carry /le/, this is not strictly necessary. These were simply the most illustrative examples found.

### 21.7 Greetings

Greetings are a hugely important part of Dogon culture. Whenever two people see one another, after even just a span of a couple hours, a complex greeting ritual will ensue in which not only the health and well-being of the interlocutor is questioned but that of the
family as well. This falls in line with greeting systems in other local languages such as Fulfulde or Bambara.

The greeting sequences begin with greetings from two main categories: time of day greetings and activity greetings. These initial greetings are then followed up by a long greeting sequence that can be used more generally.

## Determine age/sex requirements for initiating greetings.

### 21.7.1 Time of day greetings

There are two main time of day greetings, one used for the morning (up until, maybe, 11 o' clock or when the sun starts to get hot) and one used for the late afternoon through the night (when the sun starts to cool off and set). Like Bambara and Fulfulde greetings, these center around verbs meaning 'pass the night' and 'pass the day', respectively.

Greetings employ these verbs in a formulaic way. The greeting initiation begins with the verb in what appears to be a hortative, though in the context, this inflection would not make any sense (i.e. saying "let's pass the night" when presumably everyone already has is not semantically well-formed). For instance:
a. àgá yáá-mı
'good morning (sg),
b. dèné-mo
'good evening (sg)'
àgá yáá-mo-ǹ
'good morning (pl)'
dènદ́-mっ-ŋ̀
'good evening (pl)'

In (xxa), we see that the morning greeting combines the verb /yáá/ 'spend the night' with the noun /àgá/ 'morning'. There is no need for such a noun in the evening greeting. The greetings differ from true hortatives in that the suffix //mo/ sounds underspecified for tone in this case, giving it a slight falling intonation; the plural (when greeting two or more people) is formed like as in a hortative, with a suffix $/$ - $\mathrm{j} /$.

These greetings are first acknowledged by the interlocutor with the exclamation /àwó̀̀/, roughly, 'yes!'. The interlocutor then continues, asking the original greeter whether he or she spent the night or the day, to which the greeter responds that he or she did. The interlocutor then asks if the greeter's family (or children or mothers or fathers, depending on the greeter) have passed the morning/night; the greeter responds that they did. This greeting sequence is shown for the morning in (xxa) and the evening in (xxb), assuming two males in (xxa) and two females of child-bearing age in (xxb):
(xx)
a. A: Àgá yáá-mo.

B: Àwó̀̀, ú 'yáá.
A: Yáá.
B: Àná úwo = mbe yáá.
A: Yáá.
b. A: Dèné-mo.

B: Àwóò, ú dènáá.
A: Dènáá.
$B$ : Úlùm $=g \varepsilon$ dènáá.
A: Dènáá.
'Good morning.'
'Indeed, did you spend the night?'
'I spent the night.'
'Did your men spend the night?'
'They spent the night.'
'Good evening.'
'Indeed, did you spend the day?'
'I spent the day.'
'Did the children spend the day?'
'They spent the day.'

Notice first in (xxa) that the question /ú 'yáá/ shows an unexpected drop in pitch between the pronoun and the verb. Also notice that in both greeting sequences, there is no subject agreement on the verbs. They are simply lexicalized as greetings in their perfect chain forms. If the interlocutor were addressing multiple people, /é/ (the 2 pl pronoun) would be used in place of /ú/.

Less commonly, around noontime, the greeting /nǎm pòò/ 'sun’s greeting' may be used. This greeting would transition immediately into non-time specific questions of wellbeing.

A word on the family members included in greetings. The standard first family member to be questioned for adult men and old women is simply 'family', which literally translates to 'your men’ (/àná úwo = mbe/). For women of child-bearing age, /úlùm = ge/ 'the children' (or just /íi=ge/ 'the child', if the interlocutor knows the woman has just one child) is used. Young girls are greeted with /nnáá = mbe/ 'the mothers' and young boys with /àbáá = mbe/ 'the fathers'. Other family members' health may be asked after later in the greeting sequence, but these are the formulaic beginnings.

After this point, the greeting sequence generally switches to more generic questions about health and wellness, rather than being specific to the time of day. I will address these greetings in section 21.7.3 below.

### 21.7.2 Activity greetings

In addition to time of day greetings, greetings may be initiated with an expression making reference to the activity of the interlocutor (the addressee). These take the form of an associative construction, "you and (activity)", with the usual form of the associative marker /le/ on each noun. Common activity greetings are listed below (using the 2 sg pronoun to illustrate, though the form would be the same substituting in the 2 pl pronoun):
(xx) a. ú=le bíré $=$ le 'you and the work'
b. ú=le òlú $=$ le 'you and the field' [úlê ǒllê]
c. ú $=$ le káádu $=$ le 'you and ??' (general greeting when the activity is not clear) [úlé káállê]
d. úle le díí=le 'you and water'
e. ú $=$ le bònnó $=$ le 'you and pounding grain'
f. ú=le jóbu=le 'you and running'

The first, (xxa), is used when someone is working, be that construction work or cooking or any sort of general labor. (xxb) is used specifically when greeting somebody in the fields. ( xxc ) is a more unusual greeting. It is very common, typically used as the default when either the greeter is unsure of what a person is doing or when one has already seen the person earlier. I am told it would be impolite to greet an elder this way. The unusual part about the greeting is the exact translation of /káádu/. I am told by one speaker that is means 'prison', but no one is precisely sure of why the work is used in this context; it seems to be a word restricted to these greetings, and it is not parsed separately. (xxd) is used when greeting someone either at the well or returning with water, while (xxe) is used to greet women pounding grain at the pounding site in the village (/bònnó/). The last, (xxf), seems as though it would be used for a person running errands, but instead it is used as a condolences greeting for someone returning from the house of a dead person or from a funeral.

In addition to this associate structure, activity greetings can also be put into the construction /(activity) 'póó/, wherein /póó/ means 'greeting'. This greeting seems to be particularly common in giving thanks as opposed to starting greeting rituals, particularly /bíré 'póó/ 'thanks for your work' and /dòlú 'póó/ 'thanks for your effort'. The response to these expressions of thanks are to repeat the expression followed by /bàà-lí/ 'it is not enough', as in /dòlú póó bàà-lí/ 'don't worry about it'. CHECK TONE.

After activity greetings, the general greeting sequence begins.

### 21.7.3 General greetings

General greeting sequences tend to address the health and well-being of the interlocutor. After the initial time greeting or activity greeting exchange, the first greeting question typically asked is what sounds like [é jánnwè], a heavily reduced version of /é jám = le = wo-y/ 'are you all in peace?' This amount of reduction is typical of a greeting, not everyday speech. The plural is typically used even if addressing a single person if the person being addressed has reached puberty. With children, the question is typically [ú jánnò], from /ú jám = le = wo-w/ 'are you in peace?'. The person responds, [jánnwè]. Next,
the family members questioned in the time of day greetings are asked about again with the peace expression. This may be followed by a general question like /é jìmé-lì-y/ 'you all are not sick?', to which a person may respond /yǒw òndí-y/ 'there is no evil (to them?)'. The following illustrates a typical greeting exchange in the morning, include the trade-off between the roles of greeter and interlocutor:
(xx) A: Àgá yáá-mo. 'Good morning!'

B: Àwóò, ú 'yáá. 'Did you pass the night?'
A: Yáá. 'I did.'
B: Àná úwo = mbe yáá. 'Did your men pass the night?'
A: Yáá.
B: É jánnwè.
A: Jánnwè.
'They did.'
'Are you all in peace?'
'We are.'
B: Àná úwo = mbe jánnwè. 'Are your men in peace?'
A: Jánnwè.
B: É jìmé-lì-y.
'They are.'
'Are you all not sick?'
A : Yǒw òndí-y. 'We are not bad.'
B: Áà.
'I see.'
A: É jánnwè.
B: Jánnwè.
'Are you all well?'

A: Úlùm $=g \varepsilon$ jánnwè.
B: Jánnwè.
A: Áà.
'We are.'
'Are the children well?'
'They are.'
'I see.'
/Áà/ marks the end of a person's greeting sequence, either indicating that the roles should be reversed or that the greeting is over. Often a greeting sequence will end in a benediction, which I will address in the next section.

### 21.7.4 Specific occasion greetings and expressions

There are a handful of greetings and expressions for specific occasions, particularly marking the arrival of somebody. First, if a person has been out doing something and returns to the village, they will be greeted with either [ámbí jéél̊̀] if one person or [ámbé j $\varepsilon$ éľ̀̀] if multiple people. These seem to derive from /ámbá ú jééľ/ and /ámbá é jéćľ́/, respectively, with vowel coalescence and fronting of $/ \mathrm{u} /$ to [i] in the case of the singular. /ámbá/ means 'God' and /jéźľ́/ 'bring', so the expression must amount to something like 'God has brought you (back)', though the tone on the verb and the lack of object marking on the pronoun make the synchronic explanation of the expression rather opaque. If a
person is highly respected, the vowel coalescence will not take place. In response, the person returning will say /àwó̀̀/ if the person who greeted is respected or older and simply /áà/ if it was a child. This greeting can be heard if people come back from fetching water or come back from a day's work in the fields.

If it is a traveler or someone who has been gone for a longer period of time, they may initially be greeted with [ámbí jéélè], but this will soon be followed by an expression /gìnc̀-ý 'dóó/, literally, 'arrive at the house!' (or something akin to 'make yourself at home!'). The Arabic equivalent of this expression used widely in Mali in multiple cultures is /bìsímúlá/ 'welcome'. (Note that this is also used to welcome people to sit down or eat or join in whatever activity may be taking place.) Older people, especially older women, may greet a traveler with /màà-ndí-yé/, a command like French courage! that lacks a good translation in English. This greeting is still widely used in more southern Tommo villages like Kansongho.

### 21.8 Benedictions

Benedictions are another important part of Malian culture, with Tommo culture no exception. We have seen above that the word for 'God' is /ámbá/, and it is this word that begins most benedictions. A few everyday benedictions involving travel do not, however, such as:
a. Jám=le dóó. peace $=$ Assoc arrive.Imper
'Arrive in peace!'
b. Jám=le yélé.
peace $=$ Assoc come.Imper
'Come back in peace!'

The first is used if the trip is terminating in another location (a one-way trip) while the second is used if the person intends to return (a round trip). Note the importance of the word /jám/ 'peace' in these expressions, another areal feature in Mali.

The structure of /ámbá/ 'God' benedictions is as follows: 'God' is placed at the beginning of the benediction, followed by an optative (essentially 3 sg imperative) phrase. This was first addressed in section XXX. The following lists common benedictions, though there are surely many others for all manner of occasions:
a. Ámbá òdù-nàà síyé ú=ỳ óbó. god road.L good $2 \mathrm{sgPr}=\mathrm{Obj}$ give.Imper 'May God give you a good road!'
b. Ámbá dènù síyé óbó.
god daytime.L good give.Imper
'May God give you a good day!'
c. Ámbá jám $=n \varepsilon$ émmé $=\mathrm{n} \mathrm{n}$ dènć-mó.
god $\quad$ peace $=$ Obl 1plPro $=$ Obj spend.day-Caus.Imper
'May God let us spend the day in peace!'
d. Ámbá wómっ $=\mathrm{n} \varepsilon$ yòróndó.
god 3 sgPoss $=\mathrm{Obl}$ make.soft.Imper
'May God be gentle with him!' (Condolence for the dead)
e. Ámbá éwo wàgá-ndí-yé-mó.
god 2 plPoss distant-Fact-MP-Caus.Imper
'May God give you all long life!'
f. Ámbá wàgé émmé=ỳ táárá.
god distance $1 \mathrm{plPro}=$ Obj show.Imper
'May God let us see the future!' (said during festivals like Ramadan)

## Chapter 22 Dialects

This chapter offers a brief morphophonological and lexical comparison between the dialect of Tédié, the main focus of this study, and the Tommo So dialects of Sarédina and Kansongho. These three dialects form a north-south line across the plateau, with Tédié at the north, Sarédina in the middle, and Kansongho at the south. Accordingly, we find a phonological continuum mirroring the geographical one. This dialect comparison is very preliminary, based off of only a couple of hours of lexical (Swadesh list) and paradigm elicitation with speakers of other dialects. It is my hope that future work can further elucidate the differences between the dialects of Tommo So.

### 22.1 Phonological differences

22.1.1 $/ \mathrm{d} \sim \mathrm{t} \sim \mathrm{s} /$

A recent sociolinguistic survey of Tommo So country by Hochstetler et al. (2011) found that Tommo So speakers generally agree that the "purest" or "most eloquent" Tommo So is spoken in Tédié, but this does not necessarily make it the most phonologically conservative. The sound correspondence $/ \mathrm{d} \sim \mathrm{t} \sim \mathrm{s} /$ is a case in point. In one word, intervocalic /d/ in the dialect of Tédié corresponds to Kansongho /t/ and Sarédina /s/. Consider

| (xx) | Gloss | Tédié | Sarédina | Kansongho | Proto-Tommo |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 'wind' | ódóró | ósóró | ótóró | *ótóró |

This triplet suggests that the original consonant was the $/ \mathrm{t} /$ retained in the dialect of Kansongho, which spirantized in the Sarédina dialect and voiced in the Tédié dialect due to a phonotactic constraint against intervocalic voiceless stops.

We see some original /s/ across all three dialects, suggesting that we should not reconstruct /s/ for 'wind'. For instance, (roughly) /ísu/ means 'fish' in all three languages, and (roughly) /èsú/ means 'pretty'. However, these are all presumably C-final stems with an
epenthetic vowel, as opposed to being underlyingly intervocalic, as in (xx). There is some suggestion that final and intervocalic /t/ underwent different processes. Compare the following to (xx) above:

| (xx) | Gloss | Tédié | Sarédina | Kansongho | Proto-Tommo |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 'road' | òdù-náá | òsù-náá | ódu | *ót? or *óz? |

The word for 'road' in the Tédié and Sarédina dialects is now made up of an opaque compound, possibly with /náá/ 'mother, true'. The same alternation between /d/ and /s/ is seen, but the dialect of Kansongho does not show the expected phoneme /t/; instead, it, like in Tédié, has voiced. One possibility here is that none of these dialects shows the protophoneme. The language Yanda-Dom has the word /ózú/ for 'road' (Heath XXX), which could have devoiced in the dialect of Sarédina and de-fricated in the Tédié and Kansongho dialects. MORE DATA

We also know that original intervocalic (or stem-final) /d/ is retained, since the word for 'year', /ànà-gúdú/, remains constant across the dialects. Thus, we have seen in this section that we need to reconstruct intervocalic ${ }^{*} \mathrm{~d},{ }^{*} \mathrm{t},{ }^{*} \mathrm{~s}$, and possibly ${ }^{\mathrm{z}}$ in Proto-Tommo.

### 22.1.2 /d~j/

We saw above that /ànà-gúdú/ 'year' is pronounced the same in all three dialects. Contrast this with the word for 'skin':

| $(\mathrm{xx})$ | Gloss | Tédié | Sarédina | Kansongho | Proto-Tommo |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 'skin' | gùdú | gùjú | gùdú | *gùjú |

The Tédié dialect lacks intervocalic (or final) / $\mathrm{j} /$ that is not part of the prenasalized stop series $/ \mathrm{nj} /$. Since we see a near identical stem in Sarédina with a $/ \mathrm{d} /$, the more likely explanation is that intervocalic $/ \mathrm{j} /$ become $/ \mathrm{d} /$ in both Tédié and Kansongho.
22.1.3 $/ \mathrm{m} \sim \mathrm{y} /$

As we saw in section XXX, the Tédié dialect of Tommo So has a restriction against word-final $/ \mathrm{y} /$. The same does not hold for all other dialects, however. In particular, the dialect spoken in Kansongho has a great many final $/ \mathfrak{y} /$ in both stems and inflection. At least some of these seem to be underlying. Compare the following two triplets:
(xx)
Gloss
Tédié
Sarédina
Kansongho Proto-Tommo

| a. 'sun' | nǎm | nǎm | nǎq | *nǎy |
| :--- | :--- | :--- | :--- | :--- |
| b. 'salt' | něm | něm | něm | *nčm |

The examples in (xxa) and (b) are a minimal pair with a contrasting vowel in the dialects of Tédié and Sarédina. In the Kansongho dialect, they have an additional difference: the final nasal. The most likely direct of change is a neutralization of the contrast in the first two dialects rather than the creation of a such a contrast in the third dialect. I thus posit the underlying forms *nǎy 'sun' and *něm 'salt' for Proto-Tommo. The same pattern as 'sun’ holds for 'fire', giving us Proto-Tommo *nǎy corresponding to Tédié and Sarédina Tommo /nǎm/.

For velar/labial alternations in the morphology, see section 22.2.

### 22.1.4 Vowel correspondences

We see two main vowel-based alternations in the dialects. The first is that the stem pattern /uyo/ is completely fronted to /iyz/ in the Kansongho dialect. We find the following correspondences:

| (xx) | Gloss | Tédié | Sarédina | Kansongho | Proto-Tommo |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | 'song' | núyó | núyó | níyé | *núyó |

This fronting is easy to imagine. Even in Tédié Tommo So, the pronunciation of 'song' is close to IP [nyo], with the $/ \mathrm{u} /$ and glide portion condensing into a front round vowel IPA [y]. Furthermore, /y/ will occasionally front surrounding vowels, so even in Tédié Tommo So /kúyá/ 'first' may be pronounced /kúyé/. These phonetic changes could easily be reinterpreted as being underlying front vowels.

The other vowel change we see is heavy reduction in the Kansongho dialect. This is seen both in final epenthetic vowels and in the final mid vowels $/ \varepsilon /$ and $/ \rho /$. For instance, where Tédié and Sarédina say /ísu/ for 'fish', it is pronounced more like [ísə] in the Kansongho dialect. Similarly, /tímé/ 'tree' in Tédié and Sarédina is pronounced more like [tímó] in Kansongho. I do not have enough data to know if schwa should be considered a phoneme proper in Kansongho, so at this point I treat it as simply a phonetic effect.

One marginal vowel change (along with a change in the place of the nasal) is seen in the adjective 'heavy':

| (xx) | Gloss Tédié | Sarédina | Kansongho |  |
| :--- | :--- | :--- | :--- | :--- |
|  | 'heavy' | túgóm | túgóm | tógón |

In the Kansongho dialect of Tommo So, the initial $/ \mathrm{u} /$ of the other two dialects corresponds to an /o/. It is not clear which direction this change occurred in. However, since most other adjectives of this morphological type (see section XXX) appear to have undergone final VC reduplication, the Kansongho pronunciation would put 'heavy' closer to this category. All that would be required would be a nasalization of $/ \mathrm{g} /$ :
( xx ) tóg $\rightarrow$ tógóg $\rightarrow$ tógóy

This is highly speculative, though, and still would not explain other adjectives in this category like /yégélu/ 'cold'.

### 22.1.5 Tone correspondences

There are sporadic cases in the Swadesh list where tone does not correspond exactly between all three dialects. For example:

| (xx) | Gloss | Tédié | Sarédina | Kansongho |
| :--- | :--- | :--- | :--- | :--- |
|  | a. | 'bone' | kìyé | Kíyé |

Given my little exposure to the other two dialects, some tonal differences may be transcription errors, so I hesitate to say anything about the reconstruction of tone for ProtoTommo.

### 22.2 Morphological differences

### 22.2.1 $/ \mathrm{m} /$ vs. $/ \mathrm{y} /$

The morphological differences found between the three dialects studied mostly boil down to one phonological correspondence: $/ \mathrm{y} / \mathrm{vs} . / \mathrm{m} /$. All $/-\mathrm{m} /$ suffixes in Tédié and Sarédina are realized as $/-\mathrm{y} /$ in Kansongho. This includes the 1 sg subject suffix and the human plural. Consider:

| $(\mathrm{xx})$ | Gloss | Tédié | Sarédina | Kansongho |
| :--- | :--- | :--- | :--- | :--- |
|  | a. 'I go' | yáà-dè-m | yáá-dè-m | yáà-dè- $ŋ$ |

b. 'men' àná-m àná-m àná-y

We had determined above that in lexical items, a contrast between original $/ \mathrm{y} / \mathrm{and} / \mathrm{m} /$ neutralized in the dialects of Tédié and Sarédina. However, reconstructing these suffixes in Tommo So as $/-\mathrm{y} /$ seems unlikely to be correct, given the fact that they are $/ \mathrm{m} /$ across the majority of other Dogon languages. Thus it seems possible that all final $/ \mathrm{y} /$ became $/ \mathrm{m} /$ in Tédié and Sarédina dialects, but morphological /-m/ has become /- $\mathrm{y} /$ in Kansongho. In fact, even the $/ \mathrm{y} /$ sometimes only surfaces as nasalization on the vowel, so the velar nasal may just be one step on the weakening process in inflection.

### 22.2.2 Negative imperative

A clearer morphological difference between the three dialects is found in the negative imperative (prohibitive). The Tédié and Sarédina dialects have the same two options available to them for the negative imperative. Either the stem takes $\{\mathrm{L}\}$ tone and is suffixed with /-gú/, or the stem retains its lexical tone and is followed with /nàà-gú/, roughly, 'don't'. The origins of this second form become clear when we consider the negative imperative form in Kansongho. There is no trace of the /-gú/ suffixed form (in the singular); instead, the prohibitive takes the form of a stem with lexical tone followed by /nà/. It seems that in the singular, this is a suffix:
(xx) a. yěl-nà (result of vowel syncope) 'don't come!'
b. yàá-nà
'don't go!'

Interestingly, the negative plural form is identical in the three dialects, with the Kansongho dialect suffixing /-gí-j̀/ onto /nà/, which sees its vowel lengthened. Whether /nà/ is still a suffix in this case or whether it forms its own word (as I have analyzed it in the Tédié dialect) is not clear.

### 22.3 Lexical differences

The vast majority of vocabulary is identical between the three dialects, making them mutually intelligible to the highest degree. Even in the Swadesh list, though, we do find a few lexical differences. I highlight these below:

| (xx) | Gloss | Tédié | Sarédina | Kansongho |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | a. | 'donkey' | jàndúlu | jàntúlu | dàn(j)úlu |
|  | b. | 'bite' | kéŕ́ | kéré | kémé |
|  | c. | 'pond' | mùgó | mùgó | wànjú |

Example (xxa) is more of a pronunciation difference than anything else. We see that the Sarédina dialect has retained $/ \mathrm{t} / \mathrm{after} / \mathrm{n} /$ (rather than spirantizing it), while Tommo So only has voiced stops after nasals. The Kansongho pronunciation seems to have swapped the position of the $/ \mathrm{d} /$ and the $/ \mathrm{j} /$ (with the $/ \mathrm{j} /$ optionally deleting after the palatal nasal). In the other cases, we see that the Tédié and Sarédina dialects have the same lexical item, while Kansongho has something different. This is not surprising, given that Tédié and Sarédina are only separated by about 15 kilometers, while it is another 30 or 40 kilometers to Kansongho.

## Chapter 23

## Texts

### 20.1 Why people named Kanda cannot be Hogon

Recorded on August 13, 2008 in Tongo-Tongo

MM: [[Móólú = mò] jàw], wó = lè [[Kándá [ògó yòel-lè]] $=$ gè ${ }^{54} \ldots$ jàw]
Mori $=$ Poss fight 3 sgPro = also Kanda Hogon enter.ImperfNeg-Neg = Def war 'The Mori war, was that also a war about Kanda not becoming Hogon?'

V: Kándá $=$ gè. ${ }^{55}$ Kàndà-tùgéérú.
Kanda $=$ Def $\quad$ Kanda-tugeeru
'Kanda. Kanda-tugeeru.'

MM: Kàndà-tùgéérú.
'Kanda-tugeeru.'

V: ò’’́, [Dèyènè-dúú $=$ mò $=$ gè $] \quad$ Kàndà-tùgéérú, nií Kàndày-tórú. ${ }^{56}$
no Denene-duu = Poss = Def Kanda-tugeeru, that Kanday-toru
'No, Kanda-tugeeru was for Denene Duu, this is Kanday-toru.'

MM: Kàndày-tórú...
'Kanday-toru...'

V/C: Kàndày-tórú...

[^46]'Kanday-toru...'

$\begin{array}{llll}\text { V: Éé, Kàndày-tórú. [Dímbú bèz̀-nغ̀] } & \text { Kándáy-tòrù. }{ }^{57} \\ & \text { yes Kanday-toru } & \text { Dimbu person.from-HumSg } & \text { Kanday-toru }\end{array}$
'Yes, Kanday-toru. Kanday-toru, the one from Dimbu.'

MM: [[Wó [ògó yóò-dè ]] =ỳ $]^{58} \quad[$ wó gáà $]$ né...
3sgPro Hogon enter.Imperf-Imperf=Obj 3sgPro say.Perf now
'He said he would become chief, now...'

V: Wó yòè.
3sgPro enter.PerfL
'He became [it].'

MM: [Yóáá wó-gú] [wó wò-gu] ${ }^{99}$. enter.Perf be-Part 3 sgPro be-Part
'He had already become [it].'

V: Wó yớáà. ${ }^{60}$
3sgPro enter.Perf
'He became [it].'
[[Kándá $[$ ògó yoó $]$ dàgé-lè] $=$ nè wóáa, ${ }^{61}$
Kanda Hogon enter.NF be.good.Neg.Imperf-Neg = Obl he.said
'After he [the people] said it would not be good if Kanda became Hogon,'

Hogon $=$ Def person.L other $=$ Obj give.Imp Quot
'they said give the chiefdom to someone else.'
[[Ǹdè yàgá] = ŋ̀ óbó] wà.

[^47]Person.L other $=$ Obj give.Imp Quot
'Give it to someone else [they said].'
[[Dàmmà-dáá]=ı̀ óbò $]$ wà.
Damma-daa = Obj give.Imp Quot
'Give it to Damma Daa.'

now person.L rascals-HumPl=Def Damma-daa now enter.Perf 'Now, the rascals entered Damma Daa'
pádáá- $d \dot{\varepsilon}=\mathrm{g}$ è $\quad$ [pádí-rá] $=\mathrm{n}^{63}$ dùmáá wò.
leave.Perf-Imperf $=$ Def leave- $\mathrm{Tr}=\mathrm{Obj}$ finish.Perf be
'[Kanday Toru] finished by saying "leave be what has been left" (i.e. let the current chief be, don't start a war).'
[Kònó 'yáá], [kòmbó=gé tàì-yz̀̀],
there.Log go.PerfNF war $=$ Def shoot.PerfL-3plS
'They went there, they made war...'
[[ògò éndé] yém yòè].
Hogon Ende like.that enter.PerfL
'and it was like that that Ende the Hogon became chief.'

MM: [Kándá kày] néé [nánà àsúú]. ${ }^{64}$
Kanda Top now never never
'As for Kanda, [he will] never again [be chief].'

V: Pés! Kándá [ògó yòé-lè].
never Kanda Hogon enter.NegHab-Neg
'Never! Kanda will never be Hogon.'

Gàndá sà-sáà-dè. ${ }^{65}$

[^48]place Red-empty.out.Hab-Hab
'They would empty the place out (i.e. destroy everything).'
$\mathrm{MM}:$ Éè. [Kándá $=$ j̀ $^{66}$ kày] ògó dàmá. ${ }^{67}$
yes Kanda=Obj Top Hogon taboo
'Yes. As for Kanda, [being] Hogon is a taboo.'

V: Dàmá, Kándá [̀̀gó yòé-lè].
taboo Kanda Hogon enter.NegHab-Neg
'A taboo, Kanda will not be chief.'

MM: [Wó yáá] ${ }^{68}$ dògǒ-m $\left[\right.$ láádàa ${ }^{69}=\mathrm{n} \varepsilon$ kì ḱ́ wó $=$ gè $]$ wó $=$ ỳ.
3sgPro go.PerfNF Dogon-HumPl certainty $=$ Obl thing be $=$ Def $3 \mathrm{sgPro}=$ Cop 'As for that, that is a thing that is certain for the Dogon.'

### 20.2 The arrival of the Dogons, clan wars, the arrival of the Fulani and French.

Recorded on August 13, 2008 in Tongo-Tongo

V: [Émmé kày], [dògǒ-m kày]... úngúló-gú [Màndé gòaá] yèlè-y.
1sgPro Top Dogon-HumPl Top get.up-Ppl Mande leave.Perf come.PerfL-1plS 'As for us, as for the Dogons, getting up, [we] left Mande and came [here].'
[Màndé gờáa] [émmé yèlć-gú], [[Màndé= báà kày] yદ̀lć-gú]
Mande leave.Perf 1plPro come-Ppl Mande=Loc Top come-Ppl
'Coming from Mande, coming from Mande, as it is...'

Ségú $=n \varepsilon ́ \quad$ yèlè-y.
Ségou = Obl come.PerfL-1plS
'We came to Ségou.'

MM: Ségú $=n$ ń $\quad$ y $̀ l \grave{c ̀-y . ~}$
Ségou $=$ Obl come.PerfL-1plS

[^49]'We came to Ségou.'

V: Ségú. Áà, Ségú = né yèláá... àà... Ségú $=$ né gó- úngúlláá...
Ségou uh, Ségou $=$ Obl come.Perf uh Ségou $=$ Obl leave? get.up.Perf
'Ségou. Uh... [we] came to Ségou... uh... [we] lef- got up from Ségou...'
kìdé... yày-gé-ní kànù...
thing how do.Nom
'Umm... what's it like...'

MM: Kánú.
Kanu
'Kanu?'

V : m̀ḿ?
'Hmm?'

MM: Kánú 'má...
Kanu or
'Was it Kanu, or...?'

V: Ûnh Ségú $=n \varepsilon$ ú úngúláà... né kày Bùgùní yèláà...
uh Ségou=Obl get.up.Perf now Top Buguni comePerf
'Uh [we] got up from Ségou... now [we] came to Buguni...'

Bùgùní gờáá Màndé $\Rightarrow$ kíd $d \varepsilon$ gàndè
Buguni leave.Perf Mande thing Mande
'[we] left Buguni, and... Mande.... umm... Mande...'
é- émmé $g \varepsilon ́-d \varepsilon ̀=g \grave{\varepsilon} \quad$ Màndè góî-m... Màndé yદ̀lè-y.
1plPro say-Hab.Rel = Def Mande.L leave.Nom-HumPl Mande come.PerfL-1plS '[what] w- we say is that [we], those who left Mande, came to Mande.'

Née kày Màndé gòáá Ségú gòáá ${ }^{70}$ Màndé yàà
now Top Mande leave.Perf Ségou leave.Perf Mande go.Perf 'Now, [we] left Mande, left Ségou, went to Mande...'

[^50]Màndé gò̀áá Bàmàkó yèláá.
Mande leave.Perf Bamako come.Perf
'left Mande, [and] went to Bamako.'

Yèláá. Émmé dògǒ-m Bàmàkó yèláá.
come.Perf 1plPro Dogon-HumPl Bamako come.Perf '[We] came. We Dogons came to Bamako.'

Né kày Bàmàkó gọ̀áá né kày Tòmmò gìn $\varepsilon=n \varepsilon ́ ~ y e ̀ l a ́ a ́, ~$ now Top Bamako leave.Perf now Top Tommo.L house $=$ Obl come.Perf 'Now, [we] left Bamako, now, [we] came to Tommo country,'
yદ̀lć-dìn= g . .
come-Inf = Def
'[For] coming [i.e., we would come].'

Wó kày wó kày Bòmbù-árú= báà yèláa née...
3sgPro Top 3sgPro Top Bombu Aru=Loc come.Perf now
'[Like] that, [like] that, [we] came to Bombu Aru, now...'
ògó gàmbílí-yáà.
Hogon divide-MP.Perf
'[we] split up the chiefdom.'

MM: ògó gàmbí-lí-yáà.
Hogon divide-MP.Perf
'[we] split up the chiefdom.'
$\mathrm{V}: \quad$ ògó $=\mathrm{g}$ ع́ gàmbílí-yáà.
Hogon = Def divide-MP.Perf
'[We] split up the chiefdom.'

Díć-m Dèyèné bèlè-m=gè.
older.brother-HumPl Deŋॄne one.from-HumPl.L = Def
'The older brothers [are] those from Deyene.'

Bé gàmbílí-yáá gòrò gém gòrì-yì-èn.

3plPro divide-MP.Perf hat.L black wear.hat-MP.PerfL-3plS
'They split [it] up [and] put on the black hat.'

Gòrò gém.
hat.L black
'[The] black hat.'

Bé $=$ lé émmé $=$ lé $\quad$ [báá túmó náá túmó] $=$ ỳ kòy. ${ }^{71}$
3plPro = Assoc 1plPro = Assoc father one mother one= Cop Emph
'Them and us, [we] are [of the] same father, same mother!'

Nè̀... émmé dágù bé gáà, yè-w lè...
now 1plPro small.HL 3plPro big.HL see.PerfL-2plS Q
'Now... we're small, they're big, you see.'

Gòrò bánú $=\mathrm{g} \varepsilon$ dúù-ndì- ${ }^{\mathrm{n}} \quad$ gém $=\mathrm{g} \varepsilon^{72} \quad$ dúù-ndì- $\varepsilon^{\mathrm{n}}$
hat.L red=Def bottom-Fact.PerfL-3plS black=Def bottom-Fact.PerfL-3plS
'They put down the red hat, they put down the black.'

Gòrò gém $=$ gé bé dùù-ndáà.
hat.L black $=$ Def 3plS bottom-Fact.Perf
'They put down the black hat.'

Nè̀̀...Dènènć bèlè-m=gé bé gòrò gém $=\mathrm{g}$ g̀ $=\mathfrak{\jmath}$
now Deyene one.from-HumPl = Def 3plPro hat.L black $=$ Def $=\mathrm{Obj}$
jènnì̀- ${ }^{\text {n. }}$.
pick.up.PerfL-3plS
'Now, the people from Deyene... they picked up the black hat.'

Émmé gòrò bánú $=g \varepsilon ́=$ j̀ jènnè-y.
1 plPro hat.L red $=\operatorname{Def}=$ Obj pick.up.PerfL-1plS
'We picked up the red hat.'

[^51]Émmé gòrò bánú jénní-m=gé tìgé ém=mè tíyáá ${ }^{73}$. 1 plPro hat.L red pick.up. $\mathrm{Nom}-\mathrm{HumPl}=$ Def surname $1 \mathrm{plObl}=$ Poss tiyaa 'We who picked up the red hat, our surname [is] tiyaa.'

MM: Tíyáá =ỳ.
tiyaa $=$ Cop
'It's tiyaa.'

V: Tíyáá... Tíyáá... Tíyáá gé-dìn.
tiyaa tiyaa tiyaa say.Hab-Hab.3p1S
'Tiyaa... tiyaa... they say tiyaa.'
nì $=$ mbé dáà $=$ lé $\Rightarrow \ldots$ dáà $=$ lè gé-dìn. $\varepsilon$ ǵgé-w lè.
that $=\mathrm{Pl}$ daa le daa le say.Hab-Hab.3p1S hear.Perf.H-2sgS Neg
'Those [people are] daa le... they say daa le. Do you understand?'

Émmé tíyáá nàà- $\mathrm{m}=\mathrm{g}$ è émmé dágù.
1plPro tiyaa master-HumPl.L = Def 1plPro small.HL
'We, the masters of tiyaa, we [are the] small [ones].'

Káá... émmé báá $=g$ è émmé $=\grave{\jmath}$ gàá m̀̀bè.
but 1 plPro father $=$ Def $1 \mathrm{plPro}=\mathrm{Obj}$ a.lot love.PerfL
'But... our father loved us very much.'

N $\varepsilon$ ع́... émmé $=\mathrm{\jmath}$ gà m̀b $\varepsilon$ = gé dí $\varepsilon$ gòrò bánú $=$ gé émmé
now 1 plPro $=$ Obj a.lot love.Rel $=$ Def for hat.L red $=$ Def 1 plPro
'Now... because our father loved us very much, it was [such that]...'
bélı̀ $=\mathrm{g}$ é $\quad$ wó $=$ ǹ.
find.Perf.Rel $=$ Def $3 \mathrm{sgPro}=\mathrm{Cop}$
'we got the red hat.'

Bèláá... néc̀ kày $\Rightarrow$... kábílí-yáá Ár $\varepsilon$ = né dànní-yáá
find.Perf now Top separate-MP.Perf Ar $=$ Obl sit.down-MP.Perf
'[We] got [it and]... now... [we] separated, sat down in Are...'

Áré $=$ né úngúláá néź kày Ségú yèláá Óndôm=báà dànní-yáá

[^52]Ar $\varepsilon=\mathrm{Obl}$ get.up.Perf now Top Ségou come.Perf Ondom=Loc sit.down-MP.Perf 'got up from Are, now went to Ségou, sat down in Ondom...'

Óndôm gòáá Mósù yèláá émmé dánnì-yì $=$ gè.
Ondom leave.Perf Mori come.perf 1plPro sit.down-MP.Perf.Rel=Def 'left Ondom, came to Mori, [where] we sat down.'

Móól $=$ né $\quad$ dànní-yáá... Móól = nè dànní-yáá,
Mori $=\mathrm{Obl}$ sit.down-MP.Perf Mori $=\mathrm{Obl}$ sit.down-MP.Perf
'[We] sat down in Mori... [we] sat down in Mori,'

Móól $=$ nè ògó pèlù kúlóy, ògó pèlù kúlóy tààndú-gó sígé.
Mori $=$ Obl Hogon 106 Hogon $10 \quad 6 \quad$ 3-Adv more
'[There were] 60 Hogons, 63 Hogons in Mori.'

MM : ògó pèlù kúlóy tààndú-gó sígé.
Hogon 106 3-Adv more
'63 Hogons.'

V: Tààndú-gó sígé Móól = nè.
3-Adv more $\mathrm{Mori}=\mathrm{Obl}$
'[sixty]-three in Mori.'

MM: Móól = nè yêm yòì- ̀ $^{\mathrm{n}}$.
Mori $=$ Obl like.that enter.PerfL-3plS
'They entered Mori like that.'

V: Yêm yọáá émmé kábílí-yáá nò $=n \varepsilon$ émmé súgáá.
like.that enter.Perf 1plPro divide-MP.Perf this $=$ Obl 1plPro go.down.Perf '[They] entered like that, we split off and we came down here.'

Nìměm...ò̀̀... ànùsáárá yèláá ògò-m pádá-mú
now uh white.person come.Perf Hogon-HumPl.L leave-Caus.Nom bày $=$ lè.
day. $\mathrm{L}=$ Assoc
'Now...uh... the white people came, at the time [they] made [us] abandon the

Hogons. ${ }^{74}$

white.person come $=\mathrm{Sub}=\mathrm{Obl}$ Hogon 106 3-Adv more $=\mathrm{Obl}$
'Before [the] white people came, the Hogons [were] at [the number of] 63.'
néé... ànùsáárá kònó yèlè.
now white.person there.DD come.PerfL
'Now... the white people came upon that.'

Yèláá bé ògó bé pádà-mì $=$ gè wó $=$ ǹ.
come.Perf 3plPro Hogon 3plPro leave-Caus.Perf.Rel = Def 3sgPro = Cop [They] came and they made [the people] abandon the Hogons.'

Púlò-m $=\mathrm{g} \grave{\varepsilon} \quad$ ògǒ-m $\quad$ pádá-máá $\quad$ bè $\grave{\varepsilon}-\mathrm{nní}=\mathrm{g}$. ${ }^{75}$
Fulani-HumPl = Def Hogon-HumPl leave-Caus.Perf can.Neg.Perf-Neg.Rel = Def 'They couldn't make the Fulbe leave their Hogons.'

C: Pádá-máá bè̀̀-nní.
leave-Caus.Perf can.Neg.Perf-Neg
'They couldn't make [them] abandon [them].'

V: Púlò-m ògǒ-m bé pádá-máá.
Fulani-HumPl Hogon-HumPl 3plPro leave-Caus.Perf
'They [tried to] make the Fulbe leave their Hogons,'
ànùsáárá wó yદ́lè $=$ gè gòrò bánú $=\mathrm{g} \varepsilon$ ǹ ǹdèmó $=\mathrm{g} \varepsilon ́$
white.person 3sgPro come.Perf.Rel=Def hat.L red=Def LogPro=Def
dògò yàgá òndú gì.
but other be.Neg say.PerfL
'[The time when] the white people came, they said "there is no red hat but us"., ${ }^{76}$
ògó pèlù kúlóy tààndú-gó sígé, ع́gáá-dè-w
lè.

[^53]Hogon $10 \quad 6 \quad$ 3-Adv more understand.Perf-Hab-2sgS Q '63 Hogons, do you understand.'

Émmé $=l$ l̀ íyèlè yèné gọ̀áá yèláá Kóndágá $=$ né dànní-yáá, 1 plPro $=$ too again there leave.Perf come.Perf Kontaka $=$ Obl sit-MP.Perf 'We too, [we] left there again and came and settled in Kontaka,'

Kóndágá $=n \varepsilon$ dànní-yáà ògó ǹdé sóy-gó ògò gèmbú sóy-gó
Kontaka $=$ Obl sit-MP.Perf Hogon person 7-Adv Hogon.L stacked 7-Adv
yòì- है $^{\mathrm{n}}$.
enter.PerfL-3plS
'[we] settled in Kontaka, [and] the Hogon [chose] seven people, the [last] seven chiefs one after another entered (i.e. were chosen),

MM: Kóntàkà $=$ nè.
Kontaka $=\mathrm{Obl}$
'In Kontaka.'

V: $\quad$ Kóndàgà $=n \varepsilon$ è dáá-gú.
Kontaka $=$ Obl be.sitting-Ppl
'Having settled in Kontaka.'

Gèmbú sóy-gó yọ̀áá néé íyc̀lغ̀ émmé= lé bé=lé
last.one 7-Adv enter.Perf now again 1 plPro = Assoc 3plPro = Assoc
kábílí-yáá
divide-MP.Perf
'The last seven entered, now again us and them, we split up,'
émmé yèláá Yèbè-nààndá $=n \varepsilon$ dànnì-yì-y.
1 plPro come.Perf Yebe Naanda = Obl sit-MP.PerfL-1plS
'We came and settled in Yebe Naanda.'

Yèbè-nààndá $=n \varepsilon$ dànní-yáá Yèbè-nààndá $=n \varepsilon ́ .$. dànní-yáá
Yebe Naanda $=$ Obl sit-MP.Perf Yebe Naanda $=$ Obl sit-MP.Perf
'[We] settled in Yebe Naanda, [we] settled in... Yebe Naanda,'
ògò kùyò yòó-d $\grave{\text { }}=\mathrm{g}$ é Bènjì-yúú gè bì- $\mathrm{e}^{\mathrm{n}}$.
Hogon.L first.L enter.Hab-Hab.Rel = Def Benjiyuu say be.Perf-3p1S
'The person Hogon to enter they called Benjiyuu.'

MM: Bènjì-yúú.
Benjiyuu
'Benjiyuu.'

V: Éè Bènjì-yúú.
yes Benjiyuu
'Yes, Benjiyuu.'

Òndòm-pírí = né émmé núyó- $\mathrm{d} \grave{\varepsilon}=\mathrm{g}$ घ̀.
Ondom Piri $=$ Obl 1plPro sing. Hab-Hab.Rel $=$ Def
'[It is what] we sing at Ondom Piri.' ${ }^{77}$

Éè, bén tíyáá yé yúú sj̀̀ wè sójo.
'Yes, (song lyrics).' ${ }^{78}$

Bènjì-yúú... nèmè ùndò = gè Bèn-sàndí bàlè.
Benjiyuu dirty.L ash.L=Def Bensandi sweep.up.PerfL
'Benjiyuu's dirty ashes (Top), Bensandi swept [them] up.' ${ }^{79}$

Áá Bèn-jámbá bàlè.
ah Benjamba sweep.up.PerfL
'Ah, Benjamba swept [them] up.'

MM: Bèn-jámbá.
'Benjamba.'

V: Bèn-jámbá. Bèn-jámbá bàlè. Bèn-jámbá úndò $=\mathrm{g} \varepsilon^{80} \quad$ Bèn-sàndí
Benjamba Benjamba sweep.up.PerfL Benjamba ash.HL=Def Bensandi bàlè.
sweep.up.PerfL
'Benjamba. Benjamba swept [them] up. As for Benjamba’s ashes, Bensandi swept

[^54][them] up.'

Bóy $\quad$ wó $=$ mò $\quad$ Sànà-ǹdó-ógó. Ámírù $=m b e ̀ ~ n ̀ d ~ \grave{~}=g \varepsilon ̀ \quad$ wó $=$ ǹ.
name 3sgPro = Poss Sana-ndo-ogo chief $=\mathrm{Pl}$ person.L = Def 3sgPro = Cop 'His name [was] Sana-ndo-ogo. He was a person of the chief's [family].'

Bèn-sàndí bàlè. Bèn-sàndí $\Rightarrow$ ònnù $=$ nè ù-ùndò
Bensandi sweep.up.PerfL Bensandi behind=Obl a-ash.L
bálí-né $=\mathrm{g} \varepsilon^{81} \quad$ Bènjù-àànó $=$ ǹ, kìdè-y, Bèn-dàmàlá $=$ ỳ.
sweep.Nom-HumSg = Def Benju Aano=Cop thing-Dim Bendambala=Cop
'Bensandi swept [them] up. The one who swept up the ashes after Bensandi was Benju Aans, no, um, was Bendambala.'

Bèn-dàmàlá.
'Bendamala.'

Éè wó kày ǹdè ògó yóè kém Ánjú = né
yes 3sgPro Top person.L Hogon enter.Perf.Rel all Anji = Obl
sù-súgù ǹ̀jí-yó-gú bé wó-gú,
Red-go.down.PerfHL lie.down-MP-Ppl 3plPro be-Ppl
ǹjí-yó-gú bé wó-gù
lie.down-MP-Ppl 3plPro be-Ppl
'Yes, as for him, every person who entered the Hogon came down to Anju, they [were] sleeping there, they [were] sleeping there,'

Bèn-dàmàlá múrtà wó dénnè=gè yèlè-lí...
Bendamala rebellion 3sgPro look.for.Perf.Rel=Def come.Neg.Perf-Neg 'Bendama, he tried to rebel (i.e., to leave), he didn't come.'
ògò-nó yèlè-lí gàà ǹdě-m wó = j̀ bé
Hogon-HumSg come.Neg.Perf-Neg say.Perf person.HumPl 3sgPro=Obj 3plPro dènné-gú —ây-ǹdèmó gónjú dómmò bè wà.
look.for.Ppl ay Log.Pro scratching wait be.Perf Quot
'[They] said the Hogon didn't come, they were looking for him-ay!-he said he was waiting in his field so the animals wouldn't eat the millet he planted. ${ }^{82}$

[^55]N $\varepsilon$ と́ dàmá òndú wá. Bèn-dàmàlá $=g \varepsilon ́$ wó $=$ ǹ.
now taboo be.Neg Quot Bendamala $=$ Def 3 sgPro $=$ Cop
'Now, [he said] there is no taboo. That was Bendamala.'

Bèn-dàmàlá úndò $=\mathrm{g}$ g̀ ǹd $\varepsilon$ bàlá-d $\varepsilon=$ gè nèy-yé $=\mathrm{g} \varepsilon ́$
Bendama ash.HL=Def person.L sweep.up.Hab-Hab.Rel=Def 2-Ord=Def émmé bálà bè.

1plPro sweep.up.Imp be.Perf
'The the second person who swept up the ashes of Bendamala was us.'

Émmé bàlá bé= gé wìdí-yáá Bènjù-àànó
1plPro sweep.up.Imp be.Perf.Rel = Def return-MP.Perf Benju Aano bàlè.
sweep.up.PerfL
'What we were going to sweep up, Benju Aano came back and swept up.'

Bènjù-àànó bàlè. Bènjù-àànó bálè $=$ gè gàláá
Benju Aano sweep.up.PerfL Benju Aano sweep.up.Perf.Rel = Def pass.Perf 'Benju Aano swept [them] up. What Benju Aano swept up passed,'
néé kày Bènjù-àànó $=$ mò $=g$ gè néé kày wìdí-yáá émmé Bènjù-Ámbíèm ${ }^{83}$
now Top Benju Aans = Poss = Def now Top return-MP.Perf 1plPro Benju Ambiem bàlè.
sweep.up.PerfL
'now Benju Aano's [ashes], now, afterwards, our Benju Ambiem swept [them] up.'

Bènjù-ámbíc̀m. Néź Bènjù-ámbièm wààrù ògó tó $=$ bè $=$ lè kém, Benju Ambiem now Benju Ambiem time Hogon be.in=be.Perf=Assoc all 'Benju Ambiem. Now, during the time when Benju Ambiem was Hogon,'
wàgé kóy, Bènjù-ámbì̀m=mò úndó= gè nćé kày Ànjú = né ògò-bádá far Emph Benju Ambiem = Poss ash=Def now Top Anji = Obl Ogə Bada bàlè.
sweep.up.Perf

[^56]'[it was] a long time ago! Benju Ambiem’s ashes, now, Dgo Bada swept [them] up in Anji.'
ògò-bádá. ògò-bádá bálè $=\mathrm{g}$ ह̀ $=\mathrm{mò}=\mathrm{g}$ è nàmbá úló-ndú-gó
Ogo Bada $\operatorname{Dg}$ g Bada sweep.up.Perf.Rel $=\operatorname{Def}=$ Poss $=$ Def not.yet go.up-Neg-Adv $\omega \grave{=}=\mathrm{g} \grave{\varepsilon} \quad \omega o ́=\grave{\mathrm{n}}$.
be $=$ Def $3 \mathrm{sgPro}=$ Cop
'Ogo Bada. [That which] Dgo Bada swept up has still not gone up [to Tongo-Tongo from Anji].'

Hogon era.L $=$ Def $=$ Assoc umm Q.Fr person-HumPl taxes pay- Ppl
bì- $\varepsilon^{\text {n }}$ ?
be.Perf-3plS
'In the time of the Hogons, umm... did people pay taxes?'

V: M̀̀̀hh́. ògó dínè = lè...
mmhm Hogon era = Assoc
'Mmhmm. In the time of the Hogons...'

MM: éè...
'Yes...'

V : ògò jàngú?
Hogon.L fine
'[The] Hogon fine?'

MM : éè.
'Yes.'

V: Ségè-mò-dìn.
pay-Caus.Hab-Hab.3plS
'They made [them] pay [it].'

MM: Est-ce que...
'Did...'

V: Wó ògò gòndó kày wòlú wàláá bì-غ̀n kày

3sgPro Hogon.L payment Top farming farm.Perf be.Perf-3p1S Top égáá-dê-w, wó ògò-nó $=\mathrm{g}$ è $=\mathrm{m} ̀=\grave{̀}$.
hear.Perf-Hab-2plS 3sgPro Hogon-HumSg = Def= Poss = Cop
'That, as for the Hogon payments, they farmed kay, do you understand, that was for the Hogon.'

Wòlú-- mìnné wó = mò wálà-dìn. Sègú $=\mathrm{g}$ ǵ wó = ̀̀.
farming field $3 \mathrm{sgObl}=$ Poss farm.Hab-Hab.3plS taxes $=$ Def $3 \mathrm{sgPro}=\mathrm{Cop}$ 'Farming - they farmed his field. That was the tax.'

Bàà gòó-dé kém. Yàè... ǹd $\varepsilon$ = gé kém mòmbí-yéé year.L leave.Hab-Hab.Rel all um person=Def all get.together-MP.NF mìnné wó = mò wálà-dìn.
field 3 sg Pro $=$ Poss farm.Hab-Hab.3plS
'Every year. Umm... everyone got together and farmed his field.'

Éè... mìnné wó = mò wàlì- $\varepsilon^{\mathrm{n}} \quad$ yó.
yes field 3 sgPro $=$ Poss farm.PerfL-3plS if
'Yes... when they farmed his field.'
$\mathrm{MM}: ~ \grave{g}$ ó nè̀ ǹ ñ́ sàdè yó nè̀ yàn-gé-ní áwà-dìn?
Hogon now person miss.PerfL if now how-Adv-Adv catch.Hab-Hab.3plS '[In the] Hogon-dom, now, if a person missed [a payment], how would they catch [him]?'

V : Ǹdé sàdè yó wó = ̀̀ jàngú dùù-rì- ${ }^{\mathrm{n}}$ yò person miss.PerfL if 3 sgPro $=O b j$ fine carry-Tr.PerfL-3plS if 'If a person missed [a payment], when they would burden [him] with a fine,'
yèláá néé kày wó=ŋ̀ àwì- $\varepsilon^{n}$ yò kèm kárángáá ànà
come.Perf now Top 3 sgPro $=$ Obj catch.PerfL-3plS if all vestibule mouth.L
wó $=\mathrm{m} ̀=\mathrm{g}$ と̀ mà-mánà-dìn.
$3 \mathrm{sgObl}=$ Poss $=$ Def Red-seal.Hab-Hab.3plS
'[he would] come, now, if they caught him, they would seal up the door to his house.'

Bòy gàm-gàm dì̀ nò=lé yélè-dìn kòy.
tomtom.L drum.type big.L this = Assoc come.Hab-Hab.3plS Emph
'They would come with this big drum!'

Gàm-gám $=$ gé bàá yèlì̀ ${ }^{\text {n }} \quad$ yó bàá yèlì- ${ }^{n} \quad$ yó drum.type $=$ Def beat.Perf come.PerfL-3plS if beat.Perf come.PerfL-3plS if 'They came beating the big drum, they came beating the big drum,'
à à̀ wò $=$ nǒ mánì- $\varepsilon^{n} \quad$ yó, ónnú $=$ báà tógíláá gòò-ndì- ${ }^{n}$
door.L be.L=this seal.Perf.HL-3plS if back = Loc pierc.Perf leave-Fact.PerfL-3plS

if house $2 \mathrm{sgObl}=$ Poss $=\mathrm{Obl}$ person-HumPl.L be. $\mathrm{Rel}=\mathrm{Def}=\mathrm{Pl}$ half all catch. NF dò-dónò-dìn.
Red-sell.Hab-Hab.3plS
'when they sealed up the door that was there, when they have pierced the back [of the house] and taken out [the people], they would catch half of the people who were in your house and sell them.'

Dò-dónò-dìn.
Red-see.Hab-Hab.3plS
'They would sell [them].'
$\mathrm{MM}:$ Kòmbó yáà-dìn yò nè̀̀, ògò-nó ǹdè wó ńb $=$ ǹ
war go.Hab-Hab.3sgS if now, Hogon-HumSg person.L 3sgPro like.Rel = Obj
túyò-dè mà ǹdě-m= gé kém yáà-d $\varepsilon$.
send.Hab-Hab or person-HumPl = Def all go.Hab-Hab
'Now, if they [would] go to war, would the Hogon send [only] the people he liked or would everyone go?'
$\mathrm{V}:$ Bédé dìné-dé-gè-nì, $\mathrm{on}^{\mathrm{n}} \mathrm{h}^{\mathrm{n}}$, ògò kòmbó yáà-dìn
yò,
big.road take.turn.Hab-Hab.Rel-Adv-Adv yes Hogon.L war go.Hab-Hab.3plS if 'Like taking turns on a big road, yes, if they went to the Hogon war,'
$\grave{\jmath ̀ n h}^{n} \hat{n}^{n}$, ògò kòmbó yáà-dìn néع́ kày
yes Hogon war go.Hab-Hab.3plS now Top
'yes, now they would go to war,'

Dámmá jàwí-yáà kòmbó = gé yáà-dìn yò kèm, áúrí-yí- $\varepsilon^{n}$
village fight-MP.Perf war = Def go.Hab-Hab.3plS if all.L agree-MP.PerfH-3plS
yó, yàí- $\varepsilon^{\text {n84 }} \quad$ yó ǹd $\check{\text { ch }}-\mathrm{m}=\mathrm{g} \grave{\varepsilon}=$ ỳ $\quad$ mòmbí-yéé
if go.Perf.H-3plS if person- $\mathrm{HumPl}=\mathrm{Def}=\mathrm{Obj}$ get.together-MP.NF
sáà-dìn, ǹd $\varepsilon$ - $m=g \varepsilon ́=\grave{\jmath}$ dáà-dìn.
destroy.hab-Hab.3plS person-HumPl=Def=Obj kill.Hab-Hab.3plS
'if a village fought and went to war, if they agreed, if they went, they would get together and destroy people, they would kill people.'
$\mathrm{MM}:$ Wó kày sàgàrà-nè dòó-dé kém yáà-dè.
3sgPro Top youth-HumSg.L arrive.Hab-Hab.Rel all go.Hab-Hab
'In that case, any young man that arrived [i.e. that could] would go.'

V: Yáà-dè. Éè ságárá-m kém yáà-dìn.
go.Hab-Hab yes youth-HumPl all go.Hab-Hab.3plS
'He would go. Yes, all the young men would go.'

Nǒw $=$ mbé ńyáá-dìn yò yêm yáà-dìn.
medicine $=\mathrm{Pl}$ eat.Perf-Hab.3plS if like.that go.Hab-Hab.3plS
'They would take medicines, [and then] they would go like that.'

Yêm yàá-dín $=\mathrm{g} \grave{\varepsilon} \quad$ Móólú $=\mathrm{m} ̀=\mathrm{g} \varepsilon ̀, \quad$ Móólú $=\mathrm{mò}=\mathrm{g}$ と̀
like.that go.Hab-Hab.3plS.Rel $=$ Def Mori $=$ Poss $=$ Def Mori $=$ Poss $=$ Def
kòmbó = gé táá ǹdé pé-tààndù dáí- है $^{\mathrm{n}}$.
war $=$ Def shoot.Perf person 30 kill.PerfL-3plS
'[Those who] went like that for Mori, for Mori they started the war and killed thirty people.'

MM: Wó kày ògò kòmbó= ǹ.
3sgPro Top Hogon.L war = Cop
'As for that, [that was] the Hogon war.'

V: ògò kòmbó dìmbù. [[Móólú ògò] kòmbò]...
Hogon.L war successor.L Mori Hogon.L war.L
'The successor [what followed] the Hogon war. The war for the chiefdom of Mori.'
$\mathrm{MM}: ~ \grave{\mathrm{o} g} \mathrm{o}^{=} \mathrm{g} \varepsilon ́ \quad$ mí yóò-dè mí yóò-dè.
Hogon $=$ Ef 1 sgPro enter.Hab-Hab 1 sgPro enter.Hab-Hab

[^57]'It's $\underline{\text { me }}$ who will be chief, it's me who will be [chief].'
$\mathrm{V}:$ Mí yóò-d $\varepsilon$ mí yóò-d $\varepsilon=n \varepsilon$ ǹ ǹd $\quad$ pé-tààndù-gò
1sgPro enter.Hab-Hab 1sgPro enter.Hab-Hab = Obl person thirty-Adv dàì- ह̀.
kill.PerfL-3plS
'Because of [this] "It's me who will be [chief], it's me who will be [chief], they killed thirty people.'

Àmbìlè-kúnjó bàà = lè pé-tààndù túrúr-gó 'sígé.
Ambile Kunjo father.L=Assoc thirty one-Adv more
'With Ambile Kunjo's father, thirty-one.'

Yàà-ná $=$ gé $=$ lè pé-tààndù néy-gó 'sígé.
woman-HumSg $=$ Def $=$ Assoc thirty two-Adv more
'With [his] wife, thirty-two.'

Kònó tàyà wó=j̀ dáí-èn. Tàyà nìmbáà... j̀j̀ò...
there.DD side.L 3sgPro = Obj kill.PerfL-3plS side.L over.there uh
'[They went] other there and killed her. On the other side... uh...'

Dàmmà-dáá=nè ǹdé néy. Ǹd $\varepsilon$ néé Nèmmé=n $\varepsilon$ ǹd $\varepsilon$ néy.
Damma $\mathrm{Daa}=$ Obl person two person two $\mathrm{N} \varepsilon m m \varepsilon=$ Obl person two
'In Damma Daa, two people. Two people, in Nemme, two people.'

Bé $=1 \varepsilon$ ह́ ǹd $\varepsilon$ náy-gó yòì- n $^{\mathrm{n}}$.
$3 \mathrm{plPro}=$ also person four-Adv enter.PerfL-3plS
'[With] them as well, four [more] people entered [death].'

MM: Nòó kày kó wàgàdù kém púlò-m yèlè-nní.
this Top this.DD time.L all Fulani-HumPl come.Neg.Perf-Neg.3plS 'As for this, at that time, the Fulbe hadn't come.'
$\mathrm{V}:$ Púlò- $\mathrm{m}=\mathrm{mbè}$ ò̀̀̀̀... kòmbó = ̀̀ kòy, ògò kòmbó... púlò-m yó-èn
Fulani-HumPl=Pl uh war = Cop Emph Hogon.L war Fulani-HumPl be-3plS 'The Fulbe, uh... it was war! There were war[s] for the chiefdom [of the] Fulbe,'
dògò ànùsáárá kòmbò ànùsáárá yèlè-lí.
but white.person war.L white.person come.Perf.Neg-Neg 'but the white people's war, the white people hadn't come.'

## MM: Ànùsáárá yèlè-lí. Púlò-m yó- n $^{n}$ dè.

white.person come.Neg.Perf-Neg Fulani-HumPl be-3plS Emph
'The white people hadn't come. There were Fulbe.'
$\mathrm{V}: \quad$ Móólú $=\mathrm{mò}=\mathrm{g}$ è tàì- $\varepsilon^{\mathrm{n}}=\mathrm{g} \varepsilon{ }^{\varepsilon}=\mathrm{le}^{85}$ ànùsáárá yèláá wò.
Mori $=$ Poss $=$ Def shoot.PerfL-3plS $=$ Def $=$ Assoc white.person come.Perf be 'At [the time when] they started the Mori [war], the white people came.'

MM: M̀báà dòò-lí.
here arrive.Perf.Neg-Neg
'They didn't make it here.'

V: Nòmbáà dò̀-lí. Bànjàngàrá = né yàà dò ${ }^{n}$ bé
here arrive.Perf.Neg-Neg Bandiagara = Obl go.Perf paper.L 3plPro
yábè $=$ gè kòmbó $=$ gé táà-dìn gì.
take.Perf.Rel = Def war = Def shoot.Hab-Hab.3plS say.PerfL
'They didn't make it here. They went to Bandiagara, and they paper they took said they would make war.'

Tà-táà-dìn bé gàà. Mm̀hn̂ àà $=$ mbé ségú má wà. Red-shoot.Hab-Hab.3plS 3plPro say.Perf mmhm who $=$ Pl numerous Q Quot 'They would make war, they said. Mmhmm, [they asked] who are more numerous.'

Wó $=$ mbé ségú yó tà-táà-dìn yò yàé táá $=\mathrm{g}$ と́ dò̀̀ ${ }^{n}$ 3 sgPro $=\mathrm{Pl}$ numerous if Red-shoot.Hab-Hab.3plS if go.NF shoot $=$ Def paper bé tósi $\varepsilon^{n}=g \varepsilon ̀ \quad$ dóón $=$ gè yó̀̀.
3plPro write. Perf.Rel $=$ Def paper $=$ Def be
'If those [people] are more numerous, and if they [really] will start war, the paper they wrote said go start [it], the paper is there.'
ògó nàm tégé = ǹ, ògó nàm tégé gàà, bé = mè yêm
Hogon sun.L shining $=$ Cop hogon sun shining say.Perf 3 plObl $=$ Poss like.that tóáán-dìn.

[^58]write.Perf-Hab.3plS
'It was noon time [for the] Hogon (i.e., things were heating up for them), [they said] it was noon time for the Hogons, they wrote like that for them.'

Yêm bé tó ${ }^{\mathrm{n}}=\mathrm{g}$ と̀ kòmbó $=$ gé yêm bé
like.that 3 plPro write.Perf.Rel $=$ Def war $=$ Def like.that 3 plPro
táè $=g$ g.
shoot.Perf.Rel = Def
'They wrote like, they made war like that. ${ }^{36}$

Hogon sun.L shining pass.Perf $=\mathrm{Obl}$ other $\mathrm{D} \varepsilon ŋ \varepsilon \mathrm{n} \varepsilon=$ Poss this but war ùngùlò-lí.
arise.Neg.Perf-Neg
'After the noon time [for] the Hogon passed, except for [the war] for Deyene, no wars were started.'

Deyen $\varepsilon=$ Poss this $=$ alsoc 3 sgPro $=$ also 3 sg Pro $=$ also Hogon.L war $=$ Cop
'That one for Deyene as well, that too, that too was a Hogon war.'
$\mathrm{V}:$ ògò kòmbó, wó $=$ lè Dèyèn $=$ mò nò $=1$ è
Hogon.L war 3 sgPro $=$ also Deyen $\varepsilon=$ Poss this = also
'[A] Hogon war, that too, that one for Deyene as well,'
néé kày Móólú $=\mathrm{m} \grave{=}=\mathrm{g} \grave{\varepsilon} \quad$ tàì- $\mathrm{\varepsilon}^{\mathrm{n}}=\mathrm{g}$ と̀ $\quad \mathrm{y}$ - $-\mathrm{w} \quad$ lè,
now Top Mori $=$ Poss $=$ Def shoot.PerfL-3plS see.PerfL-2sgS Q
XXX
néé kày $D \varepsilon ̀ y e ̀ n \varepsilon ́=m \grave{~}=\mathrm{g} \grave{\varepsilon}=l$ è Kàndà-túgérú ògó $=\mathrm{g} \varepsilon ́ \quad$ wó
now Top Deyen $\varepsilon=$ Poss $=$ Def=also Kanda Tugeru Hogon= Def 3 sgPro yóò-dè-m gì...
enter.Hab-1sgS say.PerfL
'Now, for Deŋॄne as well, Kanda Tugeru said, "I will become chief".'

[^59]àn-nà... kìdè... Kóíré, Kándá ògó yòé-lè gì.
man-HumSg.L thing Koire, Kanda Hogon enter.Neg.Hab-Neg say.PerfL 'The man... umm... Koire, he said Kanda would not be chief.'

Kándá ògó yòé-lè = nè wó wá ògó= gé ǹdè
Kanda Hogon enter.Neg.Hab-Neg = Obl 3sgPro Quot Hogon = Def person.L yàgá = ̀̀ óbó gì.
other $=$ Obj give.Imper say.PerfL
'[They said] Kanda would not be chief, he (they) said give the Hogon-ship to someone else.'

Ǹdèmó yóò-dè gì.
LogPro enter.Hab-Hab say.PerfL
' $\mathrm{He}_{\mathrm{i}}$ [Kanda] said he $\mathrm{e}_{\mathrm{i}}$ would be [chief].'

M̀̀̀hm̌ wó yóò-d $\varepsilon$ = gè $=n \varepsilon ́ \quad$ úngúláá Bànjàgàrá yàì $\varepsilon^{n}$. mmhm 3 sgPro enter. $\mathrm{Hab}-\mathrm{Hab}=\mathrm{Def}=\mathrm{Obl}$ get.up.Perf Bandiagara go.PerfL-3plS 'Mmhm, because [he said] he would become [chief], they got up and went to Bandiagara.'

Yàbà-nní Bànjàgàrá=né bé yàà agree.Neg.Perf-Neg.3plS Bandiagara $=$ Obl 3plPro go.Perf 'They didn't accept [the fact that Kanda wanted to be chef], and they went to Bandiagara.'

Ànùsáárá bé $=$ ỳ dós $=\mathrm{y}$ g̀̀ àà $=$ mbé ségú má wà yêm wó white.person 3plPro $=$ Obj paper $=$ Def who $=P l$ numerous Q Quot like.that 3sgPro gáà, Kàndà-sómbò = mbè ǹdèmbé ségú wà. say.Perf Kanda Sombo $=\mathrm{Pl} \quad$ LogProPl numerous Quot
'The white people, [their] paper asked like that who is more numerous, [and] [the people $_{i}$ of] Kanda Sombo [said] they $y_{i}$ are more numerous.'

Bé ségú yo $=1 \varepsilon$, Nám-tín $=$ = $\varepsilon$ è Bànjàgàrá bèz̀-nè-gò
3plPro numerous if $=$ too Nam Tin $\varepsilon=$ Def Bandiagara person.from-HumSg-Adv bè.
be.Perf
'Even if [they] were more numerous, Nam Tine (the chief) was from Bandiagara.'

Bé ségú yó yàè táá wá.
3plPro numerous if go.NF shoot.Imper Quot
'[They said], if they are more numerous, [then] go make war.'

Yàè táá $=\mathrm{g}$ é bé yè láá, Dèyènè-dúú
go.NF shoot.Imper $=$ Def 3plPro come.Perf Dejene Duu
$\mathrm{b} \grave{\varepsilon}$ ह̀n $\grave{\varepsilon}=\mathrm{g} \varepsilon ́$
person.from-HumSg.L = Def
Kóíró... Ànjú j̀gò=nè... Ànjú j̀gò gìǹ̀ = nè wó- wó gíynè.
Koiro Anji Hogon = Obl Anji Hogon.L house.L = Obl 3sgPro 3sgPro beg.Perf.HL '[Saying] go and make war, they came, Koiro, the person from Deyene Duu, he- he came to beg [for warriors] at the chief of Anji, at the chief of Anji's house.'

Móólú ògò gìnè $=n$ ǹ wó gíy ${ }^{n}$ è.
Mori Hogon.L house.L=Obl 3sgPro beg.Perf.HL
'He begged at the chief of Mori's house.'

Óndóm $=n \varepsilon$ yàà wó gíynè.
Ondom = Obl go.Perf 3sgPro beg.Perf.HL
'He went to Ondom and begged.'

Kém wó=ỳ bàrì- ह̀n $^{n}$.
all $3 \mathrm{sgPro}=$ Obj help.PerfL-3plS
'Everyone helped him.'

Nòó pínníyáá bé $=$ ỳ pàdé-lè $=\mathrm{g}$ è bé
this after 3 plPro $=$ Obj leave.Neg.Perf-Neg.Rel $=$ Def 3plPro
júgò $=$ gè
know.Perf.Rel = Def
(coughs) ǹdèmbé... íyદ̀lè Bànjàgàrá yàì-èn.
LogProPl again Bandiagara go.PerfL-3plS
'After that, [when] they $\mathrm{y}_{\mathrm{i}}$ realized that [they] wouldn't leave them [i.e. that they couldn't fight them, [when] they realized that, (coughs), they ${ }_{i}$ went to Bandiagara again.'

Bànjàgàrá bèz̀-nè=gè bj̀ì-n $\grave{=}=\mathrm{g} \varepsilon ́ \quad$ bílé-bílé
Bandiagara person.from = Def speak.Nom-HumSg.L = Def double.speak tàà-gú wà kòy.
shoot-NegImp Quot Emph
'The speaker from Bandiagara said "Don't double speak" (i.e. yesterday you said you were more numerous, today you say it's them).'

Bé wá bé ségú gè-lí mà wà.
3plPro Quot 3plPro numerous say.Neg.Perf-Neg Q Quot
'[He asked] "Didn't you say that you were more numerous?""

Bé ségú gì ${ }^{87}$ ííyé yèláá ǹdě-m $=g \varepsilon ́ \quad$ bàrì̀ ${ }^{\text {n }}$, 3plPro numerous say.PerfL today come.Perf person-HumPl = Def help.PerfL-3plS '[They] said they are more numerous, today [they] came [and said] the people helped them,'
yǎy 'kánáá bàrì-èn, yàé táá wà, yàé táá = gé
how do.Perf help.PerfL-3plS go.NF shoot.Imper Quot go.NF shoot.Imper $=$ Def yàà... néź...
go.Perf now
'how they helped [them], [the man from Bandiagara said] go make war, [they, his men] went to make war... now...'
wó táì- $\varepsilon^{\mathrm{n}}=\mathrm{g}$ と̀ $\quad$ wó $=\grave{\mathrm{j}}$.
3 sgPro shoot.Perf.Rel-3pIS $3 \mathrm{sgPro}=\mathrm{Cop}$
'it was like that that they declared war.'

Wó gálè $=n$ è yàgá kòmbó tàà-nní.
3sgPro pass.Perf=Obl other war shoot.Perf.Neg-Neg.3plS
'After that passed, they made no other war.'

### 20.3 Origin of Tongo-Tongo

Recorded on August 13, 2008 in Tongo-Tongo
$\mathrm{V}:$ Ànjù gờàa ${ }^{88} \quad$ yélí-n $\varepsilon=g \varepsilon^{89} \quad$ Ámbá-kànù.
Anji.L leave.PerfL come.Nom-HumSg = Def Amba Kanu
'The one who left Anji and came [here was] Amba Kanu.'

[^60]MM: Ámbá-kànù.
'Amba Kanu.'

V: Ámbá-kànù.
'Amba Kanu.'

Wó nò=nó wó yélì = gè.
3 sgPro this $=$ Obl 3sgPro come. PerfL $=$ Def
' He , he came here.'
yèláá wó tú máá Àmbà-pàlá $=$ né wó dánnì-yì $=$ gè.
come.Perf 3sgPro alone Amba Pala = Obl 3sgPro sit-MP.Perf.Rel = Def
' $[\mathrm{He}]$ came and he settled in Amba Pala by himself.'
 now... woman-HumSg have-Neg like.that sit-Ppl be-Ppl now house $=$ Def 3sgPro
údò $=$ gè.
build.Perf.Rel=Def
'Now, he had no wife... being settled like that, being there now, he built a house.'

Gìn $\varepsilon=\mathrm{g} \dot{\varepsilon} \quad$ dèmbé-dìm $=\mathrm{g}$ g̀.
house $=$ Def build.roof-Inf $=$ Def
'The covering of the house (i.e. he had to build a roof on the house).'

house $=$ Def 3sgPro build.Perf.Rel $=$ Def ladder $=$ Def have-Neg
dèmbé-dìm $=\mathrm{g}$ と̀ $=\mathrm{mò} \quad$ bílúu $\quad$ s̀̀-ĺ́.
build.roof-Inf= Def=Poss ladder have-Neg
'He built the house, [but] it did not have a ladder, it did not have a ladder to build the
roof.'

Kònó úggúláá Ànjú yà̀̀.
there.DD get.up.Perf Anji go.PerfL
'He got up from there and went to Anji.'

Ànjú $=$ né wó yáè $=$ gè bílú wó $=$ mò jènnáá yèláá.
$\mathrm{Anji}=\mathrm{Obl} 3 \mathrm{sg}$ Pro go.Perf.Rel $=$ Def ladder 3 sg Pro $=$ Poss pick.up.Perf come.Perf '[When] he went to Anji, [he] picked up his ladder and came [back].'

Tábí-ráá. Bílú $=\mathrm{g}$ と́ wó tábì-rì $=\mathrm{g}$. .
touch-Tr.Perf ladder $=$ Def 3 sgPro touch-Tr.Perf.Rel $=$ Def
'[ He$]$ put [it] up. He put up the ladder.'

N $\varepsilon$ ع́.. gìn $\varepsilon=g \varepsilon ́ \quad$ dèmbè.
now house= Def build.roof.PerfL
'Now... he built a roof [on] the house.'

Ànjú bèlè-m $=$ gè gòáá wó wá Tógó-ó-tògò,
Anji person.from-HumPl.L = Def go.out.Perf 3sgPro Quot pour-o-pour.L
Bílú-ó-bìlù.
ladder-o-ladder.L
'The people from Anji came out and called him Togo-o-Togo, Bilu-o-bilu.'

MM: Wó yàà néé Tó-tóŋó = mò tìgè = gè wó=ỳ.
3sgPro Top now Tongo Tongo $=$ Poss surname $=$ Def 3 sgPro $=$ Cop
'As for that now, that is the name of Tongo-Tongo.'

V: Tógó-ó-tògò, Bílú-ó-bìlù.
pour-o-pour.L ladder-o-ladder.L
'Togo-o-togo, Bilu-o-bilu.'

Yém wó gàà... nćé... kònó dáá-gú Kòìgé $=$ n $\varepsilon$ yàà-ná
like.that 3sgPro say.Perf now there.DD sit-Ppl Koige $=\mathrm{Obl}$ woman-HumSg
dènnè. Tààndù-kìndíyé.
look.for.PerfL Taandu Kindiye
'Having said that... now... being settled there, [he] looked for a wife in Koige.
Taandu Kindiye (three shadows).'

MM: Tààndù-kìndíyé.
'Taandu Kindiye.'

V: Tààndù-kìndíyé. Tààndù-kìndíyé = j̀ wó $j \varepsilon ́=g \varepsilon ̀ ~ n o ̀ n o ́ ~ d a ̀ n n i ́-~$ yáá.

Taandu Kindiye Taandu Kindiye $=$ Obj 3sgPro marry.Perf.Rel $=$ Def here sitMP.Perf
'Taandu Kindiye. [When] he [had] married Taandu Kindiye, he settled here.'

child.L first.L 3sgPro birth.Perf-Hab.Rel $=$ Def chef $=\mathrm{Pl}$ house.L

## person. $\mathrm{L}=\mathrm{Cop}$

'The first child she gave birth to was one of the chief's people.'

Kàndà-sòó-yèlìm.
'Kanda Soo Yelim (lit. Kanda I saw no speech).'

MM: Kàndà-sòó-yèlìm.
'Kanda Sos Yelim.'

V: Éè. Bóy $=$ gè Ànjú $=$ né bé jàà, Ànjú bèlè-m sò yes name $=$ Def Anji $=$ Obl 3plS take.Perf Anji person.from-HumPl.L speech yè-nní wà, Kàndà-sòó-yèlìm.
see.Neg.Perf-Neg.3plS Quot Kanda Soo Yelim.
'Yes. They took the name to Anji, the people from Anji [said that] they didn't see any words [in the name], [so] Kanda Soo Yelim.'

Kàndà-sòó-yèlùm = gè ùrò = gè èndè-kìndíyé.
Kanda So Y Y lim = Def little.sibling.L=Def $\mathcal{E n d} \varepsilon$ Kindiye
‘Kanda So Yelim's younger sibling was $\varepsilon$ nd $\varepsilon$ Kindiye.
èndè-kìndíyé ùrò $=$ gè -- $\quad$ èndè kìndíyé $=g \varepsilon ́ \quad$ ùrò Yà-téé.
End $\varepsilon$ Kindiye little.sibling.L=Def $\varepsilon$ nd $\varepsilon$ Kindiye = Def little.sibling.L Ya T $\varepsilon \varepsilon$
‘ $\varepsilon$ nd $\varepsilon$ Kindiye’s younger sibling-- $\varepsilon$ nd $\varepsilon$ Kindiye’s younger sibling was Ya Teะ.'

Émmé Yà-t $\grave{\varepsilon}$-gòmbóló gé-dè-y, Yà-t $\varepsilon$ é .
1plPro Ya Teq lumpy.head say.Hab-Hab-1plS Ya Te
'We call [her] Ya Ter the Lumpy Head, Ya Teq.'

Yà-téé úrò $=\mathrm{g}$ と̀ $\quad$ èn-tààndú. èn-tààndù-ìyǎy.
Ya Tع 1 little.sibling. $\mathrm{HL}=\operatorname{Def} \varepsilon_{n}$ Taandu $\varepsilon_{n}$ Taandu-girl
'Ya Teq's younger sibling was $\varepsilon$ n Taandu, $\varepsilon$ n Taandu the girl.'

M̀ǹhn. Wó=lı̀ $\quad$ wó $=\grave{\mathrm{n}}$.
$\mathrm{mmhmm} 3 \mathrm{sgPro}=$ also $3 \mathrm{sgPro}=\mathrm{Cop}$
'Mmhmm, that was also that.'

Ya T $\varepsilon \varepsilon=$ Def now 3 sgPro now child find.Perf be.Perf or find.Neg.Perf-Neg
'Now, as for Ya Tع $\ldots$.. as for her... did she have a child or did she not?'

V: Nánà wó góè = nè àn-ná $\grave{\varepsilon} \grave{\varepsilon}^{\mathrm{n}}$-lí.
never 3sgPro go.out.PerfHL = Obl man-HumSg marry.Neg.Perf-Neg
'Never since she was born (lit. came out) did she marry a man.'

C: Àn-ná $\quad$ è ${ }^{\mathrm{n}}$ - $\mathrm{lin}^{90}$
man-HumSg marry.Neg.Perf-Neg
'She never married a man.'

MM: Yà-té $=$ gè.
Ya T $\varepsilon \varepsilon=$ Def
'Ya Tعє.'

V: Yà-t $\varepsilon$ 白 $=$ gè... Yà-t tı̀ $\varepsilon$-gòmbóló.
Ya T $\varepsilon \varepsilon=$ Def Ya T $\varepsilon \varepsilon$ lumpy.head
'Ya Tعє... Ya Tع $\varepsilon$ the Lumpy Head.'
 house 3 sgPro $=$ Poss $=$ Def now uh mayor.L house build.Perf-
Hab.3plS = Def = Obl
'Her house, uh, [where] they have built the mayor's office now,'

Mèz̀r gìné údáá-dìm $(=\mathrm{g} \grave{\varepsilon}=\mathrm{n} \grave{)}) \quad$ wó $\quad$ sáná $=\mathrm{g} \grave{\varepsilon}=\mathrm{mbè}=$ lé
mayor.L house build.Perf-Hab.3plS = Def=Obl 3sgPro
older.brother $=\mathrm{Def}=\mathrm{Pl}=$ Assoc
wó jáwì-yì =gè yò-yǒw=gè.
3sgPro fight-MP.Perf.Rel = Def Red-mean.Nom = Def
'[By where] they built the mayor's office, ${ }^{91}$ she fought with her older brothers, she was mean.'

[^61]Wó jáwì-yì = gè yèné yàà dànní-yáá gìné wó=mò
3sgPro fight-MP.Perf.Rel = Def there.DD go.Perf sit-MP.Perf house
$3 \mathrm{sgObl}=$ Poss
wó túmáá údáá. ${ }^{92}$
3sgPro alone build.Perf
'She fought [with them], went there, settled down, and built her house herself.'

Kònó wó-gú àn-nà wó = ̀̀ dénné-dè kém m... there.DD be-Ppl man-HumSg.L 3sgPro = Obj search.for.Hab-Hab.Rel all mm ámbá wó $=$ ỳ tóyò $=n \varepsilon ̀,{ }^{93}$ àn-ná ${ }^{\text {è }}{ }^{n}-l i ́$. god $3 \mathrm{sgPro}=\mathrm{Obj}$ form.PerfHL $=\mathrm{Obl}$ man-HumSg marry.Neg.Perf-Neg 'Being there, any man who went to look for her, mm... since God made her, she never married a man.'

Kònó wó-gú éé néé mm... Àmbà pàlá síbáá-dìm... àmbà pàlá there.DD be-Ppl uh now mm god.L long plant.Perf-Hab.Inf god.L long kó síbéé wó=lé ámbá wó=mò... j̀̀̀ò... kìdè dùù-ndú that.DD plant.NF $3 \mathrm{sgPro}=$ also god $3 \mathrm{sgObl}=$ Poss uh thing.L bottom-

## Fact.Nom

ìbè ì̀ dùù-ndú $=$ gè $\quad$ wó $=$ l̀̀ yèné $\quad$ wó síbáá. ${ }^{44}$ market.L child.L bottom-Fact.Nom = Def 3sgPro =also there.DD 3sgPro 'Being there, uh now, mm... They put up a fetish... a fetish, they put that up, and she also put up her own fetish there, uhh... [where we] put things down, [where we] put down food for the market.'

Àn-ná = mò kó síbéé wó= mò kó síbéé
man-HumSg $=$ Poss that.DD plant.NF $3 \mathrm{sgObl}=$ Poss that.DD plant.NF
kànà-mé-nnè wà.
do-Caus.Neg.Hab-Neg.3p1S Quot
'[They] put up one for a man, [she] put up one for her, [the people said] they could not allow that.'

[^62]Wó $=\mathrm{mò}=\mathrm{g}$ と̀ dàmbáá $\quad$ njí-ráá-dìn $=\mathrm{g}$ è $\quad$ wó $=$ ỳ.
$3 \mathrm{sgPro}=$ Poss $=$ Def knock.over.Perf lie.down-Tr.Perf-Hab.3plS $=$ Def $3 \mathrm{sgPro}=$ Cop '[So] they knocked hers over (and made it lie down).'

MM: Jáàtì... donc nìměm kày nćé Mùgàà-tàná $=$ lé $\Rightarrow$ Tó-tónó $=$ lé $\Rightarrow$ exactly thus.Fr now Top now Muga Taya = Assoc Tongo Tongo = Assoc

all Amba Kanu house.L = Obl leave.Perf-Hab = Cop
'Exactly... so... as for now, now Muga Taya and Tongo Tongo, both came from the house of Amba Kanu.'

V/C: Kém.
all
'Both (or everyone).'

hidden. $\mathrm{L}=$ NegCop secret. $\mathrm{L}=$ NegCop
'Nothing hidden, nothing blocked.'

MM: Néと́ Kàndà-sòó-yèlìm=lè $\quad$ èndè-kìndíyé = lè Yà-tè $\varepsilon$-gòmbóló = lè
now Kanda Sos Yelim = Assoc End Kindiye=Assoc Ya Té lumpy.head=Assoc
èn-tààndù-ìyǎy $=$ lè nò $=$ mbé kày báá $\Rightarrow$ 'túmó 'náá 'túmó. ${ }^{96}$
$\varepsilon$ n Taandu girl = Assoc this = Pl Top father one mother one
'Now, Kanda Sos Yelim, $\operatorname{End} \varepsilon$ Kindiye, Ya Teq the Lumpy Head, and $\varepsilon$ n Taandu
the
Girl, as for these, [they were all of] the same father and same mother.'

V/C: Báá 'túmó 'náá 'túmó.
father one mother one
'Same father, same mother.'
$\mathrm{MM}:$ Bé yàgú sàà ùlùm, bé Kóígé sàà ùlùm?
3plPro which sister.L children.L 3plPro Koige sister.L children.L
'They [are] matrilinear children of which [place], they [are] matrilinear children of Koige?

[^63]V/C: Éé bé Kóígé sàà ùlùm $=m b e ̀=$ ỳ.
yes 3plS Koige sister.L children. $\mathrm{L}=\mathrm{Pl}=\mathrm{Cop}$
'Yes, they are matrilinear children of Koige.'
$\mathrm{MM}:$ Néé nìměm kó yàà nàlí-yáá Kèndónnó= bàà yáí-né 'yáá now now that.DD Top birth-MP.Perf Kendonno=Loc go.Nom-HumSg go.Perf nว̀nó wádí-né wàdáà.
here stay.Nom-HumSg stay.Perf
'Now then, with that, [a lot of kids] were born, and those that went to Kendonno went, and those that stayed here stayed.'

V: Wàdáà. Éé nàlí-yáá.
stay.Perf yes birth-MP.Perf
‘[They] stayed. Yes, [they] were born.'

now Amba Kanu = Def 3sgPro Amba Kanu=Def hear.Hab-Hab.2sgS = Q
'Now, Amba Kanu, that [was] Amba Kanu, do you understand?'

Bèré wó $=$ mò= lè bé wó-gú wó báá 'yímáá- $\mathrm{d} \varepsilon$ e $=\mathrm{g}$ è
stomach $3 \mathrm{sgObl}=$ Poss $=$ Assoc 3 plPro be-Ppl 3sgPro father die.Perf-Hab.Rel $=$ Def $y غ ̀-w=l e ̀$.
see.PerfL-2sgS = Q
'[When] they were pregnant with him, his father died, you see.'

Bálá-kànù ${ }^{97}$ yímáá- $d \grave{\varepsilon}=g \grave{\varepsilon} \quad y \grave{c}-w=$ lè.
Bala Kanu die.Perf-Hab.3plS = Def see.PerfL-2sgS = Q
'Bala Kanu died, you see.'

Bèré wó $=$ mò $=$ lè wó-gú ${ }^{98}$ Bálá-kànù wó yímáá. $\ldots$ né $\varepsilon$... wó $=$ j̀. . .
stomach $3 \mathrm{sgObl}=$ Poss $=$ Assoc be-Ppl Bala Kau 3sgPro die.Perf now
$3 \mathrm{sgPro}=\mathrm{Obj}$
pàndé, [ágá ḿ= mò dì̀ gàá $]^{99}$, pàndé $=$ gè Sèmmèlè
tá áa $^{100}=$ nè

[^64]widowhood mouth $1 \mathrm{sg} \operatorname{Pro}=$ Poss than big $\quad$ widowhood $=$ Def Semmel $\varepsilon$

## Tana $=\mathrm{Obl}$

pándì-làà-dìn. ${ }^{101}$
widow-Rev.Perf-Hab.3p1S
'Being pregnant with him, Bala Kanu died... now... it's bigger than my mouth, [but] they de-widowed (remarried) her in Semmele Taya.'

Kóntáká... bèlè-m = gé bé pándì-làà-dìn.
Kontaka... person.from-HumPl.L = Def 3plPro widow-Rev.Perf-Hab.3plS
'The people from Kontaka, they de-widowed [her].'

Pándí-láá... émmé $=$ ǹ... émmé $=$ lé Sèmmèlè tà $\mathfrak{y}$ á $=$ lé
widow-Rev.Perf 1 plPro = Obj 1plPro = Assoc Semmele Taya = Assoc
náá túmó=j̀, báá $=\mathrm{g} \varepsilon ́ \quad d \varepsilon ́ y=$ ǹ.
mother one $=$ Cop father $=$ Def different $=$ Cop
'[They] de-widowed [her]... us... us and Semmele Taya, [our] mother is the same, the father is different.'
$\mathrm{MM}:$ Sèmmèlè tà tá $=$ lé émmé $=$ lè náá $=$ gé túmó $=\mathfrak{\jmath}$ báá $=$ gé
Semmele Taya $=$ Assoc 1 plPro $=$ Assoc mother $=$ Def one $=$ Cop father $=$ Def
déy $=$ j̀.
different $=$ Cop
'[For] Semmele Taya and us, the mother is the same, the father is different.'

V/C: Báá $=\mathrm{g} \varepsilon \quad$ déy $=\mathrm{j}$.
father $=$ Def different $=$ Cop
'The father is different.'

MM: Yàà pàndè úlùm.
woman.L widowed.L children
'Widow's children.'

V: Néé yém wó-gú émmé náá $=\mathrm{g}$ ह́ kìd $\varepsilon=\mathrm{g} \varepsilon$ è wó jénnè $=\mathrm{g}$ g̀ now like.that be-Ppl 1plPro mother $=$ Def thing $=$ Def 3 sgPro
pick.up.Perf.Rel $=$ Def
ǹdémó kánú bàlè-ṃ ${ }^{102}$ wà.

[^65]LogPro gold sweep.up.PerfL-1sgS.H Quot
'Now, being like that, our mother said she picked something up, that she found gold.'

Égé-w $=$ lè. ${ }^{103}$
hear.PerfH-2sgS $=\mathrm{Q}$
'Do you understand.'

gold sweep.up.PerfL-1sgS.H = Def Top now Bala Kanu $=$ Def $=$ Obj transfer-

## Fact.Perf

'Now, [saying] "I found gold", [she] transferred [that] to Bala Kanu (a name).'

Nìměm émmé túmòm nánní-yáá dímbè $=\mathrm{g}$ è wó $=$ j̀.
now 1plPro Rec chase-MP.Perf follow.Perf.Rel=Def 3sgPro=Cop
'Now we chase each other and follow each other (i.e. because of Bala Kanu, we are together, one after another).'
$\mathrm{MM}: \Uparrow$ Ḿńḿn wó wó jénnè $=\mathrm{g}$ と̀ $\quad \mathrm{n} \varepsilon ́ \Rightarrow$ súgó-nó $=\mathrm{g} \dot{\varepsilon}=\mathrm{j} . .$.
mmm 3sgPro 3sgPro pick.up.Perf.Rel = Def now little.sibling-
$\mathrm{HumSg}=\mathrm{Def}=\mathrm{Obj}$
'Mmm, [when] she [had] picked it up, now, to the little brother...'

V: Éèyó wó kày wó jénnè = gè néé kày úlùm
yes 3 sgPro Top 3sgPro pick.up.Perf.Rel = Def now Top children
wó $=\mathrm{mò}=\mathrm{mbé}=\grave{\mathrm{j}} \quad$ óbù $=1 \grave{\varepsilon} \quad$ mà.
$3 \mathrm{sgObl}=\mathrm{Poss}=\mathrm{Pl}=\mathrm{Obj}$ give $\cdot \mathrm{Perf}=\mathrm{NegCop} \mathrm{Q}$
'Yes, as for that, what she picked up, now, did she not give it to her children.'

Néé kày Sèmmèlè tà yá yé= tòò 'émmé yé = tòò-y.
now Top Semmele Taya Exist = be.in 1plPro Exist = be.in-1plS
'Now, there is Semmele Tana and us.'

Néé sàw... Sò̀ dámmá ${ }^{105}$ tòò-lé kòy.
now Saw Soo Damma be.in-Neg Emph

[^66]'Now, Saw... So七 Damma is not a part of that!'

C : Sòò dámmá tòò-lé.
Sos Damma be.in-Neg
'Sos Damma is not part of that.'

MM: óhòhò.
'Uh-huh, uh-huh.'

V : Sòò dámmá tòò-lı̀.
Soo Damma be.in-Neg
'Sos Damma is not part of that.'

Sò̀̀ dámmá $=$ lé émmé $=$ lé bàà íí $=\grave{\jmath} \quad$ dè $\Rightarrow$
Sos Damma $=$ Assoc 1plPro = Assoc father.L child $=$ Cop Emph
'Sos Damma and us, we are paternal relatives.'

Náá $=$ gé túmó-lè.
mother $=$ Def one-Neg
'The mother is not the same.'

Émmé $=$ lé Sèmmèlè tàná $=$ lè náá túmó $=$ ỳ.
$1 \mathrm{plPro}=$ Assoc Semmele Taya $=$ Assoc mother one $=$ Cop
'Us and Semmele Taya, [our] mother is the same.'

Nòn-gó-ní... wó hálè Sèmmèlè tà yá bè̀c̀-m $=\mathrm{g}$ ह̀ $=\mathrm{mò}=\mathrm{n}$ è
that-Adv-Adv 3sgPro even Semmele Taya person.from-HumPl.L $=$ Def $=$ Poss $=\mathrm{Obl}$
èsè-lí kòy, yém bǎy-ní...
be.clear.Neg.Perf-Neg Emph like.that until-Adv
'Like that... it wasn't clear even to the people of Semmele Tana, not so much.'

Soo Damma 1plPro say.Hab-Hab.Rel = Def now here leave.from.Perf
Dènỳn $n=$ báà dìmbé-gú yém yàè.
Deŋยn $\varepsilon=$ Loc follow-Ppl like.that go.Perf
'Now, [what] we call Sos Damma, [he] left here, and went like that, via Denene.'

V：Sòò dámmá Bárá órò ${ }^{106}=$ nè wó úngùlì $=$ gè $\quad$ Dènènè dáá $=n \varepsilon ̀$
Sos Damma Bara Oro＝Obl 3sgPro get．up．Perf．Rel＝Def Deŋॄne Daa＝Obl
yàà wò ${ }^{107}$ dánnì－yì $=$ gè．
go．Perf 3sgPro sit－MP．Perf．Rel＝Def
＇Soo Damma got up from Bara Dro，then went to Deyєnє Daa，where he settled down．＇

Kònó dáà bàà ${ }^{108}$ Dènènè dáá $=n \varepsilon$ wó－gú Dènènè dáá ìyày，yàà－nà
there．DD seated be．Perf Deŋยen $\mathrm{Daa}=\mathrm{Obl}$ be－Ppl Deŋยne Daa girl．L woman－
HumSg．L
jè．
marry．Perf．L
＇［Having］settled there，being in Deŋॄne Daa，he married a girl，a woman from Deŋfne Daa．＇
Yàà－ná $=g \varepsilon ̀ \quad$ wó $j \varepsilon ́=g \varepsilon ̀ \quad$ wó $=l \grave{\varepsilon} \quad$ yèń yàà．．．

ว̀̀̀ò．．．
woman－HumSg＝Def 3 sgPro marry．Perf．Rel $=$ Def 3 sgPro $=$ also there go．Perf uh
Túmbòl bèz̀－nè kìdé＝j̀ tèmbè．
Tumbol person．from－HumPl．L thing＝Obj found．PerfL
＇He married the woman，［and］she also went there．．．uh．．．he found someone from Tumbol．＇

Mmm．．．sáà．．．sáá．．．
mmm Saa Saa
＇Hmm．．．Saa．．．Saa．．．＇

C：Sàà tónómó．
Saa Toŋэmь
＇Saa Təŋァmっ．＇

V：Sáà，Sàà tónómó＝gé．．．wó Sàà tónómó＝gé wó＝lè mà．
Saa Saa Təŋァmっ＝Def 3sgPro Saa Təŋっmっ＝Def 3sgPro＝NegCop Q
＇Saa，Saa Tэŋэmっ．．．Wasn’t it Saa Təŋァmっ．＇

[^67]Nìm $\varepsilon$ ̌m $\Rightarrow$ ám $\Rightarrow$ kìd $\varepsilon$ = mbè...
now um thing $=\mathrm{Pl}$
'Now... umm... you know...'

Nààbèlù bòró gìn $\grave{\varepsilon}=\mathrm{g} \grave{\varepsilon}=\mathrm{n} \varepsilon \quad$ dòó-d $\mathrm{c}-\mathrm{w}^{109} \quad$ yò nùmò nààndá
Naabelu Boro house. $\mathrm{L}=\mathrm{Def}=\mathrm{Obl}$ arrive.Hab-Hab-2sgS if hand.L left
 side $. \mathrm{L}=$ Obl house be $=$ NegCop stone.L big.piece touch-MP-Inf be $=$ NegCop éè gìn $\varepsilon=g \varepsilon ́ \quad$ wó $=$ ǹ.
yes house $=$ Def $3 \mathrm{sgPro}=\mathrm{Cop}$
'If you arrive at Naabelu Boro's house, on the lefthand side there's a house, right... there's [a house] touching the big boulder, right, yes, it was that house.'

Wó kònó 'yáá Sáá $=\mathrm{g}$ と̀ gìn $\grave{=}=\mathrm{n}$ と̀ wó dánnì-yì $=\mathrm{g}$ è.
3sgPro there.DD go.Perf Saa=Def house.L=Obl 3sgPro sit-MP.Perf.Rel=Df 'He (the man from Sos Damma) went there and settled at Saa's house.'

Néé Dènènè dáá $=$ nè yàà-ná wó jáè $=$ gè ì̀ kùyò now Deŋยne Daa = Obl woman-HumSg 3sgPro take.Perf.Rel=Def child.L first.L nàlá-dìm $=\mathrm{g}$ ह́... kìdè... â.
birth.Hab.Rel-Inf=Def thing uh
'Now, he brought a wife to Deŋॄne Daa, [and] the first child they had was... um...
ah.'

C: Kàndà něm = lè.
Kanda Nem = NegCop
'Wasn't it Kanda Nem?'

V: Kàndà něm.
'Kanda Nem.'

C: Kàndà něm.
'Kanda Nem.'

V: Éé Kàndà něm nàlè...
${ }^{109}$ The tone pattern here is like that in relative clauses rather than main clauses.
yes Kanda Nem birth.PerfL
'Yes, [she] gave birth to Kanda Nem.'

Néé Kàndà něm wó nàláá nàláá-dè = gè yàà... wó yàà
now Kanda Nem 3sgPro birth.Perf birth.Hab-Hab.Rel=Def Top 3sgPro Top
Kǒm bèl $\grave{\varepsilon}-\mathrm{m}$ bòrògó $=g \varepsilon ́=$ báà dàlìr̀̀ gàmbéé bé
Koum person.from-HumPl.L valley $=\mathrm{Def}=$ Loc good.things.L some 3 plPro
bèláá- $\mathrm{d} \varepsilon$ è $=g \grave{\varepsilon} \quad$ wó $=$ ǹ.
find.Perf-Hab.Rel = Def 3sgPro = Cop
'Now, as for [when] Kanda Nem was born, [and his son] was born, [and] because of that, the people from Saoura Koum found most of the good things in the valley.'

C: Kǒm mègáá bé $\quad s \varepsilon ́=g \varepsilon ̀ \quad$ wó $=$ ǹ.
Koum boss.around.Perf 3plPro have.Rel=Def 3sgPro=Cop
'They [the people of Kanda Nem] bothered [the people] from Saoura Koum.'

MM: Mm̀hn.
'Mmhmm.'

### 20.4 Dogon funerals in the old days

Recorded on August 13, 2008 in Tongo-Tongo
Dialogue between Sana 'M. le Maire' Ouologuem and Endekindie Ouologuem
 funeral inside. $\mathrm{L}=\mathrm{Obl}$ now uh thing what $=\mathrm{Pl}$ what $=\mathrm{Pl}$ be.right.Perf-Hab 'Now, in funerals, what sorts of things were normally done?'

V: Gěm kòlò=nè. Kìdè káná bí- $\mathrm{c}^{\mathrm{n}}$. funeral inside. $\mathrm{L}=\mathrm{Obl}$ thing.L do.Hab be.Perf.Rel-3plS
'In funerals. The thing[s] [we] used to do.'

Gěm kòlò $=n \varepsilon$. bǎy $=g \varepsilon ́ \quad$ dènnì- $\grave{\varepsilon}^{n} \quad$ yò ìsǎy $\varepsilon$ ènnì- ${ }^{n} \quad$ yò... funeral inside.L $=$ Obl day $=$ Def search.Perfl-3plS if grain wet.PerfL-3plS if 'In funerals. When they [had] searched for the day, [and] when they [had] wetted the grain...’
m̀ḿ... ìsǎy $\varepsilon$ nnì- ${ }^{\text {n }}$ yò, ìsǎy $=$ gé... uhh... nàmì- $\varepsilon^{\mathrm{n}}$ yò, kònjó
mm grain wet.Perf.HL-3plS grain $=$ Def uh grind.PerfL-3plS if beer àlì̀- $\varepsilon^{\mathrm{n}} \quad$ yò, kònjó $=$ gé gò̀è yó,
brew.Perf.L-3plS if beer=Def go.out if
'Mmm... When they [had] wetted the grain, [and] when they [had] ground the grain, [and] when they [had] brewed the millet beer, [and] when the millet beer [had] come out,'

Néと́ kày... dògǒ-m... ว̀ò... dìgè nǎm... kádá-na yo $\Rightarrow$
now Top Dogon-HumPl uh evening.L sun oldest.man-HumSg if
Nìyàlù íb $\varepsilon=\grave{j}^{110} \ldots$ Nìjàlù íb $\varepsilon=\grave{\jmath}$ dìgè nǎm dìgè nǎm Ningari.L market $=$ Cop Ningari.L market $=$ Cop evening.L sun evening.L sun tígì-rè-dìn... ká'dá-ná=ỳ.
call.names.of.ancestors-Tr.Hab-Hab.3plS oldest.man-HumSg $=\mathrm{Obj}$
'Now... [the] Dogon... uh... in the evening... if it was the oldest man (in the village),
it was [on] Ningari's market day... it was [on] Ningari's market day, in the evening, in the evening, they would call out the names of [his] ancestors, the oldest man's.'

Dìgè nǎm tìgìrì- $\grave{\varepsilon}^{\mathrm{n}} \quad$ yyò, dìgè nǎm tìgìrì $\varepsilon^{\mathrm{n}} \quad$ yò evening.L sun call.names.PerfL-3plS if evening.L sun call.names.PerfL-3plS if ògò búrú yóò... ògò búrú $=$ mbé súdò-dìn.
Hogon.L horn is Hogon.L horn $=\mathrm{Pl}$ blow.Hab-Hab.3plS
'When they [had] called out the names of his ancestors in the evening, when they [had]
called out the names of his ancestors in the evening, there was a Hogon's horn... they
would play the Hogon horns.'

Wárá $=\mathrm{mbè}=\mathrm{lè} \Rightarrow$ màlbá $=\mathrm{mbè}=\mathrm{lè} \Rightarrow$ ògò $\quad$ búrú $=\mathrm{g} \grave{\varepsilon}=\mathrm{mbè}=$ lè éé...
spear $=\mathrm{Pl}=$ Assoc gun $=\mathrm{Pl}=$ Assoc Hogon.L horn $=\mathrm{Def}=\mathrm{Pl}=$ Assoc uh 'With spears, and with guns, and with Hogon horns, uh...'

like.that do.Perf.L-3plS if now Top morning.L day $=$ Poss now Top go.out.PerfL3plS

[^68]'Once they [had] done that, now... the next morning... now, once they [had] come out,'
wárá $=$ mbè $=$ lè yónnú yánnà-dìn, ${ }^{112}$ màlbá $=$ mbé táà-dìn, spear $=\mathrm{Pl}=$ Instr rounds walk.around.Hab-Hab.3plS gun $=\mathrm{Pl}$ shoot.Hab-
Hab.3plS
sóm = mbé jóbò-ndò-dìn.
horse $=\mathrm{Pl}$ run-Fact.Hab-Hab.3plS
'They would make their rounds with spears, they would shoot guns, [and] they would
race horses.'

Éè yêm.
yes like.that
'Yes, like that.'

MM: Néé súgó $=$ gé nćè... yìmú kém = nè kánà-dìn $\quad$ má $\Rightarrow^{113} \ldots$ mà ǹd $\varepsilon$
now sugo $=$ Def now death all $=\mathrm{Obl}$ do.Hab-Hab.3plS or or person. L
bèlú $\quad s \varepsilon=m o ̀=\grave{̀}$.
animal have $=$ Poss $=\mathrm{Obj}$
'Now, the sugo dance, would they do it for any death or... or was it [just] for people who had animals?'
$\mathrm{V}: ~ \mathrm{~N} \mathrm{~d}$ と̀ bèlú 'sé yáá $\Rightarrow$.
person.L animal have Top
‘[For] people with animals....'
$\mathrm{C}: \quad$ Bèlú $\quad$ bànàà $=\mathrm{mò}=\mathrm{n}, \quad$ súgó $=$ gè.
animal master $=$ Poss $=$ Cop $\operatorname{sug} \boldsymbol{\rho}=$ Def
'It was for animal owners, the sugo [dance].'


[^69]sugs person.L cow Exist = have uh even cow cow Exist = have goat Exist $=$ have
'The sugo... [it was for] people who have cows... uh... even cows, who have cows, who have goats.'

Yém kánáá-dè yò, súgó= 'gé...góò-dìn tín $=\mathrm{g}$ é ènè
like.that do.Perf-Hab if $s u g \boldsymbol{\rho}=$ Def dance. $\mathrm{Hab}-\mathrm{Hab}$ one $=$ Def goat.L
gírí-né kúyó-gó góò-dè. ènè gírí-né=gè.
herd.Nom-HumSg first-Adv dance.Hab-Hab goat herd.Nom-HumSg= Def
'Once it had been done like that, they would dance the sugo, the first (number one), the goat herder[s] would dance first. The goat herder[s].'

Wó góè yò, nàà gírí-né= gé ónnú $=$ né !góò-dè.
3sgPro dance.Perf.HL if cow.L herd.Nom-HumSg $=$ Def last $=\mathrm{Obl}$ dance. $\mathrm{Hab}-$ Hab
'Once he (they) had danced, the cowherd would dance last.'

Wó $=1 \varepsilon ̀ \quad$ wó $=$ j̀.
$3 \mathrm{sgPro}=$ also $3 \mathrm{sg} \operatorname{Pro}=\mathrm{Cop}$
'It was also that (i.e. that's how it was).'

Yónnú = gé yáì- $\varepsilon^{\mathrm{n}}$. Wárá 'kúyó yèlè... yóò-dè, wárá rounds $=$ Def go.Perf.HL-3plS spear first come.PerfL enter.Hab-Hab spear nàà-nù, yónnú $=$ gé wó !kúyó 'yóò-dè.
master-HumSg.L rounds $=$ Def 3 sgPro first enter. $\mathrm{Hab}-\mathrm{Hab}$
'They did their rounds. First the spear came, he would enter [the family of the deceased], the spear master, he entered into the rounds first.'

Wó- wó.. wárá 'náá-m=gè yànnáá gòì- ${ }^{\mathrm{n}}$ 多 yò
3sgPro 3sgPro spear master-HumPl.L = Def make.rounds.Perf leave.PerfL-3plS if màlbá nàà-m yé = yòò-dìn.
gun master-HumPl.L Exist = enter.Hab-Hab.3plS.L
'When he-, he... the spear masters had made their rounds and left, [then] the gun masters would enter.'

Wó $=1 \grave{\varepsilon} \quad$ Wó $=\grave{\jmath}$.
$3 \mathrm{sg} \operatorname{Pro}=$ also $3 \mathrm{sg} \operatorname{Pro}=\mathrm{Cop}$
'It was also that.'

MM: $\varepsilon$ č... néé... kúyó émmé nòmbáà yélí-m dògò èè... kídé... uh now before 1 plPro around.here come.Nom-HumPl but uh thing 'Uh... now... if not for us, the people who came here before... uh... uh...'

Bòmbú $=$ báà $=$ mbè kúý́ $\quad$ dàbá $=g \varepsilon ̀=m b e ̀=l e ̀ . .$. dàbà ǹd $\varepsilon$ $=g \varepsilon ́ \quad$ wòlú
$\mathrm{Bombu}=\mathrm{Loc}=\mathrm{Pl}$ before hoe $=\mathrm{Def}=\mathrm{Pl}=$ Assoc hoe. L person $=$ Def farming wàlá $\quad$ bè $=g \grave{\varepsilon}=\mathrm{mbè}$, farm.Hab.Rel be.Perf $=\mathrm{Def}=\mathrm{Pl}$
'The people of Bombu, before, [they would take] hoes and... the hoes the person used to farm with,'
ín $\varepsilon=\mathrm{g} \varepsilon$ $=\mathrm{mbè}$ kém gàmbáá múnjù-lò-dìn, gàmbáá iron $=\mathrm{Def}=\mathrm{Pl}$ all some break-Hab-Hab.3plS some
bànjá $=g \varepsilon ́=m b e ̀=l e ̀ \quad$ kém jógò bì ${ }^{n}{ }^{n}$ bowl $=\mathrm{Def}=\mathrm{Pl}=$ Assoc all break. Hab be.PerfL-3plS.
'and some [people] would break all of the blades, some people used to break all of the bowls.'

Est-ce que ém $=$ mé $=$ báà kó yós̀?
Q.Fr $\quad 1 \mathrm{plObl}=$ Poss $=$ Loc that.DD be
'Did that exist where we are?'

V: Ém $=\mathrm{m}$ と̀ $=$ 'báà $\quad$ yé $=$ bè. $\quad$ Pà-pádì- $\varepsilon^{n}$. 1 plPro $=$ Poss $=$ Loc Exist $=$ be.Perf Red-leave.Perf.HL-3plS 'It was where we are. They abandoned [it].'

Ém $=m \varepsilon ́=$ báà..$\quad$ yàá-m... kòŕs $=$ gè... ìsǎy jòò-ndì- ${ }^{n}$ yò, $1 \mathrm{plObl}=$ Poss $=$ Loc woman $-H u m P l$ calabash $=$ Def grain fill-Fact.PerfL-3plS if 'Where we are, when women [had] filled the calabash with grain,'
 death $=$ Def $=$ Obl sing.names-Tr.PerfL-3plS if doorway $=$ Def $=$ Obl break.PerfL3plS
bírìdì̀... kánà-dìn.
scattered do.Hab-Hab.3pIS
'Around here, women... when they had filled the calabash with grain, when they had sung the names of the ancestors of the deceased, when they had broken the calabash in the doorway, they would splatter it everywhere.'

Tùmbùtù něm $=$ mbé nàmá $=$ mbé kém kánà-dìn.
Timbuktu.L salt $=\mathrm{Pl}$ meat $=\mathrm{Pl}$ all do.Hab-Hab.3plS
'Timbuktu salt, etc., meat etc., they would do [it] all.'

C : Árá $=\mathrm{mbè}$.
rice $=P l$
'Rice, etc.'

V : Árá- kánà bì- $\varepsilon^{\mathrm{n}}$. Kém pà-pádì- $\mathrm{\varepsilon}^{\mathrm{n}}$. ògò-nó
rice do.Hab be.Perf-3plS all Red-leave.PerfHL-3plS Hogon-HumSg pàdà-mì.
leave-Caus.PerfL
'They used to do rice [too]. They abandoned it all. The Hogon made [them] abandon [it].'
$\mathrm{MM}:$ ògò-nó $=\mathrm{g}$ と́ pádà-mì.
Hogon-HumSg = Def leave-Caus.PerfL
'The Hogon made [them] abandon [it].'

V: Éè.
'Yes.'

MM: Yámú gàbáá-y gàà.
waste too.much-VCop say.Perf
'He said it was too much waste.'

V: Éè.
'Yes.'
 now sugg $=\mathrm{Def}=\mathrm{Obl}$ animal.L herd.Nom-HumSg $=$ Def child $3 \mathrm{sgPro}=$ Poss $=$ Def kèmmè póó $=n \varepsilon$ ém 'jóó-ndì yò, yèláá yìmú $=\mathrm{g} \varepsilon$ gourd.L fat $=$ Def milk fill-Fact.PerfHL if come.Perf death $=$ Def tìgì-rì-غ̀n $\quad$ yò, mòlùgíyé $=n \varepsilon$ dáà-nì kànì yò bìréé,
sing.names-Tr.PerfL-3plS if doorway $=$ Obl chuck.down-Adv do.PerfL if scattered Now, in the sugo, a goat herder, when his child [had] filled a big gourd with milk, he came, and when they [had] sung the names of the deceased, when he [had] chucked the gourd down in the door, splatter!!'

Wó $=1 \grave{\varepsilon} \quad$ yém kánà bì- ${ }^{\mathrm{n}}$.
$3 \mathrm{sgPro}=$ also like.that do.Hab be.Perf-3p1S
'They also used to do [things] like that.'

MM: Wó=lé kémmé...
$3 \mathrm{sgPro}=$ also gourd
' $[\mathrm{So}]$ that also, the gourd...'
$\mathrm{C}: \grave{\mathrm{o}}^{\mathrm{n}} \mathrm{h}^{\mathrm{n}}{ }^{\mathrm{n}}$ kémmé=gé kònó kóllò-dìn. Kògódó=gé.
uh-huh gourd=Def there.DD take.down.Hab-Hab.3plS shell=Def
'Yes, they would unhook the gourd form up there. The shell [of it].'

person.L animal have-Neg = Poss sugo dance.Neg.hab-Neg.3plS
'They would not dance the sugo for those who did not have animals.'
$\mathrm{C}:$ Bèlú sè-lı̀ = mò súgó gòé-nnè.
animal have-Neg = Poss sugo dance.Neg.Hab-Neg.3plS
'They did not dance the sugo for [a person] without animals.'

Wó $=$ mò $\quad$ kày ónnú $=$ ỳ.
$3 \mathrm{sgPro}=$ Poss Top behind $=$ Cop
'As for his [funeral], it would come afterwards.'

MM : Wó kày súgó=ǵ́ kày ǹd $\varepsilon$ = ǵ́ bèlú nàà-nù $=$ ỳ yò
3sgPro Top sugo $=$ Def Top person $=$ Def animal master-HumSg $=$ Cop if kém yém júgò-mò-dè.
all like.that know-Caus.Hab-Hab
'As for that, as for the sugo, if a person was an animal owner, [it] would let everyone know that.'

uh-huh goat $=$ Cop if $=$ NegCop dance. Hab-Hab. 3 plS cow $=$ Cop if $=$ Neg
gó̀̀-dìn.
dance.Hab-Hab.3plS
'Yes, even if it was a goat, they would dance, even if it was a cow, they would dance.'

V: Góò-dìn.
dance.Hab-Hab.3plS
'They would dance.'

C : Wó kày bèlú bàyàà = mbè.
3sgPro Top animal owner. $\mathrm{L}=\mathrm{Pl}$
'As for that, [it was what they did for] animal owners.'

### 20.4 The story of the co-wives and their children

Recorded on June 15, 2008 in Tongo-Tongo
Narrated by Segire Ouologuem

well woman-HumSg = Def 3 sgPro co-wife. $\mathrm{HL}=$ Def child 3 sgPro $=$ Poss $=$ Def
$\mathrm{wo}_{\mathrm{i}}=$ lé pádáá dámmá yàè.
$3 \mathrm{sgPro}=$ Assoc leave.Perf village go.PerfL
'Well, the woman ${ }_{i}$, her ${ }_{i}$ co-wife ${ }_{j}$ left her ${ }_{j}$ child with her ${ }_{i}$ and went to the village.'

Dámmá wó yàà, yàà-ná $=$ gè wó òlú $=$ báà $\varepsilon$ é $\varepsilon^{n}$ 'kébé-nú yàè. village 3 sgPro go.Perf woman $-\mathrm{HumSg}=$ Def 3 sgPro field $=$ Loc ash gather -Ppl go.PerfL
'She [the co-wife] went to the village, and the woman [ $\neq$ the co-wife] went to the field to gather soda ash (from burning millet stalks).'
éćn $=$ gè kébé-nú yàà, wó kébé-gú wó kébé-gú sáy-nú
ash $=$ Def gather-Ppl go.Perf 3sgPro gather-Ppl 3sgPro gather-Ppl a.lot-Adv gáà-ndì-yì.
big-Fact-MP.PerfL

[^70]'She went to gather ash, and as she gathered and gathered, it [the pile of millet stalks] became very big.'

દ́ $\varepsilon^{\mathrm{n}}=$ gè sáy-nú wó gáà-ndì-yàà ${ }^{115}$ néé gày nǎm kúndí-le ${ }^{116}$ dòè.
ash=Def a.lot-Adv 3sgPro big-Fact-MP.Perf now Top fire put-Nom arrive
'The ash (millet stalks) got so big, so now [the time] came to set fire [to them].'

woman-HumSg 3sgPro child 3 sgPro $=$ Poss $=$ Assoc 3 sgPro co-wife.HL
child. $\mathrm{L}=\mathrm{Def}=$ Assoc
wò.
be
'[The] woman, she was (is) with her child and the child of her co-wife.'
yêm wó kánáá.
like.that 3sgPro do.Perf
'She did like that.'

Bon, í- $\varepsilon$ ع́n $=$ gè wó gáá-ndí-yáá wó [ígè yàà-nà] ì̀ $=$ gè $=$ ǹ wó well ch- ash = Def 3sgPro big-Fact-MP.Perf 3sgPro co-wife.HL child.L=Def=Cop 3sgPro
bọ̀àà wòô gàà
call.Perf present say.Perf
'Well, the [pile of] stalks got [so] big, she called her co-wife's child, he ${ }^{117}$ said "Yes, I'm here",'
wó wá $\varepsilon$ ع́ $\varepsilon^{n}=\mathrm{g}$ è $=\mathrm{n}$ と̀ jòbó yó wà,
3sgPro Quot ash = Def = Obl run.Imper enter.Imper Quot
'she told him to run into the millet stalks.'

Kùgòlù wó móòndè $\quad$ غ̀ ${ }^{n} \quad$ dúm $=\mathrm{g} \grave{\varepsilon}=\mathrm{n} \grave{\varepsilon}$.
stalk.L 3sgPro assemble.Perf.Rel ash.L pile= Def=Obl
'[run and enter into] the millet stalks she'd assembled in a pile.'

[^71]Néé gày íí= gè jòbáá yòè yó nǎm kúndò-dè gàà.
now Top child = Def run enter.PerfL if fire put.Hab-Hab say.Perf
'Now, when the child runs into [there], she said she would light the fire.'

Wó wá sǒm kó yéllè = gè jòbó yóó wà dè, Quot horse $=\mathrm{Pl}$ horse $=$ Def that.DD come.Hab.Rel $=$ Def run.Imper enter.Imper Quot Emph monster horse
gòndò sǒm kó yéllè = gè jòbó yóó wà.
Gondo horse that.D come.Hab.Rel = Def run.Imper enter.Imper Quot
'[She said] a horse is coming, run inside! The horse from Gondo is coming, run inside.'

Núyó-gó kìdè wó núyó-dè wá sǒm kó yéllè jòbó
sing-Adv thing,L 3sgPro sing.Hab-Hab.Rel Quot horse that.DD come.Hab.Rel run.Imper yóó wà, gòndò sǒm kó yéllè jòbé yóó wa. enter.Imper Quot Gondo horse that.D come.Hab.Rel run.NF enter.Imper Quot '[She] pretended to sing, "A horse is coming, run inside! The horse from Gondo is coming, run inside!""

Yêm wó gàà íí=gè wó jóbò=gè $\varepsilon$ ع́ $\varepsilon^{n}=$ gè yòndíláá like.that 3sgPro say.Perf child = Def 3sgPro run.Perf.Rel = Def ash $=$ Def pull.aside.Perf yèné yòè.
there enter.PerfL
'[The woman] having said [that], the child ran and pulled aside the millet stalks, and entered there.'

Yèné wó yóáá yàà-ná $=$ gè jǎm tớáán kùndì.
there.DD 3sgPro enter.Perf woman-HumSg = Def fire strike.Perf put.PerfL
'He went inside there, and the woman lit [the] fire.'
nǎm tớáa ${ }^{\mathrm{n}}$ wó kúndáá íí=gè yènć yímá-ỳ.
fire strike.Perf 3 sgPro put.Perf child=Def there.DD die.Perf-V.Cop
'She lit the fire, and the child died there.'

Yímáá nǎm $=$ gé kém wó $=$ ỳ t témáá jàà $\varepsilon \varepsilon^{n}$ nó biláá die.Perf fire $=$ Def all 3 sgPro $=$ Obj eat.Perf finish.Perf ash 3sgPro become.Perf
 woman-HumSg $=$ Def ash 3 sgPro $=$ Poss load.up-MP.Perf house.L-Dim come.Perf
'[He] died, the fire finished eating all of him up, he became ash, the woman loaded up his ashes and came home.'

દ́ $\varepsilon^{n}=$ gè $\quad$ dùy-yáá $\quad$ gìnè-ý $\quad$ wó $\quad$ yélè $=$ gè, éýó $\Rightarrow$, [íǵ́ yàà-
nà $]^{118}=\mathrm{g} \grave{\varepsilon}$
ash $=$ Def load-MP.Perf house.L-Dim 3sgPro come.Perf.Rel $=$ Def uh-huh! co-wife $=$ Def dámmá 'gớáá wó yé'láá, í́ = gè òndú.
village leave.Perf 3sgPro come.Perf child=Def be.Neg
'[When] she had loaded up the ashes and come home, uh-huh!, the co-wife left [her] village and came, [but] the child was not [there].'

Íí ǹdém=mò yàbáá wò mà wà.
child LogPro = Poss where be Q Quot
'[She asked] where is my child?'
á ǹdémó 1 í $=$ gè $=$ ǹ yêm wó gàà [ígé yàà-nà] = gè ǹdémó nònú ah LogPro child $=$ Def $=$ Obj like.that 3 sgPro say.Perf co-wife $=$ Def LogPro here pádáá òlú yà̀̀-m wà.
leave.Perf field go.PerfL-1sgS Quot
'Ah, she asked for her child like that, the co-wife said "I left him here and went to the fields".

É wó=ỳ ǹdémó wó=lé pádáá dámmá yàè-m wà.
eh 3 sg Pro $=\mathrm{Obj}$ LogPro $3 \mathrm{sgS}=$ Assoc leave.Perf village go.PerfL-1sgS Quot '[She said] "Eh! I left him here with her and went to the village".'

Wó $\quad$ í $=\mathrm{g} \varepsilon$ è $=\mathrm{y} \quad$ nònú pádáá òlú yà $\mathrm{c}_{\text {. }}$
3 sgPro child $=$ Def $=$ Obj here leave.Perf field go.PerfL
'She left the child here and went to the field.'

Yállà $\quad$ íí $=$ gè $=n \varepsilon ̀ \quad n \varepsilon ́ \varepsilon ́ ~ y a ̀ y-g e ́-n u ́ ~ k a ̀ n i ̀ . ~$
wonder child $=\mathrm{Def}=\mathrm{Obl}$ now how do.PerL
'What happened to the child?'
à ǹdémó nònú pádáá òlú yàà dùlí-yáá tèmbè-lí-m wà.

[^72]ah LogPro here leave.Perf field go.Perf return-MP.Perf find.Neg.Perf-Neg-1sgS Quot '[The co-wife said] "Ah! I left him here and went to the field, and when I came back, I [couldn't] find [him]".,

Dámmá kém íí=gè=̀̀ dènnáá dènní-láa íí=gè yè-mè-lí.
village all chil $=$ Def $=$ Obj search.Perf search-Rev.Perf child $=$ Def see-Pass.Perf.NegNeg
'The whole village searched for the child, they searched [again], [but] the child wasn't found.'
 like.that 3 sgPro do.Perf woman $-\mathrm{HumSg}=$ Def field $=$ Obl ash.L 3sgPro burn.Perf-
$\mathrm{Hab}=$ Def
ع́ $\varepsilon^{n}=$ gè bàláá yêm jèèlì.
ash $=$ Def sweep.up.Perf like.that bring.PerfL
'After that (having done that), the woman swept up the ashes, the ashes she made in the field, and brought them [home] like that.'

ash $=$ Def sweep.up.Perf 3sgPro bring.Perf ash $=$ Def water $=$ Obl put.Perf 3plPro té'gí-ráá.
drip-Tr.Perf
'[She] swept up the ashes and she brought them [to the other woman], they put the ash in water and made it drip (ashes are put in a recipient with small holes in the bottom, then water filters through it).'

ash $=$ Def drip-Ppl child $=$ Def $=$ Obj ash $=$ Def inside $=$ Obl sing sing. Hab-Hab child. L dáí- $\varepsilon^{\mathrm{n}}=\mathrm{g}$. .
kill.Perf.Rel-3plS = Def
'As the ash was dripping, the child [started to] sing [from] inside the ashes, the child that was killed.'

ash $=$ Def drip.Hab-Hab.Rel = Def child = Def leave.PerfL if horse come.Hab-Hab jòbó 'yóó, gòndò sǒm yદ́lè-d $\grave{\Rightarrow}$ jòbó 'yóó.
run.Imper enter.Imper monster.L horse come.Hab-Hab run.Imper enter.Imper
'[When] the ash was dripping, the child said, "A horse is coming, run inside, a monster horse is coming, run inside".'
yêm wó gàà yàà-ná $=$ gè jáá sírè-dè gàà $\grave{\text { è }}{ }^{n}$ wó
like.that 3 sgPro say.Perf woman-HumSg = Def meal cook.Hab-Hab say.Perf ash.L
3sgPro
tégí-ráá-dè=gè núyó=gè núyó-gú wó wó-gú wó 'kéeníl-yáá
drip-Tr.Perf-Hab.Rel = Def song = Def sing-Ppl 3sgPro be-Ppl 3sgPro listen-MP.Perf
í $\quad$ wó $=\mathrm{mò}=\mathrm{g}$ è núyó-gú sè.
child $3 \mathrm{sgObl}=$ Poss $=$ Def sing-Ppl have
'[The child] he said like that, and the woman said [wanted] to prepare the meal, and the ashes she had put in the water were singing, she listened, and her child was singing.'
 person-HumPl $=$ Def $=$ Obj call.Perf 3 sgPro come.Perf.Rel $=$ Def 3plPro Quot sitMP.Imper
wà.
Quot
'[When] she had called the people and come [back], [she told] them to sit.'

Bé dànní-yáá $\varepsilon$ én ${ }^{n}=$ gè wògáá wó kú'ndáá díi wó kózráá 3plPro sit-MP.Perf ash = Def scoop.Perf 3sgPro put.Perf water 3sgPro pour.Perf íyèlદ̀ àníy $=$ = mò-gè-nú yêm nùyè.
again before $=$ Poss-Adv-Adv like.that sing.PerfL
'They sat down, and she scooped up ashes and put them [in a recipient], she poured water on [them], and again they sang like they did before.
 this child LogPro $=$ Poss $=$ Def voice $. L=$ Def $=$ Neg.Cop Q Quot '[She asked] is this not my child's voice?'

Bé sélùmàà ${ }^{119}$ yàà-ná $=$ gè yállà wó $=$ ỳ sǒm
3plPro ask.Perf woman-HumSg = Def wonder 3 sgPro $=$ Obj horse come. Hag-
yદ́lé-d $\varepsilon=$ gè jòbó yóó áá gì mà wà.
Hab.Rel = Def run.Imper enter.Imper who say.PerfL Q Quot

[^73]'They asked [something], the woman asked [the child] who told him that a horse was coming, to run inside.'
náá-na ${ }^{12 \theta}=$ gè yêm wó gàà.
mother-HumSg = Def like.that 3sgPro say.Perf
'The mother said that.'

ع́én $=$ gè wó yábìlì $=$ gè yàà-nà ǹdémó óbó=gè wà ǹdémó
ash = Def 3sgPro answer.Perf.HL = Def woman-HumSg.L LogPro step = Def Quot LogPro

Quot horse come.Hab-Hab ash.L pile $=\mathrm{Def}=$ Obl run.Imper enter.Imper 3sgPro say.Perf yòáá ǹdémó kánáá wó wá nǎm tớáán kùndù wà, enter.Perf LogPro do.Perf 3sgPro Quot fire strike put.PerfL Quot
'The ash replied that his stepmother told him that a horse was coming, run inside, and [when] he had entered, she lit a fire,'

> ǹdémó= lé túmó-gó dànnè wà.

LogPro = Assoc one-Adv burn.perfL Quot
'[she] burned him together [with the stalks].'

Yàà-nà wó=j̀ kò bǎy gàndà kònó àwì-દ̀ ${ }^{\text {n }}$ wà. woman-HumSg $3 \mathrm{sgPro}=$ Obj that.DD day place.L there.DD catch.PerfL-3plS Quot '[They say] that that day they caught that woman there [to find out what happened].'

Yàà-ná wó [ígè yàà-nà] $=m o ̀=n \varepsilon ̀ \quad$ bìrè pàdíć $=n$ bírè-dè wà, woman-HumSg 3sgPro co-wife.HL=Poss=Obl work.L bad=Obj work.Hab-Hab Quot nòy-gó-nú yêm kìdé kánà-dè wà. that-Adv-Adv like.that thing do.Hab-Hab Quot
'[They say that] a woman does bad work with regards to her co-wife, that she does things like that.'

### 20.5 The story of the animals and the sun <br> Recorded on June 15, 2008 in Tongo-Tongo <br> Narrated by Segire Ouologuem

[^74]Bon, òlù nàmá kém bé móòmbì-yì=gè bé dánnì-yì $=\mathrm{g}$ é, well field.L meat all 3plPro assemble-MP.Perf.Rel=Def 3plPro sit-MP.Perf.Rel=Def
 thing all woman- $\mathrm{HumPl}=$ Assoc be-3plS thing all children- $\mathrm{HumPl}=$ Assoc be-3plS 'Well, [when] all of the wild animals got together and sat down, they were all with wives, they were all with children.'

Náá bon, nǎm wá yàà-ná sè-lદ̀ wà wó túmáá = ǹ, wó now well sun Quot woman-HumSg have-Neg Quot 3sgPro only=Cop 3sgPro
 person-HumPl $=\mathrm{Pl}=$ Obj pleasing-Fact-MP.Neg.Perf-Neg Quot
'Now then, [they said] the sun does not have a wife, it is only him, this was not pleasing to the people.'

Kìdè kó hákílé ǹdémbé $=\mathrm{m}$ と̀ y lè $\quad$ wà, bé dánnì-yì $=\mathrm{g}$ g̀ thing.L that.DD mind LogProPl=Poss come.PerfLQuot 3plPro sit-MP.Perf.Rel=Def yàà-ná óbó-mó wà.

## woma-HumSg give-Hort Quot

'[They said] that thing (idea) came into their minds, [when] they sat down, let's give [him] a wife.'

Néと́ kày bày kúyé érénúyón bé kánì $=\mathrm{g}$ è bé dánnì-yì $=\mathrm{g}$ è now Top day.L first meeting 3plPro do.Perf.Rel = Def 3plPro sit-MP.Perf.Rel = Def sò̀̀ wó sóì-દ̀n.
speech.L that.DD speak.Perf.HL-3plS
'Now, [when] they met the first day [and] they sat down, that is what they spoke.'

Bǎy $=g \varepsilon ́$, mómbú $=g \varepsilon ́ \quad$ bà $y=g \varepsilon ̀ \quad j o ̀ m o ́ ~ b e ́-b e ̀-l i ̀ . ~$.
day $=$ Def meeting $=$ Def day $. L=$ Def hare Red-be.Perf-Neg
'[That] day, the day of the meeting, Hare wasn't there.'

Jòmó dámmá yà̀̀.
hare village go.PerfL
'Hare had gone to the village.'

Wó úggúláá = jàà wó yèláá, Eh!, jòmó wá wóò gàà, bon

[^75]3sgPro get.up.Perf=finish.Perf 3sgPro come.Perf eh hare Quot come! say.Perf well
ǹdémbé gày nòy-gó-nú yàmíé èrènúyón kànì-غ̀ ${ }^{\text {n }}$ wá dè.
LogProPl Top that-Adv-Adv other.day meeting do.Perfl-3plS Quot Emph
'He finished getting up, and he came, and Eh!, they called Hare, and well, [they said] they had held a meeting like that the other day!'

Kìdé kém yàá-m=lé wò- $\varepsilon^{\mathrm{n}}$, nǎm wà yàà-ná sè-lè.
thing all woman-HumPl = Assoc sun Quot woman-HumSg have-Neg
'Everyone was with wives, [but] the sun did not have a wife.'

Tsk! Nǎm yàà-nà sè-lè = gè wó ǹdémbé = j̀
tsk sun woman-HumSg. have-Neg.L=Def 3sgPro LogProPl=Obj
èlè-ndì-yè-lí wà,
sweet-Fact-MP.NegPer-Neg Quot
'Tsk, [they said] the sun's not having a wife doesn't make us happy,'
ǹdémbé wó=ỳ yè-ndéé yàà-ná óbó-mó gì-દ̀ ${ }^{n}$ wà.
LogProPl 3sgPro=Obj see-Fac.NF woman-HumSg give-Hort say.PerfL-3plS Quot '[They] said they looked at him and said let's give [him] a wife.'

Hòn $^{n}$ wà jòmó kó $=$ nè dàgáá wò má wà.
Huh Quot hare that.DD=Obl be.good.Perf be Q Quot
'Huh, Hare asked, "Is that good?""
ǹd $\grave{-}-\mathrm{m}=\mathrm{mbé}=\mathrm{g} \varepsilon$ dàgáá wò gì- $\varepsilon^{\mathrm{n}} \quad$ wà.
person- $\mathrm{HumPl}=\mathrm{Pl}=$ Def be.good.Perf be say.PerfL-3plS Quot
'The people said it is good.'

Tààmáá ǹdém $=$ mò $=$ nè dàgà-lú wà dè.
thought LogPro $=$ Poss $=$ Obl be.good.Neg.Perf-Perf Quot Emph
'[Hare said], "In my opinion, it's not good!""
ńjé=ỳ mà, yállà nǎm wâ $\Rightarrow$ ííyé nìmém wó túmáa̋ gòìlè wó
what $=\operatorname{Cop} \mathrm{Q}$ wonder sun Quot today now 3sgPro only leave-Nom.L 3sgPro
gòò-dè = nó ǹdémbé yè-dè nó,
go.out-Hab.L = this LogProPl see-Hab.L this
'Why is that, [well], if now today the sun alone, this going out of his, what it is we see,'

Yàà-ná wó jè̀e íi wó nálèè, ${ }^{122}$ wó wó 'gòecé woman-HumSg 3sgPro marry.NF child 3sgPro birth.NF 3sgPro 3sgPro go.out.NF yàà-ná wó 'gọ̀é úlùm $=$ mbè 'gọ̀eé yállà ḿn mò ǹdémó woman-HumSg 3sgPro go.out.NF children=Pl go.out.NF whether 1sgObl=Poss LogPro
úndú $=$ nè nàmà tóó $=$ mbè $=1 \varepsilon$ ĺ dóm bíl̀̀-d $\varepsilon$ má wà.
forest $=\mathrm{Obl}$ meat. L be. $\mathrm{in} . \mathrm{Rel}=\mathrm{Pl}=\mathrm{NegCop}$ seat be.possible.Hab-Hab Q Quot
'He'll marry a woman, she'll have a child, he himself will go out (shine), the wife will go out, the children will go out, that is to say, I ask if [you] the animals who are not in the forest can sit [in that].'

Yêm wó gàà, nàmà úndú $=\mathrm{n} \varepsilon$ tóó $=\mathrm{g} \grave{\varepsilon}=\mathrm{mbè}$ jàdáá gàndà kó like.that 3sgPro say.Perf meat.L forest $=$ Obl be.in. $\mathrm{Rel}=\mathrm{Def}=\mathrm{Pl}$ reflect.Perf place. L that.DD
nàáa ${ }^{123}$ bì- $\varepsilon^{n}$, jàdáá bé yè-ndáá, wàlláy sòb $=$ gè mùlú-gó wò.
forget.Perf be.Perf-3plS reflect.Perf 3plS see-Fact.Perf my.God speech = Def similar-Adv be
'[The hare] having said that, the animals in the forest thought it over, they had forgotten that part, they thought it over and looked [at the speech and saw], my God, it is like that.'

Mómbú $=$ gè $\uparrow\left[\begin{array}{ll}\text { gàà bì- } \\ \\ \end{array}\right]$ wà dògò dàgà-lú wà.
meeting $=$ Def say.Perf be.Perf-3p1S Quot but be.good.Neg.Perf-Neg Quot
'They had spoken [at] the meeting, but [they said] [what they said] was not good.'

Dàgà-lú wá dè.
be.good.Neg.Perf-Neg Quot Emph
'It was not good, [they said]!'

Kó ${ }^{124}$ yélì̀-dìn.
that.DD come.Han-Hab.3p1S
'They came back.'

Íyèlè bày yàgá yêm mòmbì-yì- ${ }^{\mathrm{n}}$.

[^76]again day.L other like.that assemble-MP.PerfL-3plS
'They met like that again the next day.'

Àà, ǹdémbé yàmmé mómbú $=$ gé $\Uparrow\left[\right.$ gàà bì- $\left.{ }^{\text {ñ }}\right]$ wà mè, jòmó wá ah LogProPl other.day meeting = Def say.Perf be.Perf-3plS Quot but hare Quot nòy-gó-nú gì wà dè.
that-Adv-Adv say.PerfL Quot Emph
'[They said], ah, they had met the other day, but Hare had said like that (that it wasn't good).'

Sàbé jàdáá ǹdémbé yèndáá kòmmó $=$ né nàmà tóó $=$ mbè yó
because reflect.Perf LogProPl look.at.Perf cave $=$ Obl meat.L be.in $=$ Pl if
dògò úndú $=\mathrm{n}$ と̀ nàmà tóó $=\mathrm{mbè}=\mathrm{\jmath}$ bìlé-lè wà.
but forest $=\mathrm{Obl}$ meat. L be.in $=\mathrm{Pl}=$ Obj be.possible.Neg. Hab-Neg Quot
'[They said] because we thought it over, we saw that if not for the animals who are in caves, the animals in the forest will not be able to stand it.'

Sàbé nǎm wó túmáá gọ̀éé dànnìlè wó dànnà-dè nó, because sun 3sgPro alone go.out.NF burn-Nom.L 3sgPro burn-Hab.L this yàà-ná wó jì, yàà-ná wó dánnè, íí wó woman-Hum 3sgPro marry.Perf.Rel woman-HumSg 3sgPro burn.Perf.Rel child 3sgPro góè, í́ wó góè, íl wó dánnè, wó wó go.out.Perf.Rel child 3sgPro go.out.Perf.Rel child 3sgPro burn.PerfRel 3sgPro 3sgPro dánnè, ǹdémbé kém yíméé dúmò-dìn wà. burn.Perf.Rel LogProPl all die.NF finish.Hab-Hab.3plS Quot 'Because they said that he alone comes out, this burning of his, [when] he has married a woman, the woman burned, [his] child came out, [his] child came out, [his] child burned, he himself burned, [they said] all of us would end up dying.'

Yêm kànì yó nǎm = mò yàà-nà jé=gè ìnè-lદ́ wà.
like.that do.PerfL if sun=Poss woman-HumSg.L marry=Def stand-Neg Quot 'If it's like that, [they said] the sun's marrying a woman will not happen.'

Donc kò bǎy nàmí = j̀ yàà-ná 'óbó-lú-gó kó = gè sòè thus that.DD.L day sun = Obj woman-HumSg give-Neg-Adv that.DD $=$ Def speak.PerfL yèn-gó-nú yêm pàdà-mì- $\varepsilon^{n}$ wà. that-Adv-Adv like.that leave-Caus.PerfL-3plS Quot
'Thus, that day they did not give the sun a wife, they (DD) spoke like that, and left it at that.'


[^0]:    ${ }^{1}$ Also called Toro So.

[^1]:    a. Mòòmíó mí=j̀ támbá-gú sê.
    scorpion 1sgPro $=\mathrm{Obj}$ strike- Ppl have
    'The scorpion is striking me.

[^2]:    
    

[^3]:    ${ }^{3}$ The status of downstep in Tommo-So tonology is not yet clear. There are cases, such as the one mentioned, where the surface form sounds as though there is downstep, though what would have triggered it is unclear. Analysis pending.

[^4]:    ${ }^{4}$ Long vowels before the diminutive suffix shorten in an effort to avoid superheavy syllables.

[^5]:    ${ }^{5}$ Note the simplification of rising to H on the light syllable.

[^6]:    ${ }^{6}$ The pronunciation varies between syncopated [dèggínć] and [dègíné], either a degeminated form of the former or a case where the human suffix simply is added to 'poverty' to derive the human nominal.
    ${ }^{7}$ See chapter 5 for a discussion of the similarities between the two constructions.
    ${ }^{8}$ The human suffix is acceptable even to describe animals in this case, though I am aware of no cases in which the human suffix appears in a lexical entry for an animal.

[^7]:    ${ }^{9}$ Note that the existential particle /yé-/ is not used after numerals ending in /-go/, cf. (xxc).

[^8]:    ${ }^{10}$ This sticky candy is referred to with the name of a tree species, yògú, known for its sticky sap.

[^9]:    ${ }^{11}$ This co-varies with a possessive-type compound /yùù dùyyú tòmmò/.

[^10]:    ${ }^{12}$ It is not clear why the tone of the perfective is LH here.

[^11]:    ${ }^{13}$ Note that the same adjective /ógu/ means both 'hot' and 'fast', but the choice of intensifier depends on the semantics, not on the morpheme.

[^12]:    ${ }^{14}$ Probably derived from /póó/ 'fat'.

[^13]:    ${ }^{15}$ Both intensifiers for 'never', along with following /pźs/.

[^14]:    ${ }^{16}$ Without the mediopassive, this is nominalized to /èsè-ndú/ 'soap'.

[^15]:    ${ }^{17}$ What exactly the transitive meaning of 'sweat' could be is not clear.

[^16]:    ${ }^{18}$ Note that while these are historically related, now when saying 'make something bigger', speakers use the causative suffix, yielding /bàrí-yé-mó/.
    ${ }^{19}$ The bare stem /kíbé/ can also be used as the mediopassive. See $\S 9.6$ for more on ambivalent verbs.
    ${ }^{20}$ Literally 'cut (sb's) heart'

[^17]:    ${ }^{21}$ Possibly related to /bàmbárá/ 'pile in a corner'.

[^18]:    ${ }^{22}$ Possibly related to /dògó/ 'brandish'.
    ${ }^{23}$ Possibly related to /yóó/ 'enter', as in 'make (the seeds) enter'.

[^19]:    ${ }^{24}$ It is unclear why the tone is not L on this and the previous perfective verb.

[^20]:    ${ }^{25}$ It is not clear why the tone of the perfective is LH here.

[^21]:    ${ }^{26}$ [ség'góááa
    ${ }^{27}$ Note that the lexical tone of 'come' is $\{\mathrm{LH}\}$ /y ̀lé/. This is evidenced by participial forms like /yèlé-gú/ 'coming' as well as infinitives like /yèlć-dim/. Nonetheless, the perfect form is idiosyncratically all H /yélaa/.

[^22]:    ${ }^{28}$ It is not clear why the tone of the perfective is LH here.

[^23]:    ${ }^{29}$ It is possible that these two participial suffixes /-gú/ and/-nú/ are related to the adverbial suffixes /-go/ and $/-n i /$, though the synchronic link seems to be broken for speakers.

[^24]:    ${ }^{30}$ For a discussion of emotion expressions in the Dogon languages, see McPherson and Prokhorov (2011).

[^25]:    ${ }^{31}$ Ramata prefers /úlû̀lè/.

[^26]:    ${ }^{32}$ A neighborhood of Saoura Koum.

[^27]:    ${ }^{33}$ Some sort of non-final chained form of the past quasi-verb /be/.

[^28]:    ${ }^{34}$ While glossed as＇or＇，this could just as easily be understood as the question particle．

[^29]:    ${ }^{35}$ That is to say, they are the only chiefs.

[^30]:    ${ }^{36}$ ATT [atete], which stands for Amadou Toumani Toure, has been the president of Mali since 2002.
    ${ }^{37}$ It is not clear why the tone of the perfective is LH here.

[^31]:    ${ }^{38}$ Ramata prefers /úlû̀lè/.
    ${ }^{39}$ Again, it appears that these are two headless relative clauses in a row, but it is unclear what the implied head would be.

[^32]:    ${ }^{40}$ Both this and the last instance of 'where they built the mayor's office' more properly belongs to where she built her house. The speaker simply takes a while to get to that part of the story.

[^33]:    ${ }^{41}$ Here the object marker is being used in place of a locative.

[^34]:    ${ }^{42}$ The $=\mathrm{n}$ marks the clause "he enters the chiefdom" as the object of /gàà/ 'said'.

[^35]:    ${ }^{43}$ The /mó/ is part of the logophoric pronoun. A possessive logophoric pronoun adds an independent possessive clitic $/ \mathrm{mo} /$ which causes the final $/ 0 /$ of the pronoun to syncopate: $/$ ǹdém $=\mathrm{mo} /$.

[^36]:    ${ }^{44}$ The phonetic realization of the sequence $/ \mathrm{se}-\bar{\varepsilon}^{\mathrm{n}} \mathrm{ma} /$ is [s $\varepsilon^{\mathrm{n}} \mathrm{mma}$ ], suggesting that at an underlying level, the nasalization of the $3 \mathrm{plS} /-\varepsilon^{\mathrm{n}} /$ is marked by a nasal consonant; nasalized vowels do not produce nasal germination in this same way. Plungian (1995) marks the 3 plS as /- $\mathrm{\varepsilon y} /$, but as we've seen elsewhere in the language, velar nasals are not allowed word-finally in the Tédié dialect of Tommo So. I have suggested that these have been reinterpreted as nasalization on the vowel in the case of the 3plS, but perhaps there is still some psychological reality to a final nasal coda.

[^37]:    ${ }^{45}$ Meaning he succeeded him as Hogon.

[^38]:    ${ }^{46}$ See the footnote in the history text.

[^39]:    ${ }^{47}$ The topicalizer /kay/ can either immediately follow the noun or the object marker / $=\mathrm{n} /$ can intervene.

[^40]:    ${ }^{48}$ Younger speakers say /kání/.

[^41]:    ${ }^{49} \mathrm{An}$ unusual HL tone pattern.

[^42]:    ${ }^{50}$ A neighborhood of Saoura Koum.

[^43]:    ${ }^{51}$ Literally a possessive construction meaning "Making leave the Hogon's day". What the speaker intends here is to say that the white people came, and at that time, they made the Dogons get rid of their system of Hogons, or traditional chiefs.

[^44]:    ${ }^{52}$ Ramata prefers /úlù̀lè/.

[^45]:    ${ }^{53}$ This phrase, 'same mother same father', is a set phrase with a different tone and intonation than would be expected if constructing it anew. Instead of the modifier /túmó/ lowering the noun it modifies, everyting in the phrase is H tone with a smooth intonational declination across the whole phrase.

[^46]:    ${ }^{54}$ This whole clause is acting as a nominal possessor: "[That Kanda does not enter the chiefdom]'s war". See chapter on relative clauses.
    ${ }^{55}$ Definite clitic on the proper name. The next name is specific as to which Kanda (a name traditionally reserved for the firstborn male).
    ${ }^{56}$ Kanday appears to be a diminutive form of Kanda.

[^47]:    ${ }^{57}$ Here, the tone has reversed and is now in the possessive type tonal pattern. See chapter 5.1.5.
    ${ }^{58}$ The $=\mathrm{n}$ marks the clause "he enters the chiefdom" as the object of /gàà/ 'said'.
    ${ }^{59}$ Two present participles in a row. Lit. "having entered and being there."
    ${ }^{60}$ Note that in speaking, the auxiliary [wò] is often dropped from the past participle. Whether this is because it phonetically absorbed by the preceding [a] or because in discourse the tense is deducible from context is not clear.
    ${ }^{61}$ [wó wá] "he said", more likely "they" meaning the people.

[^48]:    ${ }^{62}$ Human plural suffix $/-\mathrm{m} /$, assimilating to the following $/ \mathrm{g} /$. The $/ \mathrm{m} /$ causes rounding of the preceding $/ \mathrm{i} /$ into $\mathrm{a} / \mathrm{u} /$. This phrase in general means French escrocs, 'rascals'.
    ${ }^{63}$ The transitive suffix/-rV/ on /pádá/ 'to let go'. In this case, it takes on a figurative meaning of 'leave [a little for the others, for the young'uns]'.
    ${ }^{64}$ Both intensifiers for 'never', along with following / pés/.

[^49]:    ${ }^{65}$ Note the reduplicated form of /sáá/ 'to empty', or figuratively, 'to destroy'.
    ${ }^{66}$ The topicalizer /kay/ can either immediately follow the noun or the object marker / $=\mathrm{n}$ / can intervene.
    ${ }^{67}$ The copula is null here. Literaly "As for Kanda, the chiefdom taboo."
    ${ }^{68}$ Another topicalizer like /kay/.
    ${ }^{69}$ 'Certainty.' Possibly related to Mombo 'period', being a monthly certainty.

[^50]:    ${ }^{70}$ [séggóáá]

[^51]:    ${ }^{71}$ This phrase, 'same mother same father', is a set phrase with a different tone and intonation than would be expected if constructing it anew. Instead of the modifier/túmó/ lowering the noun it modifies, everyting in the phrase is H tone with a smooth intonational declination across the whole phrase.
    ${ }^{72}$ [géngé]

[^52]:    ${ }^{73}$ [tígáá]

[^53]:    ${ }^{74}$ Literally a possessive construction meaning "Making leave the Hogon's day". What the speaker intends here is to say that the white people came, and at that time, they made the Dogons get rid of their system of Hogons, or traditional chiefs.
    ${ }^{75}$ A headless relative construction. It is unclear what stylistically this adds.
    ${ }^{76}$ That is to say, they are the only chiefs.

[^54]:    ${ }^{77}$ Ondom Piri is a yearly festival at the beginning of hot season in which... xxx
    ${ }^{78} \mathrm{I}$ am told these lyrics translate to roughly 'Oh Bentiyaa, you have to talk about millet.'
    ${ }^{79}$ Meaning he succeeded him as Hogon.
    ${ }^{80}$ In this case, the possessive overlay is HL rather than L .

[^55]:    ${ }^{81}$ [bálné $=\mathrm{g}$ è]
    ${ }^{82}$ If someone wants to give up their post, even now, they go to the fields and stay there.

[^56]:    ${ }^{83}$ There seems to be no regular possessive tone overlays on a proper name.

[^57]:    ${ }^{84}$ It is unclear what the tone is doing on this and the previous perfective verb.

[^58]:    ${ }^{85}$ It is not clear why the tone of the perfective is LH here.

[^59]:    ${ }^{86}$ Again, it appears that these are two headless relative clauses in a row, but it is unclear what the implied head would be.

[^60]:    ${ }^{87}$ [séggì̀]
    ${ }^{88}$ Low-toned before the agentive verb? Possibly a compound?
    ${ }^{89}$ [y ́lné]

[^61]:    ${ }^{90}$ The tone pattern of verb souns more level L than LH, but this is probably an intonational effect.

[^62]:    ${ }^{91}$ Both this and the last instance of 'where they built the mayor's office' more properly belongs to where she built her house. The speaker simply takes a while to get to that part of the story.
    ${ }^{92}$ There is an intonational fall on the end of this perfective form.
    93 /àmbà toŋว/ 'destiny'.
    ${ }^{94}$ The last syllable is L due to sentence-final intonation.

[^63]:    ${ }^{95}$ Idiomatic expression.
    ${ }^{96}$ See the footnote in the history text.

[^64]:    ${ }^{97}$ Really Báná-kànù, but the old man can't pronounce very well.
    ${ }^{98}$ [wóg]
    ${ }^{99}$ "It's bigger than my mouth." Said because you're not supposed to speak of your elders with disrespect.
    ${ }^{100}$ A part of Denene Duu.

[^65]:    ${ }^{101}$ Here, it's as if the tone pattern is that of the imperfective (HL), but the final vowel of the stem is perfective.

[^66]:    ${ }^{102}$ This tone pattern could reflect an underlying $H$ tone on the subject agreement suffix that surfaces when something follows it.
    ${ }^{103}$ Why the perfective is H here is unclear.
    ${ }^{104}$ Younger speakers say /káyí/.
    ${ }^{105}$ A neighborhood of Saoura Koum.

[^67]:    ${ }^{106}$ A neighborhood，really Bare Oro，the baobab for meetings．Once，Saoura Koum and Tongo－Tongo got in an argument，and the men went there to hold a meeting，but there was no shade．There was an old man who sniffed tobacco，he found a baobab seed in his snuff and threw it down and it instantly became a big baobab．
    ${ }^{107}$ The pronoun is unusually L－toned here．
    ${ }^{108}$ Some sort of non－final chained form of the past quasi－verb／be／．

[^68]:    ${ }^{110}$ Here the object marker is being used in place of a locative.
    ${ }^{111}$ I believe this expression should be parsed with a possessive clitic, though the whole means 'the next morning.'

[^69]:    ${ }^{112}$ This expression means to walk around the village, either through the streets or around the edges, generally while singing.
    ${ }^{113}$ While glossed as 'or', this could just as easily be understood as the question particle.

[^70]:    ${ }^{114}$ Literally 'husband's wife', but it is treated as one possessed compound, not as an embedded possessor. This is evidenced by the tone: being a kinship term of 3 or more syllables, it takes a HL overlay; if it were simply 'her husband's wife', we would expect /wó ígé yàà-nà/

[^71]:    ${ }^{115}$ An unusual tone pattern for this perfective non-final verb.
    ${ }^{116}$ It is not clear why the tone of the object is not lowered here. It must not be being treated as a nominal compound.
    ${ }^{117}$ The gender of the child is not specified in the story, so for ease of comprehension, I have assigned the child masculine gender.

[^72]:    ${ }^{118}$ It appears that here, unpossessed 'co-wife' has the tone of a possessive construction, 'husband's wife', rather than the usual compound tones.

[^73]:    ${ }^{119}$ An unusual tone pattern.

[^74]:    ${ }^{120}$ This appears to be the human singular suffix added to 'mother', but this form is only attested here.

[^75]:    ${ }^{121}$ Ramata prefers /úlù̀lè/.

[^76]:    ${ }^{122}$ An unusual HL tone pattern.
    ${ }^{123}$ A bell-shaped tone, the latter fall possibly just due to intonation.
    ${ }^{124}$ The discourse definite demonstrative [kó] can be used as a progressive marker.

